Education and Society in Hong Kong and Macao

Comparative Perspectives on Continuity and Change

Second Edition

Edited by

Mark Bray & Ramsey Koo

Comparative Education Research Centre
The University of Hong Kong

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Education and Society in Hong Kong and Macao

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Contents

List of Abbreviations

AIOU	Asia International Open University
ACSC	Amateur Continuing Study Centre
APA	Academy for Performing Arts
APAEC	Asia-Pacific Adult Education Committee
AULP	Associação das Universidades de Língua Portuguesa
BA	Bachelor of Arts
BEd	Bachelor of Education
CBE	Catholic Board of Education
CCP	Chinese Communist Party
CDC	Curriculum Development Committee/Council
CDI	Curriculum Development Institute
CEC	Continuing Education Centre
CEPA	Closer Economic Partnership Arrangement
City U	The City University of Hong Kong
CMI	Chinese Medium of Instruction
CPCE	Committee on the Promotion of Civic Education
CUHK	The Chinese University of Hong Kong
DSEC	Direcção dos Serviços de Estatística e Censos [Department of Statistics & Census; also sometimes translated as Statistics & Census Service]
DSEJ	Direcção dos Serviços de Educação e Juventude [Department of Education & Youth; also sometimes translated as Education & Youth Affairs Bureau]
ED	Education Department
EETS	Expatriate English Teachers Scheme
EMB	Education & Manpower Bureau
EPA	Economic & Public Affairs
ESF	English Schools Foundation
GDP	Gross Domestic Product
GPA	Government & Public Affairs
HKALE	Hong Kong Advanced Level Examination
HKBC	The Hong Kong Baptist College
HKBU	The Hong Kong Baptist University
HKCEE	Hong Kong Certificate of Education Examination
HKEA	Hong Kong Examinations Authority
HKEAA	Hong Kong Examinations & Assessment Authority
HKFEW	Hong Kong Federation of Educational Workers
HKIEd	The Hong Kong Institute of Education
HKPRO	Hong Kong Public Record Office
HKU	The University of Hong Kong
HKUST	The Hong Kong University of Science & Technology
HUCOM	Heads of Universities Committee
ICAE	International Council for Adult Education
ICT	Information & Communications Technology
IEA	International Association for the Evaluation of Educational Achievement
IFT	Instituto de Formação Turística
IIUM	Instituto Inter-Universitário de Macau

IT   Information Technology
KLA   Key Learning Area
KMT   Kuomintang
LPAT   Language Proficiency Assessment for Teachers
MA   Master of Arts
MACE   Macau Association for Continuing Education
MCEA   Macau Chinese Education Association
MEd   Master of Education
MFA   Multi-Fibre Arrangement
MPI   Macau Polytechnic Institute
MUST   Macao University of Science & Technology
NET   Native English-speaking Teacher
OECD   Organisation for Economic Co-operation & Development
OLI   The Open Learning Institute
OUHK   The Open University of Hong Kong
PGCE   Post-Graduate Certificate of Education
PISA   Programme for International Student Assessment
PRC   People's Republic of China
PTU   Professional Teachers' Union
QAKT   Qualified Assistant Kindergarten Teacher
QEF   Quality Education Fund
QKT   Qualified Kindergarten Teacher
SAR   Special Administrative Region
SARS   Severe Acute Respiratory Syndrome
SBM   School-Based Management
SCMP   South China Morning Post
SCNU   South China Normal University
SCOLAR   Standing Committee on Language Education and Research
SET   School English Teacher
SMP   School Mathematics Project
SPACE   School of Professional & Continuing Education
SPUC   St. Paul's University College
SWD   Social Welfare Department
TESL   Teaching of English as a Second Language
TIMSS   Third International Mathematics & Science Study
TLQPR   Teaching & Learning Quality Process Review
TOA   Target Oriented Assessment
TOC   Target Oriented Curriculum
TTRA   Targets & Target Related Assessment
UEA   University of East Asia
UGC   University Grants Committee
UK   United Kingdom
UM   University of Macau
UPGC   University & Polytechnic Grants Committee
USA   United States of America
VTC   Vocational Training Council
WTO   World Trade Organisation

List of Tables

Mongolia

Beijing

D.P.R. Korea

R.O. Korea

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China

EAST CHINA SEA

Bhutan

India

Myanmar

Macao

Hong Kong

Taiwan

PACIFIC OCEAN

Thailand

Vietnam

Cambo-dia

SOUTH CHINA SEA

Philippines

Brunei

PEARL RIVER DELTA

CHINA

SHENZHEN

HONG KONG

ZHUHAI

MACAU

Foreword

Robert F. ARNOVE

To the many favourable reviews in major research journals of the first edition of this book, I add my enthusiastic endorsement. More than just an invaluable historical overview of the evolution of education systems in Hong Kong and Macao, the first edition was an exemplary introduction to the purposes and methodologies of comparative education. Major events that have transpired since publication of the 1999 first edition make the updated and expanded version a further most welcome contribution to the literature on continuity and change in education. This thematic focus, as well as the examination of the similarities and differences in education systems, is central to comparative education inquiry.

As a model of what constitutes good comparative analysis and the informative use of case studies, the book has several distinctive features. Each chapter systematically and explicitly compares each territory with the other. Comparisons also are selectively drawn with mainland China, other parts of the region, and former colonies of the United Kingdom and Portugal. Furthermore, intra-country comparisons complement inter-country comparisons, as shown in the chapter on the teaching of history which contrasts four different types of schools in each territory. Such comparisons are possible because of the substantial familiarity and expertise each author has with education in the pair of territories. Further, the authors are well acquainted with one another's work, and the editors have inserted cross-references of important points throughout the book.

Appropriate historical and comparative perspectives are employed as each part of the book examines the evolution of education through the main era of colonialism, the transitional periods, and the postcolonial period following reintegration with China. The temporal dimension of comparative education, which is often neglected, thereby gains equal status with the more common locational dimension as the book analyses patterns in both time and place. Further, in addition to comparing and contrasting education in Hong Kong and Macao, the chapters examine cross-currents between the two territories as well as mainland China. All these currents are placed in an even broader context of global trends in education, technologies, and labour markets. With these multiple levels of analysis in place, the reader is able to examine the lingering colonial legacies of the British and Portuguese in addition to the traditional Chinese notions of education that shape the limitations and possibilities of reforming school policies and practices. Thus, despite apparent commonalities in the histories, geographies, and sociocultural characteristics of the two societies, the illumination of these multilevel and variegated influences explains why there are significant differences in the trajectories, functioning, and outcomes of education.

The updated and expanded second edition documents education initiatives in the postcolonial periods (since 1997 for Hong Kong, and 1999 for Macao) as they are affected not only by internal factors but also by changes on the Chinese mainland and in the global economy. The goals, governance, financing, content, and processes of education in Hong Kong and Macao have been markedly influenced in the postcolonial period by the accelerated pace of marketisation on the mainland; major shifts in the global division of labour; the expanded flow of students, scholars, and workers across the borders separating the Special Administrative Regions (SARs) and mainland China; a strong pro-democracy movement, especially, in Hong Kong; and even demographics such as lower birth rates. Efforts to reconcile the desire for autonomy on the part of the SARs with pressures for greater control from Beijing have shaped curricula, language policies, teacher education, education-labour force linkages, and enrolment patterns. Along with documentation of these shifts, the second edition includes two new chapters (on adult education and lifelong learning; and on language and education) and updated references in a bibliography of over 700 primary and secondary sources.

Education and Society in Hong Kong and Macao was conceptualised as an academic work with the aim of deepening understanding of the forces that shape education in different societies. Comparative studies conducted along the lines of this volume may also provide policy-makers and practitioners with the insights and information needed to make more enlightened decisions so that education can contribute to a sense of personal and collective identity, to economic prosperity, and to democratic citizenship. Achieving these goals will not be easy given the tensions and contradictions that beset the two societies. As the various chapters point out, the challenges facing education in Hong Kong and Macao reflect not only those that are common to many countries, but also those that are particular to them given the individual histories and relationships between the two territories and their former colonisers, mainland China, and the global economy. In facing the challenges of providing a meaningful education for all members of their societies, decision-makers in Macao and Hong Kong will be assisted by the richly documented and theoretically framed essays in this volume. The book will serve as an impetus to explore further developments within this fascinating area of the south coast of China. The volume will also be stimulus to a wider community of scholars interested in the many significant issues that the book raises related to educational reform and political transition.

Introduction

Introduction

Mark Bʀᴀʏ & Kᴏᴏ Ding Yee, Ramsey

The fundamental basis of comparative studies of all kinds is identification of similarities and differences. From this identification, analysis usually proceeds to the reasons for the similarities and differences, and to the conceptual implications of the forces which shape the objects being compared.

The field of comparative education resembles all other comparative fields in this respect. Major questions for analysts in the field of comparative education concern the reasons why education systems in different parts of the world are similar to and/or different from each other. Additional questions concern the links between education systems and the broader societies which those education systems serve. Education systems on the one hand reflect the societies in which they are situated, and on the other hand shape those societies.

Meaningful analysis is facilitated when the units for comparison have sufficient similarity as well as significant difference. In this light, Hong Kong and Macao make an ideal pair for comparison. This book shows that the conceptual lessons from comparison of Hong Kong and Macao go far beyond the small corner of East Asia in which the two territories are located.

To expand on this point, this Introduction begins by outlining the major similarities and differences in Hong Kong and Macao. It then turns to comments on the nature of continuity and change in education and society, and to specific aspects of education and political and social transition with which the book is particularly concerned. The next section explains the way in which the book is organised, and outlines the contents of each chapter.

Hong Kong and Macao: Similarities and Differences

For comparative studies of the type presented here, analysis of education systems must be couched within the framework of contextual features. For this reason, it is useful to commence with an outline of political, social and economic similarities and differences.

The most obvious similarities between Hong Kong and Macao are in location and in political history. Both territories are located on the south coast of China; both have been colonies of European powers; and both are now Special Administrative Regions (SARs) within the People's Republic of China (PRC). The chapter in this book by Adamson and Li describes the two territories as siblings. Macao, the chapter points out (p.35), is "the introspective elder – outshone, overshadowed and greatly influenced by the more gifted and extrovert junior"; but the two territories exist in

parallel and mutual support. They operate economic, political and social systems which resemble each other but are significantly different from those in the rest of the PRC. Pursuing the metaphor of the family, China is commonly referred to as the motherland. Adamson and Li point out that the motherland was until recently politically, economically and socially estranged, and that the reunification has resulted "in a familial accommodation of differences rather than a whole-hearted embrace". Commonalities in evolving attitudes towards the motherland are further elements of similarity between Hong Kong and Macao.

As distinguishable entities, Hong Kong and Macao are products of colonialism. Macao emerged as part of the Portuguese empire in the 16th century (C.M.B. Cheng 1999). It was chiefly needed as a port in which ships could anchor and be repaired, and as a base for trade with China and other parts of Asia. Geographically, the territory of Macao comprises the Macao peninsula and the offshore islands of Taipa and Coloane. The Portuguese arrived in southern China in 1513. Macao was ceded to the Portuguese in 1557 by the Chinese government in exchange for banishment of pirates in the Pearl River Delta. In 1974, Macao was redefined as a "Chinese territory under Portuguese administration". The 1987 Sino-Portuguese Joint Declaration set a timetable for full reversion of sovereignty to the PRC on 20 December 1999 (Shipp 1997).

Hong Kong was established as a separate entity three centuries later than Macao, but again was chiefly valued by the British as a port and as a base for trade within the region (Endacott 1964). Geographically, the territory of Hong Kong comprises Hong Kong Island which was ceded to the British in 1841, the Kowloon Peninsula which was added in 1860, and the New Territories which were leased for 99 years in 1898. The scheduled expiry of the lease in 1997 was the chief factor setting the timetable for the reversion of sovereignty over Hong Kong to the PRC on 1 July of that year. Although strictly speaking the lease applied only to the New Territories and not to Hong Kong Island or the Kowloon Peninsula, it was clear to negotiators on both sides that the component parts could no longer be separated. Because of this, the whole of the territory of Hong Kong was returned to Chinese sovereignty, including the parts that had been ceded "in perpetuity". The initial arrangements for the change of sovereignty were set out in a Sino-British Joint Declaration in 1984.

These comments show that similarities in the political histories of the two territories are not confined to colonial origins, for both have had a common destiny in the contemporary era. Although Macao had been colonised earlier than Hong Kong, its reversion of sovereignty occurred slightly later. The political negotiations allowed Hong Kong to retain many of its existing characteristics, including its legal, financial and educational systems. While China remained officially socialist, Hong Kong remained officially capitalist. This formula was known as 'one country, two systems', and set the model for Macao's subsequent reversion of sovereignty (S.H.S. Lo 1993). The Basic Law for Macao was modelled on that already prepared for Hong Kong.

The similarities do not end there. Among other common features, some of which are identified in Table 0.1, are that:

- both are small in area;
- both are small in population, especially compared with their immediate neighbours;
- both are urban societies, with insignificant agricultural sectors;
- in both territories, the great majority of inhabitants are Cantonese-speaking

Chinese;
- both have efficient financial infrastructures and free market economies with simple taxation systems;
- both have highly productive and competitive workforces; and
- both have efficient telecommunications and transport systems, providing easy access to mainland China and other parts of the world.

Table 0.1: Characteristics of Hong Kong and Macao

	Hong Kong	Macao
Land area (sq. km.)	1,097	27
Population	6,816,000	441,600
Population density (people per sq. km.)	6,200	16,400
Ethnicity	95% Chinese; 2% Filipino; 3% other	96% Chinese; 2% Portuguese; 1% Filipino; 1% other
GDP per head (US$)	24,000	15,432
Official Languages	Chinese and English	Chinese and Portuguese
Currency	Hong Kong Dollar (HK$)	Pataca (MOP)
Exchange rate	US$1 = HK$7.8	US$1 = MOP8.0

Note: Data refer to 2002.

Sources: Hong Kong, Information Services Department (2003); Macao, Department of Statistics & Census (2003).

Despite these similarities, major differences are also apparent. Among them are the following:

- Although in global terms both territories are small in area, Hong Kong is considerably larger than Macao. Hong Kong's land area is 1,097 square kilometres, compared with just 27 square kilometres in Macao.
- Hong Kong's population is much larger: 6,816,000 in 2002 compared with 441,600 in Macao.
- Unlike Hong Kong, Macao has a significant Portuguese minority – though this minority is considerably smaller than it was before 1999.
- Although both territories have high per capita incomes compared with most parts of the region, Hong Kong's per capita incomes are higher than those of Macao.
- Although the economies of both territories are mainly based on the service sector, in Macao the sector is dominated by gambling. Macao sees itself in this respect as the "Las Vegas of the East", whereas Hong Kong has a stronger role in the financial sector and as a regional headquarters for large companies.
- In both territories, Chinese is an official language. However, one legacy of Macao's period under Portuguese administration is that Portuguese is the other official language. By contrast, one legacy of British administration in Hong Kong is that English is the other official language in that territory.

Turning specifically to education, again similarities and differences are evident. The main similarities are in the formal nature of schooling, some parts of the

curriculum, some sponsoring bodies, and high enrolment rates. However, the structure and important aspects of the content of education differ significantly in the two territories.

One final observation under the heading of similarities and differences is that because Hong Kong and Macao have much in common, they can also be taken as a pair to contrast with other parts of the world. One particular theme in this book concerns colonial transition. The transitions in Hong Kong and Macao differed from most other colonial transitions because they occurred at the end of the 20th century rather than earlier. Also, the transitions were to reintegration with the country from which the colonies had previously been detached rather than to sovereign independence. As in other domains, politics and education have shaped each other: political forces have shaped the scale and content of education, and the nature of education has to some extent shaped the landscape of politics. In this and other respects, although the book primarily focuses on only two territories it can contribute to much wider understanding. Indeed most chapters make specific comparisons and contrasts not only between Hong Kong and Macao as separate entities but also between Hong Kong and Macao as a pair and other parts of the world.

Education and Society in the Context of Continuity and Change

One major theme running through all chapters, as indicated in the subtitle of the book, is continuity and change. A huge literature focuses on change in education systems. By contrast, the literature on continuity is relatively modest – even though continuity is in many respects more important than change. Sometimes this continuity is a desirable form of stability, whereas on other occasions it is an undesirable resistance to change. Whatever the case, it is arguable that continuity deserves much more attention than it usually receives. This point is elaborated upon in the last chapter of the book.

While the main part of the book focuses on continuity and change during the 20th century, the production of a second edition five years after the first permits analysis of continuity and change during the turbulent years at the beginning of the 21st century. These were the initial postcolonial years for both Hong Kong and Macao; and political changes were compounded by economic and technological changes. As the various chapters show, however, much continuity was also evident in the education systems. This again can be viewed either positively or negatively, depending on the dimensions being scrutinised and the perspectives of the observer.

Analysts sometimes note that education systems in Asia and the Pacific are primarily oriented towards coping with the 'here and now' issues and solving current problems. As observed by UNESCO (1990, p.21):

> Education helps by providing knowledge and understanding through the development of skills and the promotion of attitudes which future citizens will need in order to cope with the diverse issues they face. However, education systems often are not 'forward looking' because … most education systems have been oriented towards immediate problems: building and enlarging schools, providing better and sufficient equipment and books, and training teachers. Little time has remained to lift the gaze from the immediate issues to look ahead and engage in forward planning to better cope with what is likely to occur.

In Hong Kong and Macao, different phases of history have certainly brought different pressures. The main colonial periods were rather different from the transitional periods and postcolonial periods. This observation highlights the fact that patterns may change significantly over time.

Related to this observation is the need to analyse contextual forces in order to achieve full understanding. Oliver (1996, p.3) pointed out that "as education exists primarily in a changing social context, it is almost certain that it will be accompanied by continual transition". However, changes in a system may have different meanings, effects, and implications to different groups of people. As Oliver added (p.3):

> If change is viewed as a series of isolated events, which upset the pleasant stability of things, then it will be perceived as something to fear, and something to avoid wherever possible. On the other hand, change can be viewed as simply a continuous process of evolution, whereby transition is part of the normal sequence of events. There may well be times of greater change and lesser change, but generally an organisation or educational system is perceived as being in a state of natural flux.

Within this framework, Oliver argued, individuals will develop new approaches to change. Thus one cannot necessarily assume that continuity is comfortable and that change is threatening. Again, the analysis of patterns in Hong Kong and Macao provides an instructive illustration of this observation.

Organisation and Contents of the Book

One particular feature of the book is that each chapter is comparative, focusing on both Hong Kong and Macao. This distinguishes it from most other works of its type (see Bray 2003a; Crossley & Watson 2003). Indeed, many works in the field of comparative education are in practice only implicitly comparative. Instead they focus on single areas, and leave it to readers to make the comparisons. The fact that each chapter in the present book addresses both Hong Kong and Macao permits the comparisons to be much more direct and informative. As observed above, most contributors also go beyond this, taking Hong Kong and Macao as a pair and making comparisons with other parts of the world.

In structure, the 15 chapters of the book are divided into four parts. As might be expected, the parts to some extent overlap; but they also form discreet and coherent units within the book. The first part focuses on levels and sub-sectors, namely preschool education, primary and secondary education, higher education, teacher education, and lifelong learning and adult education. The second part focuses on political, economic and social issues. The four chapters in this part address church and state in education, higher education and colonialism, education and the labour force, and language and education. The third part turns to curriculum policies and processes. It begins with a general chapter on curriculum reform before moving to specific chapters on civic and political education, on history curricula, and on mathematics curricula. Finally, the volume concludes with chapters on methodology and focus in comparative education as illustrated by this book, and on the overall lessons for continuity and change.

To elaborate on this outline, several comments may be made on individual

chapters. The first chapter, by Wong and Rao, explores the development of preschool education in Hong Kong and Macao. It particularly notes changes before and after the signature of the 1984 (for Hong Kong) and 1987 (for Macao) Joint Declarations with China in terms of curricula, school operations, educational resources, teacher training, and government policies. Wong and Rao point out that in Hong Kong the colonial authorities never considered preschool education to be part of basic education, arguing that it was desirable but not essential and thus not demanding substantial investment of government resources. The Macao government, by contrast, adopted a more favourable policy and considered the final year of kindergarten to be part of basic education for the fee-free education scheme. Although other sectors of education have arguably been more advanced in Hong Kong than in Macao, this has not been the case at the preschool level. However, the chapter identifies many complexities in the nature of instruction, the curriculum, and the quality of education.

The chapter by Adamson and Li examines primary and secondary schooling. The chapter argues that the fact that Hong Kong and Macao share a similar history, geography, ethnicity and postcolonial fate has created significant similarities in the nature of schooling. In turn, colonial history has provided both territories with education systems that are very different from the system in the motherland. These differences have been sustained in the postcolonial era, though some elements of convergence can be identified.

Developments and changes in higher education, along with the labour market and the associated transitions in the needs of both local and global industry, have led to new challenges for university graduates. Yung examines the structure and development of higher education in Hong Kong and Macao in terms of two spheres of knowledge in higher education, namely quantitative-structural, and organisation and governance. In both territories, the expansion of higher education in the 1990s offered increasing access to academic qualifications. However, the increasing cost of higher education, coupled with keen competition in the labour market, made investment in higher education less worthwhile from the perspectives of stakeholders. Partly to avoid the high costs of local university education, increasing numbers of students, particularly in Macao, chose to further their education in mainland universities. At the same time, Hong Kong and Macao both hosted increasing numbers of mainland students in search of specialisms and external connections not so readily available on the mainland. Macao's system of higher education was more market-oriented than Hong Kong's; but radical changes were embarked on in Hong Kong, in part because of economic factors and the forces of globalisation.

Teacher education is another domain which continually faces the challenges of socio-political and other changes. The chapter by Li and Kwo focuses on patterns of teacher education development in a historical perspective. It notes the limited proportions of trained local teachers in both Hong Kong and Macao, and the strategies adopted in the 1980s and 1990s to tackle the situation. Hong Kong achieved quantitative targets earlier than Macao and then turned to quality. Macao has made more use of expertise in mainland China to upgrade its teaching force.

Turning to lifelong learning and adult education, the chapter by Aliana Leong observes that provision in Hong Kong has a longer history than that in Macau, but that in both territories economic and demographic changes have sharply altered both supply and demand. Increased integration with mainland China, and the forces of globalisation, which were accelerated when China joined the World Trade

Organisation (WTO) in 2001, further shape the nature of lifelong learning and adult education in the pair of territories. The chapter provides an important complement to the analysis in other chapters of formal mainstream schooling and higher education.

Beatrice Leung's chapter begins the second part of the book with analysis of relationships between church, state and education during the colonial periods. As in many other colonies, in both Hong Kong and Macao the churches and governments worked in partnership to provide education and other social services. With the approach of reunification with the motherland, church leaders and their congregations were concerned about the implications of operation under a communist government. However, Leung points out that the long period of political transition provided opportunities for churches to prepare; and in the event the government in Beijing proved much more flexible than had been feared. The postcolonial period brought various pressures, but they were rather different from those that had been anticipated. They were relatively minor tussles over language policy, school-level management and curricular adjustment, and in general the major force was of continuity rather than change.

Hui and Poon also have strong historical perspectives. They analyse the ways in which the colonial states intervened in the development of higher education in Hong Kong and Macao, using it as a means for imperial expansion. Through four case studies – St. Paul's University College, the University of Hong Kong, the University of East Asia, and the Hong Kong Baptist College – the chapter shows similarities, variations and trends in the ways that higher education was controlled by the two colonial states. Hui and Poon argue that in the past, state control of higher education was a means of regulating social mobility. The 1990s brought considerable expansion, and this much reduced the previously elitist nature of the sector.

Ma's chapter explores the links between education and the labour force, particularly in relation to economic development and supply of highly educated personnel. Changes in the benefits and costs of education raise policy questions about the ways in which local and overseas graduates can be made more employable. One way to do this is through courses which combine academic education with specialised training in broad basic skills.

Bray and Koo's work on language and education provides the last chapter in this part of the book. Again the complexities of policy-making during the main colonial, late colonial and postcolonial periods make fascinating material for analysis. In Hong Kong the questions were about the respective roles of English, Cantonese and Putonghua; and in Macao the questions were about the roles of all of these plus Portuguese. Hong Kong policy-makers and practitioners faced major complexities, but their counterparts in Macao arguably faced even greater challenges.

The third part of the book, which focuses on curriculum policies and processes, commences with a chapter by Lo. This chapter analyses and contrasts various areas of curriculum reform in the two territories. The Hong Kong authorities tended initially to adopt the stimulus-response model and then the rational model. The Macao authorities favoured the rational model in their educational reform, along with the use of stimulus response in the face of ad hoc events.

During the build-up to reintegration with China, the study of civic education gained major attention in both Hong Kong and Macao. Tse provides a detailed account of continuity and change in political education in the two territories, and discusses the implications for future civic education programmes. Tse notes that in

both places the reforms in civic education produced changes which, as in many other postcolonial societies, were likely to be more apparent than real. The major institutional constraint, he suggests, lay in the conservative constitutional framework adopted in Hong Kong and Macao.

The following chapter, by Tan, focuses on the history curriculum. Using literature review, interviews, and analysis of the history curricula of selected secondary schools in Hong Kong and Macao, Tan examines the development of the history curriculum during colonial transition. Because of the centralised nature of the curriculum in Hong Kong, wide variations in the political content were not found there. However, the uncoordinated nature of Macao's educational systems allowed pro-PRC, pro-Taiwan, and Lusocentric curricula to coexist and evolve.

The final chapter in this part, by Tang, focuses on mathematics curriculum. Using Margaret Archer's morphogenetic systems theory as a basis for part of his study, Tang examines the nature and causes of stability and change in Hong Kong and Macao. Macao's idiosyncratic socio-historical background and the more visible effects of links with the mainland were the major influences responsible for its different curriculum development track in mathematics. Thus, local socio-historical background and efforts of local mathematics educators must be identified for the understanding of stability and change in these places.

The fourth part of the book contains two concluding chapters by Bray. The first comments on the previous chapters within the framework of methodological literature in the field of comparative education. Illuminating the approaches used by the various authors, the chapter adds useful discussion to the broader literature on methodology in the field. The second chapter discusses the principles of continuity and change in education. It revisits the model used by Thomas and Postlethwaite in 1983, and also incorporates insights from other literatures. The chapter shows ways in which the book adds to understanding not only of Hong Kong and Macao but also of other parts of the world.

A Note on Spelling

Possible confusion exists in English concerning the alternative spelling of Macao as Macau. During the initial centuries of the colonial period, in Portuguese the territory was called Macao. During the 19th century the Portuguese authorities changed the spelling to Macau, and in the Portuguese language that remains the spelling of the name. However in English some people, especially ones outside the territory, preferred to spell the name Macao even after the change of spelling in Portuguese; and after the 1999 resumption of sovereignty, the authorities in Beijing announced that that would be the spelling in English (Bruning 2001). The Macao authorities issued an internal circular on the matter, and since that date government publications in English have used the spelling Macao. The first edition of this book was published in 1999, i.e. before the announcement of this policy, and spelled the territory's name as Macau. This second edition follows the new official spelling, i.e. Macao.

However, various complexities remain. Following the announcement of government policy, some institutions changed the spelling in the English versions of their names but others did not; and in any case, whereas Portuguese is an official language, English is not. This creates some diversity when referring to single

institutions in different languages and at different points in time. It also creates diversity when referring to different institutions at single points in time. This book has endeavoured to find a balance between accuracy and consistency, but with emphasis on faithful reproduction of the spelling used in the sources cited. When citing Portuguese-language publications, the spelling is Macau; but when translating Chinese-language publications into English, the spelling is Macao. When citing English-language publications, the spelling follows that of the publications themselves. The spelling in the names of institutions follows that of the institutions themselves at the particular point in time.

For the sake of comparison, it is worth adding that for much of the 19th and early 20th centuries, Hong Kong was more commonly written as Hongkong. Thus the chapter by Hui and Poon contains a statement from Sir Frederick Lugard, who was governor of the territory from 1907 to 1912. The chapter is accurate in its quotations about "taxpayers in Hongkong" (Lugard 1910, p.1) and "the Hongkong University" (Lugard 1912, p.3). However, this form of writing the territory's name lost general currency, and for the present book it does not create as much confusion as Macao/Macau.

Conclusions

This Introduction has provided some background, an overview of broad areas of education and society, and an indication of the structure of the book. Hong Kong and Macao are similar in their colonial histories, ethnic composition, geographic location, and status as SARs of China. However, significant differences exist within their social, political and economic systems. This pattern has an impact on education as well as on other sectors, and helps explain many aspects of continuity and change.

Underlying each chapter in the book are several common premises. They include the following:

- the phenomena of continuity and change relate to all aspects and levels of education and society;
- some aspects of the relationship between education and social processes of continuity and change are universal, but patterns are complex and differ in individual societies;
- education in general, and schooling and curriculum processes in particular, can be understood more deeply if contextualised within wider frameworks;
- comprehension of the complex phenomena associated with educational processes is enhanced by comparative and multidisciplinary analysis and interpretation.

Finally, although the first edition of this book took its subject much further than previous studies, and the second edition takes it further still with the addition of two chapters and thorough updating of the rest, a great deal remains to be done. Individual components of education systems could be examined in greater detail; and the processes of change will require continuing monitoring and analysis. It is hoped that scholars will take the book as the basis for further work, thereby extending exploration more widely and deepening understanding of the processes of continuity and change in education and society.

Levels and Sub-sectors

1

Preschool Education

WONG Ngai Chun, Margaret & Nirmala RAO

Research conducted in various countries indicates that attendance at preschool pro-grammes promotes children's cognitive development and school success, and narrows the achievement gap between children from low income families and their more ad-vantaged peers. These findings, along with increasing attention to research on the ef-fects of environmental stimulation on early brain development and governments' ac-ceptance of lifelong learning, have led to an emphasis on early childhood services across the world.

Over the past few decades, investigators in different countries have examined the relationship between the quality of preschool programmes and children's develop-mental outcomes. This research has tended to use structural or process dimensions, or both, to gauge the quality of programmes. Structural measures of programmes include staff-child ratios, staff qualifications, teaching experience and stability, health and safety factors, and the physical setting. Process measures refer to the quality of inter-actions between staff and children (Lamb 1998). Structural and process measures are related to each other (Howes 1997; Rao, Koong et al. 2003) and to child outcomes (Howes et al. 1992; National Institute of Child Health & Human Development 2003).

In Hong Kong, preschool institutions are in the private sector and come under the jurisdiction of two government departments. The Education & Manpower Bureau (EMB) oversees kindergartens, whereas the Social Welfare Department (SWD) ensures that child-care centres meet government standards. Child-care centres serve children from six weeks to six years, and children in Hong Kong between the ages of three and six years can be enrolled in kindergartens. The government decided in 2003 that from 2005 onwards the EMB would regulate all services for children between three and six years, and that guidelines issued by the SWD would be used to monitor all services for children less than three years. Most kindergartens offer bisessional classes of around three hours each, while most child care centres offer whole-day programmes.

In Macao, by contrast, kindergartens operate on a whole-day basis. The gov-ernment operates a small number of kindergartens through the Department of Educa-tion & Youth, but most kindergartens are private institutions which operate under the regulations of that Department. In both territories, over 90 per cent of children aged three to five are enrolled in some form of preschool education (Hong Kong, Education & Manpower Bureau 2003a; Macau, Direcção dos Serviços de Estatística e Censos [DSEC] 2003).

This chapter examines commonalities and differences in preschool education in Hong Kong and Macao. Given the two territories' colonial heritage, relatively small size

and geographic location, one would expect much similarity. However, significant differences exist, and the factors underlying these differences will be explored. The chapter will compare coverage and provision, assumptions about what children should learn, and the professional preparation of those who teach in preschools. These matters have been markedly influenced by governments, and the nature of policies at particular times has significantly influenced continuity and change.

Preschool Education in Macao

The ratification of the Sino-Portuguese Joint Declaration in 1987 stimulated far-reaching reform, and was a watershed for educational policy in Macao. Another watershed was the resumption of Chinese sovereignty in 1999. Accordingly, the following discussion begins with the situation before 1987. It then considers the period 1987 to 1999, before turning to the situation since 1999.

Government Policy before 1987
During most of the colonial period, the Macao government, in so far as it was concerned about education at all, was chiefly concerned with the education of Portuguese-speaking children. Education for the Chinese-speaking population was mainly left to churches and other voluntary agencies. In the preschool sector, the first government kindergarten was established in 1923 and operated in Portuguese. In the 1950s, a second government kindergarten, operating in Portuguese and Chinese and known as a Luso-Chinese institution, was opened and affiliated to an official primary school. The number of government kindergartens remained at two until after the signature of the 1987 Sino-Portuguese Declaration which set the timetable for the territory's political transition in 1999.

Private kindergartens were much more numerous. The first, operating in Chinese, was set up by the Catholic Church in 1919. In 1987, the territory had 55 private kindergartens. Of these, 53 were Chinese-medium, one was Portuguese-medium, and one was English-medium (Macau, DSEC 1990). Thus, in Macao the education of three to five year olds was mainly undertaken by the private sector.

The differences in government attitudes towards the education of the Chinese-speaking and Portuguese-speaking communities created different patterns of control. The government exercised full control over the two official preschools through the inspectorate. Private preschools, in contrast, had considerable autonomy. The government did have a Private Schools Auxiliary Unit, but it was staffed by education officers rather than inspectors. It mainly played a liaison and advisory role in registration of new schools and distribution of grants. The monitoring of the quality of preschool education was generally beyond the authority of the unit, and its officers were not empowered to supervise the preschools. Government standards for initial and continued registration of preschools focused on safety and hygiene of the premises. Institutions were left to be self-regulating, and the government did not even set standards of minimum quality.

The Macao government became slightly more active in the sector after the 1974 overthrow of the right-wing regime in Portugal. A 1977 law permitted private schools to receive direct subsidies and exemption from taxation, and families of students in financial difficulty could apply for assistance. A 1985 policy took intervention further

by facilitating subsidy of private school teachers at all levels. In financial terms, how-ever, these changes were minimal when compared with total expenditure. Less than one-third of government education expenditure was distributed to the private schools, while the rest was for administration of the Department of Education and the official schools (Wu 1994).

As a result, great disparities in financial resources existed between official and private preschools. Even after 1987, two-thirds of private kindergartens' total incomes came from school fees, and government subsidies only accounted for 19 per cent (Macau, DSEC 1994). However, variations existed between the private kindergartens according to the financial conditions and philosophies of individual governing bodies.

There were also wide variations between private and official schools in terms of class size, teacher-student ratios, teacher qualifications, and teaching and learning methods. These personnel-related and tangible resources significantly influenced the quality of early education. After 1979, immigration from mainland China brought a marked increase in Macao's preschool population. This had an adverse impact on class size and student-teacher ratios (Table 1.1). Between 1979 and 1983 the preschool population increased at an average annual rate of 10 per cent, and from 1983 to 1988 the average annual increase was 13 per cent. However, growth in the number of teachers did not match that in the number of children. Between 1979 and 1988 the number of kindergarten teachers only increased by half while the number of students doubled. By 1987, the adult-child ratio had reached 1:40. This figure included Portuguese-language teachers in the Luso-Chinese kindergartens, and subject teachers in some private kin-dergartens. Thus average class size was even higher. In the mid-1980s, class sizes ranged from 20 in the official preschools to over 70 in the private preschools (Macau, DSEC 1989).

Table 1.1: Kindergarten Population and Teachers, Macao, 1979/80 - 1987/88

	1979/80	1982/83	1987/88
Number of children	8,041	11,192	18,250
Number of teachers	307	314	451
Teacher-child ratio	1:26	1:36	1:40

Source: Macao, Department of Education & Youth.

All teachers in the official preschools were required to possess professional qualifications, but almost half of the private kindergarten teachers were untrained. This discrepancy is significant, because teacher qualification is one of the most important indicators of preschool quality. It affects programme effectiveness by influencing the educational goals, values and classroom behaviour of the teachers.

The learning environments of the official kindergartens were designed and equipped according to Portuguese standards which catered for a child-centred, activity-based type of learning; and a guideline on space and furniture issued by the Portuguese Ministry of National Education in 1973 was used by the Macao official schools as a reference point. In contrast, children in most private kindergartens were crowded in rows and had few resources for learning activities. This disparity raised

major questions about fairness in the distribution of educational resources.

Traditionally, teacher training in Macao also fell on the shoulders of the private sector. A teacher training unit was established in 1951 in St. Joseph's College, a Catholic secondary school. The college operated a two-year full-time programme of kindergarten teacher training for junior secondary graduates from 1953 to 1980. From 1980 to 1987, secondary graduates who wished to be kindergarten teachers could join its one-year full-time course, which also entitled them to teach in primary schools. Between 1945 and 1966, Tak Ming Middle School also operated a one-year full-time programme of kindergarten teacher training for senior secondary school graduates; and Choi Kou Middle School had two cohorts of one-year trained kindergarten graduates from 1967 to 1969. Because of these inputs, the supply of trained teachers for kindergartens was superior to that of primary and secondary schools. In 1988, 56 per cent of Macao kindergarten teachers had received professional training compared with only 27 per cent of primary teachers (Macau, DSEC 1989). Nonetheless, the fact that nearly half of the kindergarten teachers remained untrained was far from satisfactory.

The first attempt by the Macao government to contribute to teacher training was a joint effort with the pro-China Macau Chinese Education Association (MCEA) and the South China Normal University (SCNU) in Guangzhou, which launched a three-year distance-learning diploma course in 1985. This course mainly focused on primary education, but some kindergarten teachers also enrolled.

Government Policy between 1987 and 1999

Economic growth combined with the accelerated development stimulated by the anticipated political handover in 1999 created considerable demand for quality human resources. A competent workforce was considered crucial for promoting social and economic development and for effective management following the end of Portuguese administration. In 1991, the Macao government released a new policy on basic education (Macau, Governo de 1991). The document envisaged a unified education system from preschool to high school, indicated the government's intention to provide fee-free basic education, and specified the degree of autonomy to which private schools were entitled in relation to government subsidy. In short, it was a blueprint of educational development for transition into the era of the Macao Special Administrative Region (SAR). The document was followed by a set of regulations for private education (Macau, Governo de 1993), a policy on curriculum for pre-primary education, primary schools and secondary schools (Macau, Governo de 1994), a law on fee-free basic education (Macau, Governo de 1995), a set of regulations for teaching staff (Macau, Governo de 1996), and a law for teacher training (Macau, Governo de 1997).

Complementary to the proposed educational reform was the Macao government's intention to increase control over the private schools. In 1993, the Department of Education underwent a series of reorganisations as part of the exercise to localise the civil service, especially in senior positions, and to facilitate implementation of the proposed education laws. The Department of Education was renamed the Department of Education & Youth. A Pre-primary and Primary Department replaced the Official School Inspectorate and the Private School Auxiliary Unit, and was made responsible for both official and private schools. However, implementation of the new policies was hampered by the shortage of human resources and the absence of the necessary legislative procedures empowering the Department to execute control of the private schools.

The tide finally turned in 1995, when the Macao government declared in Law 29/95/M that seven years of fee-free education would be provided for all five-year-olds in preschools and for children at all levels of primary school. Private schools were encouraged to join the scheme and become members of the subsidised school network, on condition that class sizes did not exceed 45. Schools were given two years to make adjustments. This step was arguably the first serious attempt by the government to regulate educational quality.

The most significant impact of the 1991 law on the preschool sector was the demarcation of kindergarten education into two parts: pre-primary education for three and four year olds, and the preparatory class of primary education for five year olds. The latter became part of the scheme for fee-free basic education.

The reform also had an impact on the number of kindergartens. In 1989 and 1990, five Luso-Chinese kindergartens had been opened in the densely-populated northern part of the peninsula. This was a measure to meet demand due to the immigration from China over the previous decade. To ease further the shortage of places, the Macao government decided not to open new official kindergartens but instead to encourage the private sector. In 1993, the government announced the first list of 16 new private schools to be built before the end of 1997. This list included five kindergartens. Between 1994 and 1997, the number of preschools contracted slightly, but student numbers shrank much more (Table 1.2), reflecting a drop in the birth rate.

Table 1.2: Preschools, Children and Teachers in Macao, 1994/95 - 2002/03

	1994/95	1997/98	1999/00	2002/03
Number of preschools	67	65	61	59
Number of children	20,476	18,291	16,162	12,639
Number of teachers	724	696	531	461
Teacher-child ratio	1:28	1:26	1:30	1:27

Source: Macao, Department of Statistics & Census.

By 1998, over 70 per cent of private schools had joined the fee-free education scheme. The preschools within this public education network had maximum class sizes of 45. The reduction in class size may be considered important progress, though the figure remained very high compared with some international standards. About 93 per cent of children aged three to five attended kindergartens (Macau, DSEC 1998b).

Up to that time the Portuguese-medium kindergartens had followed curricula designed in Portugal, while the Luso-Chinese kindergartens had used a mixture of Hong Kong and Portuguese models, and the majority of private kindergartens had adopted a Hong Kong model. Teaching materials published in Hong Kong were used in all private Chinese-medium kindergartens and in the Luso-Chinese kindergartens. The Curriculum Organisation Law for Kindergartens, Pre-primary and Primary Schools, which outlined a centralised framework of curriculum development for Macao schools, was issued in 1994. A Curriculum Development Committee consisting of teachers from private and official schools and lecturers from the University of Macau was subsequently formed to design provisional teaching syllabuses and teaching materials for each class level. Teaching materials organised around themes were trialled in the official kindergartens

beginning in 1995 with the lowest classes. By 1997, the initiative had been extended to all three kindergarten levels. The reform was jointly monitored by the Department of Education & Youth and by specialists at the University of Macau. In 1999, the consolidated curriculum was recommended to the private kindergartens.

Various initiatives were also embarked upon in teacher training. In 1987, what was then called the University of East Asia (in 1991 renamed the University of Macau) was authorised to run day-release in-service courses for pre-primary and primary teachers. Students were awarded a Diploma in Education after two years' study. Also in 1987 St. Joseph's College stopped all full-time courses, continuing only with part-time evening ones. Two years later, the government officially recognised the preschool and primary education courses offered by St. Joseph's College, the University of East Asia and the South China Normal University. Graduates from those institutions were eligible for standard subsidies from the government. This treatment raised the question whether the courses should all be considered equivalent to each other despite differences in the mode of teaching, course hours, course design, student assessment, and qualifications of the teaching staff. For example, the course offered by the University of East Asia was the only one to include supervised teaching as a major component, and to make a pass in this domain a precondition for graduation. The fact that the Macao government disregarded these inequalities seemed to imply that the main target was to have as many 'trained' teachers as possible, preferably reaching 100 per cent by 1999. In this sense, quantity was the main concern.

As a result of the ample opportunities available for teacher training through the three venues, the proportion of professionally trained kindergarten teachers rose from 56 per cent in 1987 to 80 per cent in 1995 (Macau, DSEC 1997b). In order to reach the target of an all-trained teaching profession, Law 15/96/M stated that new entrants to the teaching profession in the 1996 academic year must have relevant professional training. Those who were already teaching but without professional training were expected to enrol in in-service courses if they were under 40 years of age and had less than 10 years of teaching experience. In 1997, Law 41/97/M stipulated criteria for teacher training and a general framework for teacher education courses. It aimed to promote parity in academic rigour among courses offered by different institutions. Teacher training had therefore become a fairly well established part of the machinery of Macao education.

However, at that time the private kindergartens did not receive much increase in government subsidies. Although education expenditure had increased prominently in the previous few years, and the government policy proclaimed a goal of equity in re-sourcing of both private and official schools (Macau, Governo de 1991), discrepancies remained. A substantial amount of the government's education expenditure was still allocated to official administration and to government schools. This situation improved considerably after 1995, when the fee-free education scheme was introduced. By 1997, government subsidy contributed to about one third of the total income of the private schools (Macau, DSEC 1988b).

Government Policy after 1999

The initial years after the transition did not bring major administrative changes. However, the birth rate and preschool population continued to decline. By 2002/03, there were 12,639 preschool children compared with 20,476 in 1994/95 (Table 1.2). Teacher child ratios were 1:27 in 2003. These favourable changes in teacher-student ratios resulted in the Macao Government's decision to enforce the 'small class' policy in

2002. Preschools in the fee-free education scheme were encouraged to reduce the class size from 45 to 35, while the subsidy was maintained on the mandated number of 45. This policy was later extended into the primary grades.

An initiative with even greater implications was the review of the Macao Education System announced in the Chief Executive's 2002 Policy Address. A consultation paper was subsequently released (Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] 2003) and suggested two changes in preschool education. First, it proposed, preschool education should include the preparatory class of primary education to become an education sector of three years; and second, preschool education should be included as part of the fee-free education system so that children from age three to 15 would benefit. In parallel, additional resources were allocated by the government to promote home-school partnership, parent education and creativity education for all sectors, including the preschools.

Preschool Education in Hong Kong

The 1981 White Paper on Kindergarten Education, the government's 1994 policy address, and the education reform launched in 2000 were critical milestones for government policy on preschool education. Therefore, the following discussion on preschool education in Hong Kong considers four time periods: before 1981, 1981 to 1994, 1994 to 2000, and after 2000.

Government Policy before 1981
In Hong Kong, a clearly-defined and unified school system which included the kindergarten sector emerged during the 1950s. One major cause of the growth of education was the rapid increase in population as a result of the influx of refugees from China. Educational development from then on swept through the second half of the 20th century. The government resolved to implement what Sweeting (1995) has described as a sequential arrangement in the expansion of education, beginning with the primary level in the 1950s and 1960s, proceeding to the secondary level in the 1970s and 1980s, and reaching the tertiary level in the 1990s. Preschool education remained neglected by the government, though it expanded significantly through private provision.

As the government gave priority to primary and secondary education, the demand for preschool education was mainly met by untrained teachers. In 1953, a Kindergarten Section was set up in the government's Education Department to provide advice in planning and implementation, but the quality of provision received little attention. Enrolments increased rapidly from 19,000 in 1957 to 141,000 in 1971 (Hong Kong, Education Department 1958, 1972). As in Macao, the rise in student numbers was not matched by an equivalent increase in teachers. Consequently the adult-child ratio deteriorated from 1:25 in 1958 to 1:35 in 1971 (Hong Kong, Education Department 1959, 1972). The percentage of trained teachers also declined. The government had limited training resources, and trained teachers were not welcomed by profit-making kindergartens since such teachers demanded higher salaries.

The situation in the child-care sector was more favourable. In 1948, a Social Welfare Office had been established to protect and care for children; and in 1958 a Child Welfare Section was created in the Social Welfare Department. However, a clear

government policy on child care did not emerge until the mid-1970s. An advisory inspectorate for child-care centres was set up in the Social Welfare Department (Hong Kong, Social Welfare Department 1977); and in the early 1980s a new ordinance and set of regulations provided the legal framework (Hong Kong, Government of 1982a, 1982b).

Systematic training for kindergarten teachers started in 1950, when a two-year part-time course was launched in the Northcote College of Education. However, the course was discontinued two years later. In 1956, the Kindergarten Section of the Education Department started a two-year part-time course with a biennial intake of 50 students. The intake was too small to meet demand, and during that period a significant number of junior high school students went to Macao to join the full-time kindergarten course at St. Joseph's College. In addition, trained teachers from Taiwan and mainland China and especially Macao came to teach in Hong Kong kindergartens.

Government contribution to the training of child-care staff began in 1958 when the Child Welfare Section and the Young Women's Christian Association jointly ran a five-week part-time course for nursery staff. In 1962, the newly-established training section of the Social Welfare Department took over responsibility for training 50 nursery workers every year (Hong Kong, Social Welfare Department 1963). The 1976 ordinance and regulations accelerated the trend by requiring child-care workers to have received training within a year of their initial employment. The Social Welfare Department ran a five-week course with an extended one-year full-time or two-year part-time course offered by the Hong Kong Polytechnic starting in 1977 and 1979 respectively.

Government Policy between 1981 and 1994

By 1980, concern by stakeholders and the general public about preschool education had reached a critical point. In that year, over 85 per cent of children aged four and five were enrolled in kindergartens, but 84 per cent of the teaching staff were untrained. Responding to the concern, the government prepared a White Paper (Hong Kong, Government of 1981) which set out Hong Kong's first official policy on the subject.

The White Paper highlighted the need to accelerate training for kindergarten teachers, and advocated in-service training as the way to upgrade existing staff. Training at that time was in two categories: a two-year part-time Qualified Kindergarten Teacher (QKT) course run by the Grantham College of Education, and a 12-week Qualified Assistant Kindergarten Teacher (QAKT) course run by the Inspectorate of the Education Department. The government set the target of 45 per cent of kindergarten teachers being trained by 1986, rising to 90 per cent by 1992. An allied target was for all principals to attain QKT status by 1986. However, since the figures on trained teachers referred to both QKT and QAKT, it appeared that the government was only willing to commit limited resources. In the child-care sector, the government was satisfied with having 70 per cent of staff trained. The authorities decided to continue with existing training provision for that sector, but envisaged creation by 1984 of a joint programme for training kindergarten and child-care staff. In addition, the government raised issues about class sizes, adult-child ratios, minimum space, materials, and equipment. Curriculum development for the kindergarten sector was also highlighted as an important need.

In 1981, an international panel of educators was invited by the government to review Hong Kong's education system (Llewellyn 1982). The panel urged vigorous

implementation of the 1981 White Paper's recommendations on preschool education, and even suggested that early childhood education should be given priority over other levels. The report argued that eventually kindergartens should become part of the aided sector.

However, the recommendations of the visiting panel did not gain full support. In 1986, Education Commission Report No.2 addressed the question whether kindergarten education was essential and therefore deserving aided-sector status. It argued that kindergarten education only had a short-term effect on later academic achievement. The Commission concluded that kindergarten education was not essential, and therefore recommended that it should not become part of the aided sector. However, the Commission did raise questions about equality of access, and advised the government to introduce a scheme to assist applicants from poor families to pay fees and other costs. The government accepted this advice, thus making some improvement but in effect confirming that it was not prepared at that time to embark on a fundamental overhaul.

The Education Commission also raised questions about the fragmentation of the sector. The Commission advised the government to work towards uniting all preschool services in order to promote uniformity in provision. The Commission recommended that the process should begin with improvement of teacher-child ratio, teacher qualifications, and space per child. In the long term, the Commission suggested, all kindergarten teachers should be trained and the maximum adult-child ratio should be 1:15. A committee was set up to compile plans for unification of the sector. However, in 1986 only 23 per cent of kindergarten teachers had received training, far below the 45 per cent target set out in the 1981 White Paper. Realising the importance of training, the Commission recommended immediate expansion of QAKT courses and, from 1990, expansion of QKT training in the Grantham College of Education.

Despite the lukewarm views expressed in Education Commission Report No.2, the public continued to remind the government of the importance of preschool education. In 1993, a motion on the matter was passed by the Legislative Council (Ieong 1993, p.112); and a report was issued on the training needs of pre-primary teachers (Hong Kong Council of Early Childhood Education & Services 1993). The Board of Education formed an ad hoc sub-committee to devise measures to improve kindergarten education. The report, released in 1994, affirmed the value of preschools in the local context by drawing on a wide spectrum of overseas studies, and concluded that the government should be more directly involved in the sector. The proportion of trained teachers had increased to 46 per cent in 1992, but this was far below the 79 per cent target set by the Education Commission in 1986. The sub-committee proposed a new target of 60 per cent trained teachers in 1999, and advocated a long-term target teacher-child ratio of 1:15. On the question of unification of pre-primary services, the sub-committee recommended development of a common curriculum for all preschools, and common teacher training courses which would be recognised by both the Education Department and the Social Welfare Department.

Government Policy between 1994 and 1999
The government's 1994 policy address stressed an official commitment to education, including preschools. One component was a pledge to spend HK$163 million in the subsequent four years for training kindergarten teachers. This was expected to provide courses for 1,130 serving teachers in 1995/96. In addition to the certificate course for

serving teachers scheduled to start in 1995 was a full-time pre-service course scheduled to start in 1997. All these initiatives were subsequently implemented in the Hong Kong Institute of Education, which opened in 1994 and took over the responsibility for teacher training from the four Colleges of Education and the Institute of Language in Education. Other initiatives included specification that new entrants to the profession after 1995 should have at least two passes in the Hong Kong Certificate of Education Examination; and the government declared that by 1997 at least 40 per cent of the teachers in each kindergarten should have attained QKT status. In order to enable kindergartens to employ teachers according to the government's recommended salary scales, policy makers promised to explore the possibility of subsidising kindergartens. These moves indicated government intention to implement several of the recommendations of the ad hoc sub-committee of the Board of Education on pre-primary education. It was the first time that substantial government investment was promised for the sector.

A working party on kindergartens had been formed in 1989 to consider the issue of unification of pre-primary services recommended by the Education Commission. This working party was initially limited in its effectiveness, but in 1994 it was reconstituted to study the practicalities of unifying all pre-primary services. In 1995, the working party recommended that unification or harmonisation of the various aspects of pre-primary service should be pursued within the context of available resources and practical administration. It proposed amalgamation of the 'Guide to the Kindergarten Curriculum' (Curriculum Development Council 1984) and the 'Activity Guidelines for Day Nurseries' (Hong Kong, Government of 1986) into a single Curriculum Guide. This was done, and the resulting document was subsequently endorsed by the Curriculum Development Council (Curriculum Development Institute 1996). In addition, a harmonised pay scale was introduced. Coordinated training for kindergarten teachers and child-care workers was also endorsed by the Working Party, and a framework on a basic training programme was formulated. All graduates of basic training courses developed according to this framework could seek recognition from either the Education Department or the Social Welfare Department.

In 1997, the Education Commission released its seventh report, on quality school education. The document was timed to enlighten the Special Administrative Region (SAR) government on the quality of education as Hong Kong advanced into the post-colonial era. The report focused mainly on primary and secondary schools, but did not exclude other levels of education. Recommendations on management and performance, for example, were considered to be generic for all levels. The report advocated creation of a Quality Education Fund (QEF) open to bids. Although the place of kindergartens in this HK$5 billion project appeared to have been overlooked in the SAR government's 1997 policy address, which mentioned only primary and secondary schools, the public felt that kindergartens should be permitted to participate in the venture. Eventually, when details of the QEF were announced in 1998, kindergartens and child care centres were invited to apply alongside other sectors. Many of the QEF projects undertaken during the following years generated empirical evidence about the efficacy of interventions in preschool education (Rao 2002).

The goals set in the 1994 policy address were reiterated in the SAR government's 1997 policy address. By 1998, 38.4 per cent of the serving kindergarten teachers had attained qualified kindergarten teacher status (Table 1.3). Teacher qualifications and the kindergarten subsidy scheme were therefore two items of major concern. By 2000, the government declared, at least 60 per cent of teachers in each kindergarten should be

qualified, and by 2004 all newly-recruited kindergarten principals should be graduates of the Certificate in Kindergarten Education or an equivalent course. Parallel to these measures was the plan to expand the training by providing 660 extra places between 1998 and 2002. The kindergarten subsidy scheme, which had been implemented in 1995 to encourage kindergartens to employ more trained staff, was reviewed in 1996. Amendments were made both to include more kindergartens and to adjust the subsidy every year. Significant numbers of children were also enrolled in child-care centres (Table 1.4).

Table 1.3: Kindergartens in Hong Kong, 1994/95 - 2002/03

	1994/95	1997/98	1999/00	2002/03
Number of kindergartens	739	735	756	777
Number of children	180,109	177,462	171,138	143,725
Number of teachers	8,107	8,619	8,855	8,412
% of teachers with QKT training	23.6	38.4	54.1	79.5
Teacher-child ratio[1]	1: 14.5	1: 13.6	1: 12.6	1: 11.3

[1] Based on half-day equivalent

Source: Hong Kong, Education Department (2000a); Hong Kong, Education & Manpower Bureau (2003a).

Table 1.4: Child Care Centres in Hong Kong, 1999/00 and 2002/03

	1999/00		2002/03	
	Number	*Places*	*Number*	*Places*
Aided day crèches	21	1,325	15	772
Aided day nurseries	237	27,324	248	28,299
Aided crèches cum nurseries	n.a.	n.a.	8	959*
Private day nurseries	n.a.	n.a.	135	16,706
Private crèches cum nurseries	143	18,716	18	1,406
Non-profit making nurseries	n.a.	n.a.	9	2,211**
Total	401	47,365	433	50,353

Note: Figures exclude residential and special child care centres
* includes 204 places for children under 2 years
** includes 458 places for children under 2 years
n.a. not available

Source: Hong Kong, Social Welfare Department (2003).

Government Policy after 2000

Shortly after the 1997 resumption of Chinese sovereignty over Hong Kong, the government undertook a comprehensive review of the education system to enhance the overall quality of education services delivered. The first stage of this review, conducted in 1999, focused on the aims of education. The consultation document (Education Commission 1999) stated that the aims of early childhood education should include helping children to (i) enjoy schooling and learning, and foster a sense of curiosity and interest in learning; (ii) experience a rich and pleasurable group life; (iii) achieve all-round child development; and (iv) foster self-confidence. After public consultation,

these aims were adopted.

The second stage of the review examined how the existing academic structure, the curricula, and the assessment mechanisms could be improved to meet the aims of education. The third stage culminated in September 2000 when the Education Commission issued reform proposals. The proposals embraced the notions that early childhood education lays the foundation for lifelong learning and all-round development. The Commission put forward proposals to enhance the professional competence of early childhood educators, improve quality assurance, reform the monitoring mechanism, enhance the links between early childhood and primary education, and promote home-preschool co-operation (Education Commission 2000). Each of these reform measures is worthy of comment.

- *Enhancing the professional competence of early childhood educators*. The government was committed to a professionally-trained teaching force, and allocated considerable funds to training. Although in 1999/00 only 54.1 per cent of kindergarten teachers had been trained to the QKT level, this figure increased to 79.5 per cent in 2002/03.

- *Improvement of quality assurance*. The Education Commission (2000) recommended that the Quality Assurance mechanism be strengthened in order to help service providers better understand their strengths and the areas in which they needed improvement. A document on performance indicators for kindergartens (Hong Kong, Education Department 2000b) contained a comprehensive set of indicators and provided a common standard for assessing early childhood education. The indicators covered Management and Organisation, Teaching and Learning, Support to Children and School Ethos, and Children's Development. Various government publications emphasised the need for self-evaluation by kindergartens as a crucial element of quality assurance, and the importance of making public the results of internal and external evaluations.

- *Moves towards unification of the monitoring mechanisms for kindergarten and child-care sectors*. Calls for unification which started in the early 1980s were not seriously addressed until the Working Party on Harmonisation of Pre-primary Services issued a consultation document (Hong Kong, Education Department & Social Welfare Department 2002). The Working Party recommended that the regulatory framework for day nurseries and kindergartens be harmonised with the Education & Manpower Bureau overseeing services for children aged three to six and the Social Welfare Department ensuring that child care centres (which included day nurseries) met government standards. The Working Party also recommended harmonisation of the financial assistance schemes for service providers.

- *Enhanced links between early childhood and primary education*. Although the activity approach was adopted in some primary schools, a comparatively strong academic focus was evident in most primary schools, and several kindergartens covered the Primary 1 curriculum in their classes for five-year-olds. Addressing issues related to the transition from kindergarten to primary school, the Education Commission (2000) recommended that primary schools promote the interest of young children in learning and achievement. Admirably, the focus of these recommendations was not solely

on preschool children adapting to the primary school, as the Education Commission (2000) also recommended mutual visits and joint activities between preschools and primary schools.

- *Promoting home-preschool co-operation.* The reform documents reiterated the government's financial commitment to parents. Through its fee remission scheme, the government sought to ensure that no one was deprived of early childhood education because of financial factors. Furthermore, the government published key information about kindergartens so that parents could make informed choices about where to send their children. In 2003, 25 per cent of kindergartens had parent-teacher associations compared with 12 per cent in 2002 (Hong Kong, Education & Manpower Bureau 2003a). This increase reflected the efforts of kindergarten administrators.

Commonalities and Differences

From this review of preschool education in Macao and Hong Kong, several major similarities and differences will be evident. This section begins by discussing preschool coverage and provision. It then considers assumptions about what children should learn, and who should teach them. As these factors are significantly affected by government policy, the section will emphasise how similarities and variations between the two territories reflect the underlying government policies.

Coverage and Provision

Almost all children over three years of age in both Hong Kong and Macao attend preschool programmes. The governments' fee remission schemes contribute to coverage rates, and the pattern also reflects the value that Chinese parents traditionally attach to early childhood education. Child-rearing in Chinese societies is strongly influenced by Confucian values, which emphasise academic achievement, effort and perseverance. Education is regarded as the path to success and financial gain (Rao, McHale & Pearson 2003). Hence, parents want their children to follow the most judicious paths through preschool to primary school and then secondary school.

   In Hong Kong, the bulk of preschool enrolment has always been in kindergartens, because parents have considered kindergarten education to be a pre-requisite for primary school entrance. However, the 1990s brought a slight shift in enrolment towards child-care centres. The increased popularity of child-care centres reflects the fact that most centres had adopted a curriculum more in line with the kindergarten sector, which in turn had reduced parents' fears that child-care centres were inadequately oriented to the transition to primary school. The whole-day operation of child-care centres was also a great asset to families with working mothers.

   In both Hong Kong and Macao, a combination of demographic trends and government policy has affected the quality of preschool provision. Both territories experienced an influx of population from mainland China, but they also experienced a falling birth rate which increased competition among kindergartens and inadvertently affected preschool curriculum. Some kindergartens have felt pressurised to provide the kind of preschool education which parents desire (a more academic focus to prepare children for primary school) rather than one which is more child-centred.

Such factors also affect equity. In Hong Kong, education for children aged three to six is not compulsory. It is also not compulsory in Macao, but the Macao government does provide fee-free education for children from the age of five. Although the Hong Kong and Macao governments monitor standards, the bulk of the responsibility for providing early childhood education rests with a combination of private and/or non-profit-making organisations. Since in both territories education for children aged three to five does not enjoy the same benefits as primary education, staff and administrative costs have to be covered by fees. Few children have the opportunity to benefit from high quality programmes since high quality care is expensive. Children from advantaged backgrounds attend high quality programmes because their parents can afford to pay high fees, but the lower income groups are disadvantaged.

The study by Rao, Koong et al. (2003) of preschool quality in Hong Kong focused on (i) structural measures which were monitored by the government such as the physical environment, health/safety, staff qualifications and staff-child ratios; and (ii) management-related measures such as administration/evaluation and staff-parent interactions. The researchers found considerable variability in process quality, with higher quality evident in preschools which exceeded government requirements. Structural and management-related measures significantly contributed to prediction of process quality and accounted for 27 per cent of the variance. These findings have implications for the stringency of regulations and training in management of preschools.

Adult-child ratios, a major indicator of preschool quality, are addressed differently in Hong Kong and in Macao. In Hong Kong, the mandated maximum of 30 pupils to one teacher has been enforced since 1986, while in the same year Education Commission Report No.2 (1986) recommended a target kindergarten teacher-child ratio of 1:15, which was close to the ratio in child-care centres. In 1994, the mandated teacher-child ratio was further revised to 20 pupils per teacher for full-day kindergarten classes and nursery (three year-old) classes (Hong Kong, Education Department 1994). Subsequently, the ratio of 1:15 was enforced in 2003 for all preschool classes. Macao's classes have considerably reduced in size over the years, but most have only one teacher, and in this respect the quality of provision may be assumed to have been inferior. M.N.C. Wong (1997) examined the relationship between preschool quality and child development in four-year-olds in Macao. She found that the quality of the learning environment contributed to children's social development and that one major quality indicator was adult-child ratios.

What should Children Learn?

The 1996 guide to pre-primary curriculum published by Hong Kong's Curriculum Development Institute followed a child-centred approach and stressed all-round development. It espoused contemporary views on effective early teaching and learning, and provided suggestions for facilitating intellectual, communicative, personal, physical and aesthetic development. Similarly, Macao's law 11/91/M stressed all-round development and child-centred education. The law stated that "the pedagogical approach of pre-school education is holistic and entrusted to kindergarten teachers". However, the Hong Kong government was concerned that some kindergartens went too far in presenting formal academic curricula, using inappropriate teaching methods for children below the age of six.

In 1999, the Hong Kong government (Hong Kong, Education Department 1999) published a list of 'Dos and Don'ts' for kindergartens. The list of 'Dos' included having

a curriculum that covered moral, cognitive, physical, social, and aesthetic aspects of development by organising activities that promote all-round development; organising various child-centred learning activities; using the mother-tongue as the language of instruction; and respecting individual differences. Good programmes in any country achieve all these goals, but some are especially pertinent to Hong Kong idiosyncrasies. For example, Chinese culture emphasises moral development, and it was recommended that the curriculum attend to this perspective. The vast majority of Hong Kong's population speaks Cantonese as a first language, but parents also want children to learn English. A common practice in Hong Kong is a mixed-code that combines Cantonese and English, but this results in poor standards of both languages. The document pointed out that a focus on separate language development can help to improve the situation. The list of 'Don'ts' also reflected the Hong Kong context: don't ask children in Nursery Class (aged three to four years) to write; don't ask children to do mechanical copying exercises; don't adopt a one-way, lecturing form of teaching; and don't design a curriculum which is too difficult. Yet while all kindergartens and child-care centres had access to the Guide, not all of them implemented its recommendations.

The Macao government had formulated a consolidated curriculum for all kindergartens in 1999. Since most Macao preschools refer to Hong Kong published learning packages for curriculum resources, and the need to reflect the value of the Macao society through curriculum content is a concern of the Macao government, a series of Theme Activities in the local context was prepared by the Department of Education & Youth. A three-year study of school-based curriculum was also launched in collaboration with the University of Macau in 2001. "Learning in Context" thus became a focus of curriculum development in the preschools.

The Hong Kong and Macao governments have had different attitudes towards the learning of the colonial languages by preschool children. In Macao, Portuguese has always been a substantial part of the curriculum of the official schools, albeit mixed with Chinese in the Luso-Chinese schools. In most private kindergartens, Chinese is the medium of instruction with English taught as a second language. The Law on Curriculum Organisation for Pre-primary and Primary Schools (Macau, Governo de 1994) stated that a second language could be taught in the preparatory class through games and activities, in order not to tamper with development of the mother tongue. This legitimised the teaching of Portuguese in the official schools and English in the private schools. Understanding that Portuguese is not such a strong international language as English, the Macao government could only enforce the teaching of this colonial language within the arena of the official sector. However, since most Macao kindergarten teachers were graduates from the Chinese high schools with limited English competencies, the quality of English learning in preschools deserved close monitoring.

In contrast, the Hong Kong government has never advocated the teaching of English or any other second language at the preschool age. The early years are perceived primarily as a time for the development of mother tongue language. Consequently, official documents such as the guidelines on preschool curriculum (Curriculum Development Council 1984; Curriculum Development Institute 1993, 1996) made no mention of the teaching of English, and it was not included in teacher education programmes before 1995. In practice, every kindergarten in Hong Kong teaches some English. Some kindergartens advertise the fact that English is taught by expatriates, but in most kindergartens it is taught by local practitioners with insufficient English

proficiency and little understanding of second-language learning in the early years. English is valued partly by parents because of its value as a route for advancement in the education system and society. Kindergartens know that English is required in primary school, and therefore teach it at the preschool level as a preparation.

After the 1997 political handover, the Hong Kong government declared that secondary school leavers should be trilingual and biliterate (Tung 1997b). In the primary schools, Putonghua, which is the official spoken form of Chinese in mainland China, became a compulsory subject in 1998. Although the preschool sector was not included in these innovations, kindergartens were influenced by the language shifts and some began to teach Putonghua. Again, no Putonghua teaching was offered in preschool teacher education courses before 1995, and in many preschools immigrants from mainland China become part-time Putonghua teachers. The fact that these two languages were now taught in preschools without a proper quality assurance mechanism highlighted the need for the Hong Kong government to review the state of language learning in the preschool sector, taking into consideration both professional judgements and societal needs. Consequently, the Standing Committee on Language Education and Research (SCOLAR 2003) acknowledged the benefits of early exposure to a second language, and suggested that preschool teachers should meet the Language Proficiency Requirement for English and Putonghua teachers in speaking in order to be language models for young children. The Macao government was more proactive over the issue of language teaching but had not yet addressed the issue of the quality of second language learning in preschools.

Who should Teach the Children?

Staff quality is one of the most important determinants of preschool quality, and research has shown that well-trained staff can offset both poor material environments (Crahay 1990) and high adult-child ratios (Howes & Marx 1992). In 1994 the Hong Kong government did make a major step by allocating HK$163 million exclusively to preschool teacher training; and the Macao government has offered fee-free teacher education courses up to the degree level for in-service preschool teachers since 1987. These steps are to be applauded, though further improvements are needed.

In some respects, practices in Macao have always been ahead of those in Hong Kong. Pre-service training started in Macao during the 1960s, while in Hong Kong it started only in 1998. Benchmarks for teacher training in Macao included the Certificate course in the 1960s and the Diploma in Education initiated in 1987. BEd courses for serving preschool teachers were launched in 1991, and the Advanced Diploma course replaced the Diploma Course in the University of Macau in 1996. By contrast, the benchmark for teacher training in Hong Kong is the Qualified Kindergarten Teacher course, which is below the Certificate level. The Certificate in Kindergarten Education Course launched in 1995 is a benchmark only for kindergarten principals. However, Hong Kong provision did begin to catch up in the late 1990s.

In Hong Kong, preschool teacher training was under government operation almost from the start. Although this implied a guarantee of minimum quality, resources were so limited that the capacity was too small to meet the needs. Since preschool education itself was in the hands of the private sector, and there was no legislation on professional requirements, the kindergartens mainly employed untrained teachers with low academic levels. Most assistant teachers had only received 12-week crash courses, which created an image that preschool professionals were of low calibre. Low salaries further

increased turn-over rates, and created obstacles for those who wished to attract applicants with higher qualifications. This longstanding legacy made it difficult for Hong Kong to reach the standards evident in Macao. However, as noted earlier the vast majority of preschool teachers had attained QKT status by 2003. Certificate courses gradually replaced QKT to become the benchmarks of preschool teacher training for both kindergartens and child-care centres. Meanwhile it is equally important to upgrade qualified teachers and administrators to the next level of their career paths in order to enhance the credibility of the profession.

In Macao, there are two dimensions to preschool teacher training: the 'vertical' upgrading of professional qualifications offered as regular courses, and the 'horizontal' widening and refreshing of professional competencies offered as short courses, mainly in the summer block. Both have been substantially subsidised by the government. In Hong Kong, preschool teacher training has always been 'vertical'. It is very desirable for government effort to extend to the 'horizontal' arm as well.

The Driving Forces of Change

The extent to which changes in preschool policy were affected by the projected return of the two colonies to their motherland was different in Macao and Hong Kong. In the former, the 1987 Sino-Portuguese Declaration marked the beginning of a new era for education. Never before had the government been so involved in devising and executing educational innovations. During the subsequent 12 years, much legislation concerning education was processed because the 1999 handover date seemed to be the deadline for completion of the proposed changes.

In Hong Kong, the change of sovereignty had less effect on preschool education, in part because the education sector as a whole was well developed prior to the 1984 Sino-British Agreement. Within the education sector, preschools were neglected by the government, but that did not greatly change in the period immediately following 1984. In 1997 preschool education remained largely in the private sector, and about one third of kindergarten teachers were still untrained. However, the government did inject more resources after 1994. This was not so much because of the impending political transition as a response to the public view that the sector needed attention.

Underlying this comment is an observation about the role of government. The delayed development of preschool education in both Macao and Hong Kong can be attributed to the way that the sector was viewed by the respective governments. The Hong Kong authorities preferred to heed the views of the 1986 Education Commission Report No.2 rather than the 1982 Llewellyn Report, and stated that preschool education was desirable but not essential. The official perception created a 'Cinderella' syndrome (Opper 1993), in which preschool education was deemed inferior to her three sisters namely the primary, secondary and tertiary sectors. There has been some improvement in the status of kindergarten education since 1994, and Cinderella is now dressed and ready for the Ball; but she has still not met the Prince. Much will depend on the extent to which the government follows through with its declared objectives.

The Macao government has in one sense been less discriminatory against the preschool sector, since all levels of education were neglected. Once this general neglect changed, some aspects of preschool education gained almost as much attention as

primary education. The fact that preschool and primary education are under the sur-
veillance of one government office indicates the degree of parity attached to both sec-
tors. When the top grade of kindergarten became part of the fee-free education scheme,
it was in effect being viewed as the preparatory class for primary education. The other
two kindergarten grades were given less attention, but were still considered to be an
integral part of the emergent Macao education system. Also, teachers of all
kindergarten grades were expected to have the same qualification benchmark, and
received the same government subsidy as their counterparts in primary schools. The
suggestion in the reform consultation document that preschool education might become
fee-free (Macau, DSEJ 2003) reflected government efforts to promote greater equity
between the two sectors.

For Hong Kong, one lesson from Macao is that fee-free education can be sepa-
rated from the question of whether kindergarten education is essential. In Macao, the
sector attracted more attention when the government affirmed the importance of pre-
school education, with increased private as well as public investment. The Macao
framework had parallels elsewhere in Asia. In Japan, for example, preschool education
is a shared venture between the government and parents. The Japanese government
does not offer fee-free preschool education; but substantial financial support is given to
preschools, and stringent requirements on quality are enforced. Governments in other
parts of Asia, such as mainland China and Taiwan, do not offer fee-free preschool
education but have acknowledged its place in the education system and monitor the
quality of provision. These observations strengthen the argument that the Hong Kong
government should declare preschool education to be desirable and essential, and is an
integral part of the education system. The Hong Kong government could follow Macao
by making the top grade of kindergarten fee-free as a possible step towards fee-free
education in the entire preschool sector.

Links with Mainland China

To some extent, commonalities in Hong Kong and Macao are derived from the Con-
fucian roots as Chinese societies. The cultural legacies of the colonial powers are in
general not conspicuous in the preschool sector except in official kindergartens in
Macao. As Hong Kong and Macao have now strengthened their bonds with mainland
China because of the return of sovereignty, it is useful to review various dimensions of
preschool education there.

The authorities in mainland China advocate a child-centred orientation in pre-
school education like that in Hong Kong and Macao. A 1987 document issued by the
State Education Commission stated that games should be the major form of activity for
children, and that their choices of games should be respected (China, State Education
Commission 1996a). The document declared that children should be happy in pre-
schools, which should have develop capabilities and character in a comprehensive
manner and should cater for individual differences. Moral education, which means the
education of feeling and the development of good behaviour, was also emphasised, as
in all preschools in Hong Kong and Macao.

In some aspects of policy, mainland China is arguably ahead of both Hong Kong
and Macao. In 1987, the State Education Commission announced a policy on
kindergarten class size and staffing. The mandated class sizes for three-year-olds was

20-25, while for four-year-olds it was 26-30 and for five-year-olds it was 31-35. Each class was expected to be staffed by two teachers and one child-care worker. The adult-child ratio so formed was close to the international standard. In 1989, the Kindergarten Management Regulations (China, State Education Commission 1996b) declared that all kindergarten teachers must be graduates from the early childhood training institutions or equivalent. A previous document, released in 1988 (China, National Affairs Office 1996), had related the government's conception of the impact of early education on the enhancement of the quality of the whole nation. In 2001, the Guiding Framework of Kindergarten Education released by the Ministry of Education reinstated the guiding principles for a child-centred, play-based early childhood education and the framework for formulating such a curriculum (China, Ministry of Education 2001).

However, while mainland China has a comprehensive set of preschool rules and regulations, they are only closely observed in urban areas. Eighty per cent of the population in the rural areas still suffers from resource scarcity. Therefore, in a country of 1.3 billion people the government of mainland China has an agenda quite different from that of the governments of Hong Kong and Macao. The mainland Chinese primary concern is to ensure the dissemination of a general framework of preschool education across the country, while allowing flexibilities in pace, capacity and methods of implementation at the local level. To this end, well-established cities such as Beijing and Shanghai had formulated their own preschool education guidelines in 1996 and 1998 respectively.

As China becomes more open to international developments in early childhood education (Wong & Pang 2002), a common language will be developed among early childhood educators in China, Hong Kong and Macao. This will facilitate greater linkage and deeper collaboration in the postcolonial period.

Conclusions

Taking a historical perspective, this chapter has traced the evolution of services in the two territories. The prospective change of sovereignty in Macao ignited a series of changes in education, which partially remedied the laissez-faire policies of the Portuguese colonial regime. The handover of sovereignty in 1999 gave the government greater impetus for a comprehensive change of Macao education, which envisaged enhanced status and quality of preschool education. In Hong Kong, change in the preschool sector in the 1980s and more prominently in the 1990s was more a response to perceived practical needs and professional advocacy than to political considerations. Yet in neither territory were explicit changes in the orientation of the preschool curriculum brought by the impending political hand-over.

Although Hong Kong has a better-established education system than Macao, neglect of the preschool sector has left it in private hands. For Hong Kong, the overarching agenda in preschool education is the quest for a well-defined status in the education system so as to generate parity in government concern and resources with the primary sector. Enhanced legislative and financial support could then become the critical force for quality in the sector.

Macao appears to be more advanced than Hong Kong in the area of preschool

teacher training, but is still weak in the other two quality constructs, adult-child ratio and class size. The high adult-child ratio reflects an underlying problem confronting the Macao preschool education scene, namely that strong child-centred activity-based learning is not easy to achieve. The key need is for financial input from the government supported by legislative measures. Meanwhile, the government proposal to put pre-school education in the subsidised sector could be a positive step towards more favourable adult-child ratios.

Improvement of teacher training and adult-child ratios would demand considerable financial input from the government. Compared with mainland China, Hong Kong and Macao are very affluent and should be in a good position to cope with the financial demands of high quality education. However, whether this quest for high quality preschool education could be actualised hinges both on the government's value judgements about preschool education and financial considerations. To change government attitudes, tertiary institutions need to conduct research in the local context that will inform government of the efficacy of preschool education. Also important is the building of a quality culture among the stakeholders. Hong Kong's Quality Education Fund might provide a model for the Macao government. This could be a vital step to move preschool education from the licensing level, the 'floor of quality', towards the professional level, the 'ceiling of quality' (Morgan 1985, p.15).

Hong Kong and Macao continued to face problems and challenges in preschool education after the political handovers. Although similar problems will arise in each territory since both are Special Administrative Regions within China, they might be tackled in different ways due to contextual differences. The political handovers have permitted more contact and exchanges between preschool professionals in mainland China and Hong Kong and Macao, thus cross-fertilising the early childhood sectors. A framework of quality early childhood programme embracing both the international perspectives and Chinese values could then emerge and become the mainstream.

2

Primary and Secondary Schooling

Bob ADAMSON & LI Siu Pang, Titus

As this volume shows, Hong Kong and Macao are siblings: they have fundamental similarities and individual traits, and they exist to some extent in a relationship of mutual dependence. Macao is the introspective elder – outshone, overshadowed and greatly influenced by the more gifted and extrovert junior, but nonetheless a source of support to Hong Kong. Both are ports situated on the south coast of China; and there are strong parallels in their historical development, although Macao did not experience a tigerish leap into economic prosperity during the 1970s and 1980s. Both have undergone decolonisation under special circumstances: it comprises reunification with a 'motherland' that had been politically, economically and socially estranged, resulting in a familial accommodation of differences rather than a whole-hearted embrace. Their existence as a pair of colonial problems left over from Chinese history (and also the vexed question of Taiwan) conveniently provided pragmatic politicians in the People's Republic of China (PRC) with legitimacy for what might have been an anomalous and potentially untenable policy of a "special administrative region with a high degree of autonomy" had only one colony existed.

The mutuality is reflected in primary and secondary schooling. As gateways into and out of China, Hong Kong and Macao are peopled with migrants (settlers and transients) seeking access to and egress from the Chinese mainland, including merchants, missionaries, educators and colonial administrators who bring multicentric perspectives of the purposes of schooling. At the interface of East and West, schools in both places mark a key point where the twain do meet and thus represent either contested cultural territory or a melting pot. In the main, Macao has been influenced by educational practices and curriculum materials from Hong Kong rather than vice versa, but this sibling dependency has not simply been a one-way process throughout history. Especially in Hong Kong's early years as a colony, many models and ideas were transplanted from Macao.

Common issues have emerged, most notably fundamental questions concerning the provision, scope and orientation of primary and secondary schooling within the colonial and postcolonial contexts. Whose responsibility is it to provide such education? Who should receive it? What should be the aims and content? Interestingly, the answers show significant similarities and differences. This chapter provides a comparative, chronological analysis of schooling in Macao, where primary and secondary schooling are closely integrated, and Hong Kong, where the two levels are generally distinct but are becoming more integrated. The chapter describes and compares the main features of educational provision at primary and secondary levels, and identifies some of the main

forces that have shaped the similarities and differences that emerge from the comparison. It suggests that geographical proximity and contemporaneous experiences produce the similarities, while the respective colonial practices of Portugal and the United Kingdom (UK) largely account for the differences. To place this discussion in context, the chapter first refers to the evolution of school systems elsewhere, particularly those places which have undergone processes of decolonisation.

Schooling, Colonialism and the Transition to Postcolonialism

Much of the literature on schooling and colonialism is concerned with the imposition and impact of Western thought on other countries, most notably the European sea powers and industrialised nations since the 16th century and, in more recent times, the United States of America (USA). Although this emphasis is apposite for the comparative study of Hong Kong and Macao, the transition to postcolonialism is also worthy of study, in that the two colonies returned to Chinese sovereignty after developing socio-economic and political characteristics that diverged from those of the mainland.

The emergence of nation-states in the past few centuries has reshaped the nature and structures of schooling (Green 1990; Ramirez 1997). Previously, much education was informal and took the form of personal apprenticeships and other mentoring to prepare children to contribute to the survival of the clan or other social structures. The nation-state focused on industrial development and expansion of economic power at the national level. Schooling became more formal, and characterised by the provision of mass education and the cultivation of patriotic sentiments. The presence of the Portuguese and British in Macao and Hong Kong respectively is explained by this search for an expansion of trade, facilitated by the development of military technology. However, in colonial societies, the question of mass education (with its resource implications) and the cultivation of patriotism (for which country?) were problematic for colonial authorities, and the situation in many settings was made more complex by the existence of precolonial forms of schooling. In Macao and Hong Kong, precolonial schooling was oriented towards the maintenance of the dynastic system in China. The focus of the schools was on instilling the classical Chinese virtues of filial piety, loyalty and righteousness through the study of the great literary works with a view to maintaining social harmony (Cleverley 1991).

Colonial authorities around the world, faced with different modes of schooling, adopted a variety of solutions (Kelly & Altbach 1984, pp.2-4). One was classical colonialism – imposing their own imported modes on the colonies. A second approach was to promote schooling in its indigenous form. A third method was to adopt a mixed system, either by generating a synthesis of the two modes, or creating a parallel system, or some other, more complex, admixture. The most common form of schooling in colonial societies was a mixed mode, as the local administration of education (as opposed to direct control located in the colonial country) meant that the nature of schooling was often strongly influenced by the particular conditions of the colony and by those directly responsible for its provision (Kelly & Altbach 1984). This mixed mode commonly had a strong centre-periphery orientation, whereby government schooling heavily favoured colonial nationals and those proficient in the colonial language who would serve interests of the ruling power, while missionaries and local organisations mainly provided schooling of various kinds for other children. The curriculum in the

elite government schools was academic and geared towards producing administrators for the government sector (Ball 1983; Bray 1997a). An example is the French system in Algeria in the 19th century. Other modes emphasised convergence, for political and/or economic reasons. For instance, the British Orientalists in India sought to graft modern Western ideas on to indigenous learning to promote industrialisation and social reforms without generating cultural resistance (Kopf 1984).

The nature of schooling during the processes of decolonisation has commonly been affected by the amount of time available for preparation; the attitude of the colonial powers towards decolonisation; the available human resources; and the end product, including self-government or transfer of sovereignty (Bray 1997a). When the process was rapid or violent (such as in India in the 1940s and many countries in South East Asia in the 1950s), or when the colonial powers were ill-disposed towards the process, the scope for schooling to be adjusted was limited – although educational initiatives might be high on the agenda of the indigenous authorities that assumed power. However, in some African countries – Ghana and Nigeria, for instance – the provision of education was expanded and reoriented to prepare for self-rule through co-operation with the colonial power (Bray, Clarke & Stephens 1986). The reunification of Macao and Hong Kong with their neighbour, as opposed to a move to sovereign independence, was not unique: the Portuguese colonies of Goa and East Timor, for example, were transferred to Indian and Indonesian sovereignty respectively. Realignment rather than independence creates an added dimension to debates concerning the nature and content of postcolonial schooling.

As far as the curriculum is concerned, school subjects deemed ripe for reorientation at a time of colonial transition (either to sovereign independence or to merger with another state) are those connected with national identity, especially history, social studies, literature and languages (Jansen 1989). Thus the content and orientation of history might be changed to reflect the perspectives of the new power, as happened in Ireland in the early 1920s; social studies programmes rooted in local experiences and environments might be introduced, as in Tanzania in the 1960s; and the colonial language might be under pressure and indigenous languages promoted in its stead, as in Malaysia during the 1970s and 1980s. A countervailing trend in many postcolonial countries has been retention or even strengthening of aspects of the imported curriculum for technological progress and international trade. This may be illustrated by the renewed status that English enjoyed in the school curriculum in Singapore in the 1960s (Jason Tan 1997) and Malaysia in the 1990s (Pennycook 1994, 1998). This tension between the desire to strengthen national identity and the imperatives of economic globalisation is discernible in the school curriculum in Macao and Hong Kong.

Primary and Secondary Schooling in Macao

The development of schooling in Macao before 1999 was influenced by two principal factors: its geographic location and the style of colonisation. Both of these had political, economic and cultural implications that impacted upon education. Geographically, Macao was initially an attractive port for the Portuguese, providing access to Chinese and other Asian markets. In the event, its golden years were short. Macao's value was drastically reduced around 1640 by a concurrence of disparate blows. The fall of the Ming dynasty, with which the Portuguese had carefully cultivated connections, the rise

of the Dutch in securing and monopolising trade routes, and the expulsion of the Portuguese from Japan all contributed to Macao's economic decline (Cremer 1991). The colonisation of Hong Kong, which had a superior harbour, condemned Macao to serving much of its colonial life as a place of rest and recreation for visitors. It provided a safe haven for political refugees from the mainland, but the proximity to China also left it vulnerable to political, economic and social problems emanating from over the border.

The second factor influencing schooling in the territory was the style of colonisation. Portugal perceived Macao as a settlement, and granted it the status of a Portuguese city in 1586 (Cremer 1991, p.35). In 1749, the Macao government decreed that only 184 Chinese were permitted to reside in the main fortified city, as opposed to the outlying islands (C.C. Choi 1991, p.64). The emergent community of Portuguese expatriates, Macao-born Portuguese and mixed race Macanese was the major concern of the government, as the Chinese population were officially classified as foreigners (Rosa 1991). This enclave mentality created a centre-periphery dichotomy that was evident in the development of schooling. Also, Portugal's strong religious tradition meant that Christian missionaries played an important role in education in Macao (more than in Hong Kong), although, as noted by Leung's chapter in this book, relationships between the Church and Macao authorities have not always been harmonious. Many of the religious schools were designed to educate Chinese children. As the missionaries did not attempt to eradicate Chinese culture completely from Macao, their schooling for the indigenous population maintained a local flavour, and it existed alongside traditional schooling provided by the Chinese community.

Since 1999, schooling in Macao has been characterised by the new concept of education embraced by the government of the Special Administrative Region (SAR). For instance, the government has tried to strengthen its influence on the private schools. Following the introduction of a system of subsidies for private schools in the 1990s, the Department of Education & Youth launched a round of public consultation regarding proposed amendments to the Macao education system to match changes in society and the economy (Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] 2003b). The second round of consultation in 2004 adjusted some original proposals, but maintained the basic thrusts (Macau, DSEJ 2004b). Major initiatives included development of school-based curricula in order to change the perception of reliance on mainland China, Hong Kong or Taiwan for curriculum borrowing; extending the 10 years of fee-free education to 12 years; unifying the 6+3+3 school system; multiple-intelligence forms of assessment; inclusive education; a financial support system for poor families; the use of English as the medium of instruction in selected schools; and small-class teaching (see also Sou 2003).

Historical Development of Schooling in Macao

Historically, a multi-track system of primary and secondary schooling emerged: religious, government and community schooling. Until the return of sovereignty loomed, the government left the education of over 90 per cent of the student population in private hands (S.P. Lau 2002a). Although government subsidies have a long tradition – in 1574, the King of Portugal started to give some of the tax revenue from Malacca to subsidise the running of St. Paul's College in Macao (S.P. Lau 1994) – government provision of education for local Chinese children was negligible and mainly

limited to those from poor families. The decline of Macao's economic value to Portugal was a disincentive for the government to invest in the education of sectors of the population that were viewed as peripheral (K.C. Tang 1999, p.76). This resulted in "enormous inertia", as one Governor admitted (Macau, Governo do 1984, p.4), in social sector provision for people other than Portuguese and Macanese.

Despite their travails with an occasionally unsympathetic government, foreign missionaries (principally the Jesuits) and their converts were very active, providing Chinese children with a basic education mainly in Western subjects, such as Latin, English and Portuguese. Indeed, from the 16th to 18th centuries, they were the sole providers of such education. Struggles between the State and the Church in Europe spilled over into Macao. The Jesuits were expelled from Macao in 1762, and schools were abandoned. The schools reopened when the missionaries returned in 1801 (Pires 1991), but further disruption occurred sporadically during the 19th century. The most active groups in the 20th century included the Diocese of Macau; Catholic missionaries, such as the Jesuits and the Canossian sisters; Protestant missionaries; and various charities with religious links. For instance, in 1905, the Salesian Fathers set up the first Western vocational school in the history of Chinese education, the Immaculate Conception Technical School (Lau 2002b). Many of the religious and charitable organisations in Macao set up schools in Hong Kong after the British established the colony in 1841. Over time, this link led to transfer between the two territories (although later it was generally from Hong Kong to Macao rather than vice versa) of curriculum, pedagogical approaches and teaching materials. Given the inertia displayed by the Macao authorities towards peripheral communities and the different affiliations and national origins of the religious groups, it is not surprising that these schools developed a plethora of curricula. Most used Chinese or Chinese and English (for its commercial value) as the medium of instruction, but parts of curricula were based on those of the home countries of the religious organisations, or Taiwan or Hong Kong (Bray & Hui 1991a, p.187).

Formal Chinese schools developed rather late in Macao. Kiang Vu Charity School was established in 1874; and the Tong Sin Tong charity society set up tutorial classes for the poor in 1892. The latter were extended to become Tong Sin Tong Charity School in 1924 to provide free education for Chinese boys, and girls were accepted to the school starting from 1937 (Tong Sin Tong 1992; Macau, DSEJ 1997a, p.205). Away from the Macao peninsula, two schools were founded for poor Chinese boys in Taipa and Coloane in the 1880s. They were built by local residents and were subsidised by the government (Pires 1991, p.17). The Hundred Days Reform movement in the latter years of the 19th century and the overthrow of the last emperor in China in 1911 led to an increase in the number of Chinese schools in Macao. In 1898, Qing government loyalists set up the Tung Man School (H.C. Tang 1995, p.411). As with other new institutions, this school sought to combine Chinese and Western learning, in accordance with the principle of "Chinese learning for the essence, Western learning for utility" which had guided the reformist Self-Strengthening Movement in China. The goal was to create a strong, modern nation that could resist the encroachments of Western countries by using imported technology but without losing cultural integrity.

Between 1910 and the 1930s, over 10 Chinese schools using Western teaching methods were established by individual scholars. These schools tended to develop their curriculum according to models from the mainland and, following the civil war, Taiwan. During the Republican era in China, a liaison developed between the ruling Nationalist

Kuomintang (KMT) Party and the schools in Macao established by Chinese patriotic associations. Most of these schools registered with the Education Department of Guangdong and, after the founding of the PRC in 1949 and the flight of the KMT forces from the mainland, with the Taiwan Government (Cheung 1955, 1956; S.P. Lau 2002b).

In the 1930s and 1940s, both the Japanese invasion of China and the civil war between the KMT and the Communists had an impact upon schooling in Macao. Over 20 schools in Guangdong Province moved to Macao to escape the Japanese, and many Chinese educators – refugees from the mainland – set up their own schools in Macao. This sudden expansion of schooling in Macao was not sustained, because of the shortage of resources and teachers. After the war, many of the schools that had moved from China returned to their original locations (H.C. Tang 1995, p.413). However, some maintained sites in Macao, such as Pui Cheng School whose kindergarten, primary and secondary sections grew to accommodate over 3,000 students. Other schools were formed by associations of KMT sympathisers who fled to Macao after 1949.

Government schooling was also a late development, dating from 1894. As noted above, the main concern of the Macao authorities was traditionally for Portuguese or Macanese residents. The centre-periphery divide was reinforced until recent times by large discrepancies in the funding of schools: government schools generally had superior resources and smaller classes than other schools (Bray & Hui 1991a, p.188). The handful of government secondary schools transplanted the school curriculum from Portugal and taught through the medium of Portuguese. The only Chinese-medium government schools were Luso-Chinese primary schools, offering a curriculum based on the Portuguese model. Since 1985, Luso-Chinese secondary schools have been established to serve the Chinese community, offering a similar curriculum through the medium of Chinese but also teaching the Portuguese language.

The period since the founding of the PRC in 1949 has been one of fluctuating tension between Macao and the mainland. Problems have been exacerbated by the lack of a buffer class of local officials in the colonial service such as the one in Hong Kong. The link between Macao and the KMT was a source of irritation to the PRC. This culminated in 1966 in the event that is known colloquially in Cantonese as the '1-2-3 Incident' (after the Chinese styling of the date, December 3rd, when the episode began). Controversy arose when a group of trade unionists sympathetic to the radical Cultural Revolution political movement then erupting in the mainland, attempted to establish a primary school in Taipa Island without following registration formalities. When the Macao government chose to close down the school, organised resistance and a political campaign gained the support of mainland groups. At one stage, food supplies to Macao were cut, Chinese warships menaced, and militant Red Guards briefly overran the enclave. The Portuguese retreated, literally and metaphorically, and at the height of the crisis Portugal even offered to quit Macao within a month. However, this offer was declined by the PRC leadership, who were concerned about the continued prosperity of both Hong Kong and Macao as go-betweens in conducting foreign trade with capitalist countries (Edmonds 1989). Eventually, the Macao government permitted the school to open and undertook to ban all organisations with strong KMT links.

The 1987 signing of the Sino-Portuguese Agreement on returning Macao to China marked a shift in stance with regard to schooling. Changes included consultations with school principals and management bodies on improving education (Bray & Hui 1991b) and the design of a Macao-oriented curriculum for Luso-Chinese kindergartens, primary and secondary schools that was introduced on a trial basis in 1996. The Macao

government also started to provide formal teacher education and 10 years of fee-free education to all children (comprising the final year of kindergarten, six years of primary and three years of junior secondary schooling) and undertaking curriculum reform in Chinese schools (H.K. Wong 1991; Li & Choi 2000). Improvements were funded by economic development, most notably in tourism, casinos, and the textile industry. New schools were built, and many existing schools acquired new buildings. Two technical secondary schools were established in 1998 to prepare a suitable workforce for the business and industrial sectors. These improvements, together with various infra-structural and developmental projects, may be attributed to the Portuguese wanting to leave Macao with honour, like the British in Hong Kong, in order to retain good relations with China.

One way through which the government of the Macao SAR tried to modify previous patterns was through a system of grants to provide 10 years of fee-free basic education. By 2004, 84 per cent of private schools had joined the free-education scheme (Macau, DSEJ 2004a, p.3). A special subsidy was also offered to parents whose children were educated in schools outside the scheme to ensure that all children could receive formal education. However, the establishment of common system of assessment for senior secondary school leavers remained a challenge for the government.

Administration of Schooling in Macao

In 2003/04, Macao had 85,859 primary and secondary students, and 3,548 teachers (Macau, DSEJ 2004a, p.2). Among the 81 schools, only 10 (12.3%) were run by the government (Table 2.1). Among the rest, just over half were run by religious groups, and the others by trading or cultural associations, individuals, societies and cooperatives. Macao had no government-aided schools of the type found in Hong Kong.

Table 2.1: Schools in Macao, 2003/04

Sponsor	Number of Schools
Government	10
Private schools with free education	59
Private schools without free education	12
Total	81

Note: Excludes evening schools and institutions which only operate at preschool level, but includes 7 special schools

Source: Macau, Direcção dos Serviços de Educação e Juventude (2004a), p.3.

The multiple providers of education in Macao created a muddled system of administration and curriculum, though the reforms in the 1990s helped to improve the situation. In the past, both Portuguese and Luso-Chinese schools run by the government followed a 4+2+3+2+1 system based on the model in Portugal. However, schools catering to expatriate Portuguese children registered with authorities in the mother country and offered a curriculum based on the national system, whereas schools for

Macanese children registered with local authorities and until 1996 largely designed their own curricula. In 2000, the Portuguese School of Macao was following a 4+2+6 system. In the 1990s, Luso-Chinese schools operated a 6+5+1 system similar to that of some English-medium religious schools. By the end of the century, the government-run Luso-Chinese schools followed a 6+3+3 system similar to that of the majority of Chinese-medium private schools. Chinese-medium and English-medium sections of religious schools either followed a 6+3+3 system (borrowed from mainland China or Taiwan) or a modified Hong Kong model of 6+5+1 (Figure 2.1). Two prevocational schools maintained a 6+5 system, as did some English-medium schools such as the School of the Nations, Chan Sui Ki College, St. Joseph (V) Secondary School (English section), and Sam Yuk Secondary School (English section). Reform plans announced in 2004 indicated intention to unify the system (Macau, DSEJ 2004b).

Figure 2.1: Primary and Secondary School Systems in Macao

	Age	Portuguese-medium Schools	Luso-Chinese Schools	Chinese-medium Schools	English-Chinese Schools+	English-medium Schools
Secondary	17	3+2+1	3+3	3+3	5+1†	
	16					5
	15					
	14					
	13					
	12					
Primary	11	4+2	6	6	6 (+1)‡	6
	10					
	9					
	8					
	7					
	6					

Notes
* Students may leave school after Secondary 5 with a general secondary school certificate issued by the school, or a senior secondary school certificate after Secondary 6.
† Some schools do not have Secondary 6 classes, so students continue their studies in other secondary schools or in the pre-university classes in the University of Macau.
‡ A one-year preparation class is added for students who are weak in English before they can study in Secondary 1.
+ These schools have English-medium and Chinese-medium streams.

Progressing from Secondary 5, school leavers could continue their senior secondary education in other schools or in the pre-university classes offered by the University of Macau, or could sit the UK 'A' Level examination. Religious schools were registered locally, but many borrowed from the Hong Kong curriculum. Because no local public examinations were available in Macao, some students gained approval to travel to Hong Kong to sit for examinations administered by the Hong Kong Examinations & Assessment Authority. Some schools prepared their students to sit for the General Certificate of Education examination set by a UK examination board which had approved those schools to operate as examination centres in Macao.

Schools run by Chinese associations affiliated to the KMT were registered first in Guangdong and, after 1949, in Taiwan; and until recently they followed their own curriculum without input from the Macao government (Cheung 1955, 1956; K.C. Tang 1998). After the watershed 1-2-3 Incident, the practice of allowing schools to register with Taiwan was stopped and schools run by associations sympathetic to the PRC were set up, again determining their own curriculum and operating a 6+3+3 system as in the mainland. As the reunion with China approached, many schools adopted textbooks from the mainland and started to prepare students to sit for the entrance examinations for universities in China.

Unlike most counterparts in Hong Kong, many schools have two or even three sections: preschool, primary and secondary (Table 2.2). Such vertical integration also reflects the lack of horizontal integration of schooling in Macao, which the 2004 reform proposals aimed to address (Macau, DSEJ 2004b). Before 1997, all the primary schools used the whole-day system even though this meant larger classes (in some cases reaching 50 or 60) than in Hong Kong. However, in 1997 a 'Net School System' was launched, and led to bisessional operation in many primary schools. There is no public examination for banding Primary 6 students for entrance to secondary schools, nor, as noted above, is there a public examination system for matriculating secondary students (although since 1990 the University of East Asia, later renamed the University of Macau, has had an entrance examination). Schools are free to assess the ability of their students, and an increasing number prepare their students to sit for the Senior 6 Public Examination in the PRC for entrance to mainland universities.

Table 2.2: Number of Schools by Type and Level, Macao, 2003/04

Type	Primary	Secondary	Preschool & Primary	Primary & Secondary	Preschool, Primary & Secondary	Special	Total
Official Chinese medium (Luso Chinese)	4	2	2	0	0	2	10
Official Portuguese medium (Luso Chinese) Section	1*	1*	0	0	0	0	2*
Private, Portuguese-medium	0	0	0	1	0	0	1
Private Chinese-medium	5	2	21	2	25	5	60
Private English-medium	0	1+3*	0	4+1*	1*	0	5+3*
Private English International School	1	1	1	0	2	0	5
Total	10+1*	6+4*	24	7+1*	27+1*	7	81+7*

Note: Does not include evening schools or schools for adults
* section (not counted as school)

Source: Direcção dos Serviços de Educação e Juventude, Macau

As Macao encountered a significant drop in birth-rate before 1999, the new Macao SAR Government lowered standard class sizes from 45 to 35 students to facilitate small class teaching. In Hong Kong, by contrast, the lack of economic support from the SAR Government discouraged a similar trend and the class size went up to 37

or above in many primary schools. However, since the number of secondary schools in Macao is small, class sizes commonly reach 60 or more, compared to 42 in Hong Kong.

The School Curriculum in Macao

Given the variety of curricula in Macao, it is difficult to generalise about the 'typical' experience of schoolchildren. However, it is clear that certain subjects receive greater attention than do others. Official statistics indicate that in Chinese and Anglo-Chinese primary schools, Chinese, English and Mathematics are allocated more lessons per week (approximately eight, six and five respectively from Primary 1 to 6) than Science, Hygiene and Social Studies (often combined, on the Hong Kong model, as General Studies), Putonghua, Physical Education, Religious Studies, Civic Education, Music, and Art & Craft (around two lessons per week each). In secondary schools, English receives the highest number of lessons per week (around nine), with Mathematics and Chinese being allocated between six and eight lessons. Science subjects, Computer Studies, Putonghua, Physical Education, History and Geography receive two to four lessons a week, while Music and Arts are allocated one lesson each. In the Luso-Chinese system, the primary schools devote around 10 lessons a week to Portuguese, eight to Chinese, five to Mathematics, two each to Science, Social Studies, and Art & Craft, with Music and Physical Education receiving one to three lessons a week. In secondary schools, Portuguese (around six lessons), English (five), Chinese (five) and Mathematics (four) receive the largest allocation. Art, Physical Education, Geography and Computer Studies are given two lessons in junior secondary school, while in senior secondary schools, Physics, Chemistry, Biology, Economics, Computer Studies, Principles of Accounting and Physical Education have two to four lessons per week according to the specific year group (Macau, DSEJ 1994b).

   The lack of a Macao-oriented core curriculum was addressed in the late 1990s. The Department of Education & Youth set up a curriculum development division in 1995 to prepare syllabuses for the subjects taught in kindergarten, primary and secondary schools. These were piloted in 1996/97. In preparation for the handover to China, many schools introduced Putonghua and a course on the Basic Law (Ngai 1994).

Teachers in Macao

Teachers in Macao come from a variety of backgrounds. In 1996/97, only 42 per cent of the teaching force (then numbering 4,135) had been born in Macao. A large proportion (34.4%) had been born in the PRC, while 8.8 per cent and 6.4 per cent had been born in Portugal and Hong Kong respectively (Macau, Direcção dos Serviços de Estatística e Censos 1998b, p.47). During subsequent years the proportions remained fairly constant, though percentage of local-born Macao teachers increased as more young teachers entered the profession (S.P. Lau 2002a).

   Most primary teachers in private schools teach specific subjects, as in Hong Kong, but teachers in the government Luso-Chinese schools teach all subjects except in the areas of Portuguese, Physical Education, Music, English, and Computer Studies. The multi-skilled class teachers stay with their classes for nearly the whole day, and are even promoted with the classes at the end of the school year, until Primary 5 when the

subject-teacher system is used. Classes in Luso-Chinese schools are small, averaging around 20 pupils in the late 1990s, but increasing as a large number of new immigrants arrived from China. In private schools, class sizes vary enormously, but the government set a maximum of 45 students per class for all schools joining the Free Education Scheme (Net School System). In secondary schools, the class size is generally more than 45.

Subject teachers in primary and secondary schools usually teach four to six periods out of seven or eight periods per day. In 2001/02, teachers taught an average of about 21 periods per week (Macau, DSEJ 2003a). Each period lasts 35 to 40 minutes. Outside school hours, many teachers take tutorial classes to assist students with their homework. This extra work is paid separately from the normal salary. Some schools run from Monday to Friday, while the rest run from Monday to Saturday morning. The school year normally runs from September to early June, with a break of two weeks before summer school starts in July. In the past, students were commonly required to attend four weeks of summer school to prepare for the new school year, but in more recent times summer school has generally become a remedial programme for students who performed poorly in examinations.

Government schools have two salary scales: one for kindergarten and primary teachers, and the other for secondary teachers. In 2002 the starting monthly salary for those on the first scale was around MOP17,500 (HK$17,000 or US$2,200), and the highest salary, normally for a teacher approaching retirement, was MOP24,000, although senior staff such as principals might receive MOP29,000. According to the other scale, a secondary teacher with a degree and a teacher education qualification would start on MOP21,500, rising over a period of about 25 years to MOP32,500. All teachers receive an additional month's salary half-yearly. These starting salaries are on a par with those in Hong Kong, although the top of the scale is much lower: a school principal in Hong Kong could earn around three times the salary of a Macao counterpart. Conditions in private schools in Macao are much less favourable: in 2002, kindergarten and primary teachers started at around MOP6,000 and secondary school teachers received a starting salary of about MOP10,000 per month. All teachers were granted an extra allowance according to their qualifications by the government of around MOP2,000 or above per month. In 2003, the teacher's tax-free privilege was ended. The retirement age is 60 in government schools, with a possible extension to 65. There are no fixed retirement ages for private schools, so there are a number of old teachers in such schools. According to official data (www.dsej.gov. mo) in 2002/03, one teacher was over 80 years old.

Primary and Secondary Schooling in Hong Kong

The development of schooling in Hong Kong has been linked to shifts in the socio-economic and political climate, which in turn has been strongly influenced by the relationships with and between the colonial power, the UK, and China. As with Macao, Hong Kong's harbour and gateway to China provided the economic motivation for the colonial presence. Likewise, the events leading up to and following the founding of the Republic of China in 1911; the Sino-Japanese war; civil war, violent political movements and sporadic famine in China; and the return to Chinese sovereignty all affected schooling in Hong Kong. But to a greater extent than Macao, economic factors,

most notably the industrialisation of Hong Kong in the second half of the 20th century, the modernisation of China after 1978, and the influence of globalisation at the turn of the millennium were significant in shaping educational provision at primary and secondary levels.

The form of colonialism practised in Hong Kong was different from that in Macao. Sweeting (1992, p.65) compared Hong Kong society to a wok rather than a melting pot, in that "various separate ingredients are rapidly and briefly stir-fried in a very heated and high-pressured atmosphere". But instead of an enclave approach, the colonial authorities created a buffer class of local elites well-educated in Western and Chinese learning to work in the administration and thus reduce potential racial friction between rulers and colonised. This policy was facilitated in the early years of the colony by a degree of convergence between colonial educational practices and traditional Chinese schooling. Government schooling served mainly to furnish civil servants and commercial go-betweens not only for Hong Kong, but also for China. British interest in modernising China was partly altruistic and partly motivated by the aim of establishing influence there (Ng Lun 1984, p.82). Community Chinese schools also supplied personnel for the modernisation of China, working for example in the customs service (Bickley 1997), and both British and Chinese schooling used an academic, examination-oriented curriculum. The inclusion of Chinese subjects in the government school curriculum and the social and economic benefits which accrued to graduates facilitated local acceptance of this liberal form of colonial schooling, a pragmatism that remains a feature of education debates in Hong Kong today. Indeed, pressure from the local community was cited in 1878 by Governor John Pope Hennessy as one reason for not introducing more Chinese components into the curriculum (Sweeting 1990, p.233). Modern schooling in Hong Kong reflects the synthesis of the two systems in the continued use of traditional features of British education (for example, school uniforms, straight rows of desks facing a blackboard, and students standing up to speak to the teacher) and of Chinese education (such as memorisation, and an emphasis on diligence).

Historical Development of Schooling in Hong Kong

After 1841, initial moves to set up public schooling came when the Morrison Education Society and various other missionary groups transferred or extended their Macao activities. Village schooling continued to be provided on a community basis, largely undisrupted by the change of sovereignty. Government provision of schooling was initially small scale and elitist – although it catered for all races – and it was left to charities and neighbourhood organisations to educate the majority of children. From 1873, when a Grant-in-Aid scheme was set up to provide private groups with government funding for education, the number of missionary schools grew further.

Two major events were instrumental in effecting educational change in Hong Kong early in the 20th century: the establishment of the Republic in China after the fall of the Qing Dynasty in 1911, and World War I. The first event intensified nationalist sentiments among Chinese in Hong Kong, creating unease in official circles that Chinese nationalism and anti-foreign propaganda might be spread in non-government schools and threaten Hong Kong's social and political equilibrium. This perceived threat produced a bureaucratic response from the government. The Education Ordinance of

1913 sought to impose control over the proliferating non-government schools by requiring them to register with the Director of Education, who would then be responsible for ensuring that the schools adhered to government regulations. This ordinance marked a shift in government concern from just the elite schools to all schools, and although the major forces for developing mass education were the economic imperatives and the population boom after World War II, the tensions of the inter-war period placed the general provision of schooling in an increasingly important position on the government agenda.

The demands of World War I for military hardware encouraged divergence in Hong Kong's economic activities, with light industry as well as shipbuilding and repairs developing in importance (Sweeting 1992). The impact on education was greater attention to fostering vocational skills. The emergent curriculum was designed to meet perceived local needs better, while still basically anglocentric in orientation in the case of government and Grant-in-Aid schools, and sinocentric in the case of private traditional schools.

World War II was a serious body blow to the British Empire, which declined rapidly. The occupation of Hong Kong by the Japanese from 1941 to 1945 also represented a considerable loss of face for the British administration, rendering its legitimacy more tenuous even after its resumption of sovereignty. The Chinese civil war and sporadic turmoil of revolutionary movements in the early years of the PRC placed economic, political and population pressures on Hong Kong. Bereft of its role as an imperial outpost, Hong Kong had to reinvent itself: light industry (including plastic goods and textiles) and entrepot services provided the capital to house and educate the huge numbers of political and economic refugees who touched base, many after swimming from the mainland. But far from proving a burden, these immigrants, rich and poor, made a major contribution to Hong Kong's emergence as an economic powerhouse. Hong Kong's relative independence from the UK and desire to remain politically independent from the Communist mainland accelerated the decoupling of schooling from anglocentric and sinocentric models. At the secondary school level, Chinese-medium schools increased in number, offering a curriculum similar to that of Anglo-Chinese schools (which purported to teach through the medium of English) – although the powerful economic pull of English as an international language bestowed low status on Chinese-medium schools in the eyes of many parents. The distancing from Communism and from the rival KMT was reflected in legislation such as that which established the Standing Committee on Textbooks in 1948, which primarily aimed to ensure that no propaganda from either camp be allowed to permeate teaching materials.

Gradually, the provision of schooling was improved to cater for the burgeoning population and the demands of the growing industrial sector for human resources with at least basic education. A seven-year expansion programme in primary education was introduced in 1954. One feature of this programme was the use of bisessional schooling, whereby the same premises were used for two schools, one operating in the morning and the other in the afternoon. Intended as a temporary measure, such primary schools were still common at the end of the century, despite the government's stated commitment to move towards all-day schooling, as policy priorities had shifted first to secondary schooling and then to tertiary institutions. Nevertheless, given the tripling of the population since the 1940s, the attainment of universal and compulsory primary education by 1971 was a considerable achievement and a marked shift from the former elitist orientation.

The use of the private sector for providing education led to occasional tensions. Schools sponsored by organisations sympathetic to the mainland were active in the riots of 1967 (which were countered mainly by local police acting as a buffer for the British army). In 1978, students from one subsidised secondary school, supported by several teachers, embarked upon a campaign criticising the general management of education by the government's Education Department (ED). Events escalated to street marches. The government responded by closing down the school (K.M. Cheng 1992, p.110). The toughness of the response contrasted with the capitulation of the Macao authorities when faced by the 1-2-3 Incident, although, in fairness, the circumstances were more politically fraught in the latter case.

The final years of colonialism in Hong Kong were paralleled by far-reaching changes on the mainland, which impacted strongly upon education in the territory. The PRC's embrace of open-door economic modernisation policies in the late 1970s resulted in another adjustment to Hong Kong's own economic profile, as much of the light industry was relocated over the border in Guangdong, where special economic zones were created. The reorientation in the PRC's priorities was reassuring to many people in Hong Kong once the territory's future was decided with the signing of the Sino-British Joint Declaration in 1984, but anxieties were reawakened by the bloody suppression of the student-led democracy movement in and around Beijing's Tiananmen Square on June 4th 1989. During this period, Hong Kong's self-identity became stronger (Sweeting 1995, p.49) and eyes were fixed on the post-1997 era and the credibility of the promise of "50 years without change" made by China's leaders.

The establishment of nine years' universal and fee-free education was achieved in 1978, providing six years of primary and three of secondary schooling. But 1978 was also significant in marking the beginning of the Four Modernisations drive in the PRC. When Hong Kong developed its service and financial sectors to compensate for the loss of its manufacturing base to the mainland, schools came under pressure to groom versatile and multilingual citizens conversant with sophisticated technology and Wall Street wisdom. This pressure was reinforced by parental expectations – a prosperous, well-travelled and increasing influential middle class had emerged – and by the determination of the government's Education Department (ED) to adopt and/or adapt the latest fashions from Western countries.

The various pressures resulted in a series of reports by the Education Commission, which had been created in 1984, and of curricular initiatives. The latter included the attempts to improve Chinese and English language standards in Hong Kong, which were portrayed as declining; the establishment of the Hong Kong Institute of Education (HKIEd) in 1994 as part of a move towards an all-graduate and qualified teaching profession; and the introduction of new approaches to teaching, learning and assessment, such as the Target Oriented Curriculum (TOC), which was underpinned by a humanistic orientation, constructivist views of learning and the promotion of task-based learning as a key pedagogy. The influence of the forthcoming reunification with – or, as Law (1997) argues, recolonisation by – China was evident in the promotion of Putonghua as a core school subject from its previously very low status (Adamson & Auyeung Lai 1997), and a lively debate over civic education, which some educators argued should be associated with patriotism. Textbooks were rewritten by commercial publishers, with a degree of self-censorship that was apparently encouraged by the Education Department. In 1994, the Director of Education suggested that history books should avoid covering the past 20 years (which would encompass the Tiananmen Square

events) on the grounds that it would be difficult to achieve historical objectivity (Lee & Bray 1995, pp.365-366).

After the handover, the Education Department – which was incorporated into the Education & Manpower Bureau (EMB) in 2003 – promoted ill-defined 'Asian values' in the civics curriculum in an attempt to strengthen Hong Kong students' identification with the mainland, where a similar promotion was seeking to fill the vacuum in philosophical worldview that had been created by the demise of the imperial system and Communism (Agelasto & Adamson 1998). Daily ceremonies for raising the national flag were introduced in many primary schools. But apart from these instances, few changes to the school curriculum could be ascribed to political motives in the immediate postcolonial period – perhaps because the PRC government was eager to be seen to adhere to its promise of a high degree of autonomy for Hong Kong. In his speech to celebrate the inauguration of the Hong Kong Special Administrative Region on 1 July 1997, the Chief Executive, Tung Chee Hwa, identified education as "the key to the future", which "should encourage diversification and combine the strengths of the east and the west" (Tung 1997a). Economic competitiveness remained a strong influence: nationalism had to be tempered with internationalism. Later in 1997, Tung visited Singapore and returned impressed with the education system there – in particular, the provision of computers and their use in teaching and learning. In his first policy address, Tung announced the development of Information Technology (IT), with each primary school to be allocated 42 computers and each secondary school 84 computers (Tung 1997b). A target of 25 per cent of the curriculum was to be taught through IT. He instituted the HK$5,000 million Quality Education Fund for school initiatives and research projects, and other measures including benchmarking of teachers' linguistic and pedagogical competence. The latter proved a controversial reform that left many teachers disaffected and a significant minority of English Language teachers having to find alternative employment.

Reforms that had a major impact on the school curriculum were undertaken at the turn of the millennium. First there was a review of education undertaken by the Education Commission, a group of advisers to the government representing various stakeholders. Apart from a public consultation, the commission examined education systems in Shanghai, Taipei, Singapore, Japan, South Korea, Chicago, and the USA (Education Commission 2000). While the first three cities are obvious points of reference for their similar economic profiles, and Japan and South Korea are likewise Asian economic dragons, the choice of Chicago and the USA is less obvious. The USA was chosen because it is an important trading and educational partner of Hong Kong; it is similarly capitalistic with a large income spread; and it has experienced similar reforms to those envisaged for Hong Kong. Chicago was chosen because it had substantially extended the participation of parents and community members in school-based management initiatives, and was thus seen as a useful reference for Hong Kong (Education Commission, personal communication).

It is noteworthy that the UK was absent from the list. Indeed, the reforms that resulted from the review of education studiously ignored the pre-handover curriculum initiative, the TOC, which has been described as "one of the most ambitious changes attempted by an education system" (Griffin et al. 1993, p.18). The reason for this historical amnesia may have been the time-honoured tradition of wishing to start with a clean slate when educational policies are formulated (Morris, Lo & Adamson 2000), or it may have been a desire to create a distinct post-1997 educational policy while

addressing similar concerns regarding the preparation of human capital for the changing economic profile of Hong Kong. Another explanation could be the perceived failure of the TOC, which seemed slow to be accepted in schools.

The outcome, in terms of the school curriculum, was the retention of the spirit of the TOC in all but name, plus a raft of reforms that had their basis in a general international trend towards decentralisation of accountability and the integration of schooling with lifelong (or lifewide) learning. Greater managerial responsibility was devolved to schools, which became subject to quality assurance inspections. Reforms were initially proposed to articulate primary and secondary schooling in the form of a fully integrated 'through train' for the nine years' compulsory education. However, pressure from the education community and the public at large to maintain competitive elements led to compromises when the policy was operationalised. The banding system was changed from five bands to three, instead of being abolished altogether, while proposed reforms to the assessment system designed to remove entrance hurdles and learning pressure were watered down. Another innovation was the rationalisation of subjects into key learning areas: Chinese Language Education (incorporating Chinese Language, Chinese Literature and Putonghua); English Language Education; Mathematics Education; Science Education (Basic Science, Physics, Chemistry and Biology); Technology Education (Computer Education, Business subjects, Technological subjects, Home Economics); Personal, Social & Humanities Education; Arts Education; and Physical Education. While this rationalisation was inspired by overseas practices that sought to create space for greater varieties of learning experiences, it served to counter local complaints about an overloaded academic curriculum. At the same time, it defined the curricular priorities of schooling, with language subjects and mathematics forming the core.

In the midst of the reforms, Hong Kong suffered a number of blows, with 2003 being a particularly difficult year. The continuing economic recession in Asia and the undermining of property prices as land over the border with the Chinese mainland became more accessible and desirable led to severe cuts in public spending that impacted upon education. Subventions to aided schools were reduced, resulting in teacher redundancies. Salaries were cut, as the government struggled to contain the budget deficit. Then coronaviral pneumonia – also known as Severe Acute Respiratory Syndrome (SARS) – spread, forcing schools to close and, when they reopened, to adopt major hygienic precautions. A number of famous private primary schools closed down due to the declining birth-rate. The shortage of primary students also affected the survival of aided and government primary schools, and was expected to work its way up to secondary schooling in the coming years.

The tenor of post-handover reforms was to replace quality education for the elite with quality education for the masses. Educational change was shaped by global influences, interacting with the local political forces of decolonisation. It was fuelled by the desire to be economically competitive, but constrained by the economic downturn and by deep set conservatism beneath the facade of modernity.

Administration of Schooling in Hong Kong

At the time of the resumption of Chinese sovereignty, Hong Kong had 846 primary schools and 468 secondary schools with enrolments of around 450,000 in each sector.

By 2003, the numbers had changed to 804 primary schools – reflecting the reduction in the birth-rate – and 491 secondary schools with enrolments of around 460,000 in each sector. There were also 83 special schools. Over half of the primary schools were still bisessional, although the government planned to phase in whole-day schooling by 2007. Primary schooling in government and aided schools was free of charge, but approximately 10 per cent of the enrolment attended fee-paying private schools.

Table 2.3: Providers of Primary and Secondary Schooling in Hong Kong, 2002/03

Level	Sector	
Primary	Government	41
	Aided	
	Local	658
	English Schools Foundation	10
	Private	
	Local	60
	International	35
	All sectors	804
Secondary	Government	36
	Aided	
	Local	368
	English Schools Foundation	5
	Private	
	Local	63
	International	19
	All sectors	491
Special Schools	Aided	83

Note: Figures do not include part-time or evening schools.

Source: Hong Kong, Education & Manpower Bureau, 2003 (www.emb.gov.hk).

In 2002/03, the ratio of government schools to aided schools (leaving aside English Schools Foundation and international schools) was approximately 1:16 in the primary sector and 1:10 in the secondary sector (Table 2.3). The aided schools were sponsored by various bodies with financial assistance from the government. The great majority of more than 400 school sponsoring bodies were religious groups (mainly various Christian denominations) or charitable organisations such as the Po Leung Kuk. Other bodies included specific trading groups (e.g. the Cotton Spinners Association), families commemorating a deceased member, associations of people from the same hometowns in China (e.g. Toi Shan Association), and alumni of educational institutions (e.g. Queen's College Old Boys' Association). In Hong Kong, subsidised schooling has existed since 1873, as noted above. However, the total number of places offered by government and aided schools had not always met demand, which meant from the 1960s to the 1990s that the government had to buy places from private schools under the Bought Place Scheme. This scheme was gradually replaced after 1991 by the Direct Subsidy Scheme, whereby private schools meeting government standards in terms of class size and teacher quality could receive subsidies and thus offer a strong alternative to public education. The scheme also enabled previously-excluded schools with strong

political links to the mainland to receive government funding (Bray 1995b). Aided schools could also opt out of the mainstream by joining the scheme, and increasing numbers did so during the period from 2000.

International schools, which serve the non-Chinese (mainly Asian) and increasingly the Chinese population, are aided or private. The largest group, the English Schools Foundation (ESF), was set up in 1967, and at that time had two schools. In 1979, a group of government schools offering education for expatriates was transferred to the ESF, thus permitting the government to concentrate on education for the Chinese majority (Bray & Ieong 1996; Yamato & Bray 2002). The ESF schools received the same financial assistance as other aided schools, but were permitted to charge fees in order to pay for superior facilities and higher salaries. In 2003, the ESF had 15 primary and secondary schools, plus one kindergarten. The ESF's autonomy has allowed it to respond to shifts in the social make-up of Hong Kong, so that its student base has become increasingly multiethnic. Some so-called international schools would be better described as foreign schools operating in Hong Kong. Examples are the Japanese, Korean and Singaporean schools. Others serve more multinational clienteles, e.g. the Canadian International School and the Hong Kong International School. Demand for private education among local parents and those returning from emigration has led to such schools broadening their student bases (Yamato 2003).

The School Curriculum in Hong Kong

In 1997, public schooling in Hong Kong had the following official aim, as displayed on the cover of Education Commission Report No.7 (1997):

> School education should develop the potential of every individual 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.

However, the emphasis on individualism and well-roundedness, drawn from the Western humanist school of thought and championed by the business community in Hong Kong, is not reflected in the implemented curriculum, where attempts to promote problem-solving, task-based learning and other active forms of learning have been passively resisted by teachers (Morris et al. 1996). Indeed, schooling is mainly perceived by parents as a means to gain access to tertiary education. As a result, it is academic in orientation with strong subject boundaries and with great value ascribed to examination performance, report cards and homework. Therefore, as observed by Bond (1991, p.18):

> … parents exert massive pressure on their children to do well in school. Homework is supervised and extends for long periods, extracurricular activities are kept to a minimum, effort is rewarded, tutors are hired, and socialising is largely confined to family outings.

In this respect, little has changed since the heyday of traditional Chinese schools.

Mainstream schooling (with variants among international and foreign schools) is organised on a 6+3+2+2 system. The common system allows for more horizontal integration across schools, which creates competition for entrance to what are perceived

as more successful schools at each stage. This competition reinforces the high status attached to examinations noted above. Children enter primary school at age six, after the large majority have already attended kindergarten for three years. The primary curriculum is subject-based, with a common-core of seven constituent subjects: Chinese Language, English Language, Mathematics, General Studies, Music, Art & Craft, and Physical Education. Table 2.4 shows the curriculum arrangement adopted by one primary school sponsored by a religious association in Hong Kong. The subjects allocated the most periods per week – Chinese Language, English Language and Mathematics – form the basis of the centrally-administered assessment conducted in Primary 3 and 6, which help to determine the children's placement in secondary schools.

Table 2.4: A Curriculum Map for a Whole-Day Primary School, Hong Kong, 2002/03

Subject	Primary 1	Primary 2	Primary 3	Primary 4	Primary 5	Primary 6
Chinese Language	7+2*	7+2*	7+2*	7+2*	7+2*	7+2*
English Language	7+2^	7+2^	7+2^	7+2^	7+2^	7+2^
Mathematics	7	7	7	7	7	7
General Studies¤	5	5	5	5	5	5
Art and Craft	2	2	2	2	2	2
Music	2	2	2	2	2	2
Physical Education	2	2	2	2	2	2
Computer	1	1	1	1	1	1
Biblical Knowledge	1	1	1	1	1	1
Life Education	1	1	1	1	1	1
Activities	2	2	2	2	2	2
Self Studies	4	4	4	4	4	4

* Like many other schools, this school offer two periods of Putonghua in Primary 1 to Primary 6. Some schools teach Chinese Language through Putonghua instead of Cantonese.
^ Unlike many other schools, this school offers two periods of Oral English taught by native English teachers.
¤ Social Studies, Science and Health Education

There are seven forms in secondary schooling, with exit points at Secondary 3, Secondary 5 and Secondary 7, although exceptional students may leave at the end of Secondary 6 to enter university. This system broadly reflects the one that was prevalent in England and Wales in the 1950s. A typical curriculum map for a secondary school is shown in Figure 2.2. Once again, the dominance of Chinese Language, English Language and Mathematics is evident. Putonghua had permeated the Secondary 1-3 curriculum of this particular school by 2003, with it serving as the medium of instruction for Chinese Language and Chinese History, although the medium switched to Cantonese in Secondary 4-5 because of the demands of the public examinations. To accommodate curriculum expansion in the post-handover policy of establishing Key Learning Areas, several formerly-independent subjects were merged as Integrated Humanities and Integrated Science for the junior forms. In some schools, pressure on the curriculum is relieved by the practice of replacing a five-day Monday to Friday timetable of 40 periods with a six-day cycle incorporating 48 periods. This arrangement allows greater curricular breadth. However, the number of cycles per year is obviously fewer than the number of weeks, and in the long run, the marginal subjects such as Physical Education,

Music and Art & Design lose out because they are allocated the same number of periods per cycle as they would have received in a five-day timetable, while the dominant subjects receive a larger allowance.

Figure 2.2: A Typical Curriculum Map for a Secondary School (Periods per Week) in 2003

	Secondary 1-3	Secondary 4-5 (Science)	Secondary 4-5 (Arts)	Secondary 6-7
Chinese Language	6	6	6	3 Arts subjects &
English	9	7	7	Use of English
Mathematics	7	6	6	
Integrated Science	4			OR
Physics		5		
Chemistry		5		3 Science subjects &
Biology		5	4$^{\#}$	Use of English
Integrated Humanities	4			
Information Technology		4^{+}	4$^{\#}$	
Economics		4^{+}	5	
Geography			5	
Accounts			5^{+}	
Art and Design	2	4^{+}	4$^{\#}$	
Chinese History	2	4^{+}	5^{+}	
Physical Education	2	2	2	
Home Economics	2			
Music	1			
Class Teacher Period	1			
French	8*	6$^{¤}$	6$^{¤}$	

\# options: students choose one of these subjects
+ options: students choose one of these subjects
* replaces Chinese Language and Chinese History for non-Chinese speakers
¤ replaces Chinese Language for non-Chinese speakers

Public examinations take place at Secondary 5 (Hong Kong Certificate of Education Examinations) and at Secondary 7 (Hong Kong Advanced Level Examinations). The system is essentially elitist. Although these examinations are based on syllabuses that are largely standardised, success is limited to the top 20 to 30 per cent of students, most notably those who are literate in English – a throwback to the time when schooling was a feeder for the colonial civil service (Biggs 1996, pp.4-6).

The school curriculum underwent major revision both before and after the resumption of Chinese sovereignty. Official documents, as noted above, stressed whole-person development, which was reflected in curriculum terms as a multi-dimensional approach to schooling. Figure 2.3 is a diagrammatic representation of the school curriculum from a 1993 official document. At the centre of the curricular reform launched in the mid-1990s was the incremental introduction of task-based learning. The initial manifestation, the TOC, started in Primary 1 in 1996. The TOC addressed concerns that prevailing approaches to schooling emphasised factual knowledge, were taught through teacher-centred and textbook-driven pedagogy, and relied on norm-referenced procedures for assessing children's learning. The TOC

promoted cross-curricular, whole-person competencies through task-based learning with criterion-referenced assessment. Students' learning was mapped against a hierarchy of learning targets for each subject and five cross-curricular principles of learning: communicating, inquiring, conceptualising, reasoning, and problem-solving. Progression was divided into three Key Stages (Primary 1 to 3, Primary 4 to 6, and Secondary 1 to 3). Although it claimed to encourage an integrated, cross-curricular approach, the TOC was initially introduced only in the three core subjects: English, Chinese and Mathematics.

Figure 2.3: Diagrammatic Representation of the School Curriculum in Hong Kong
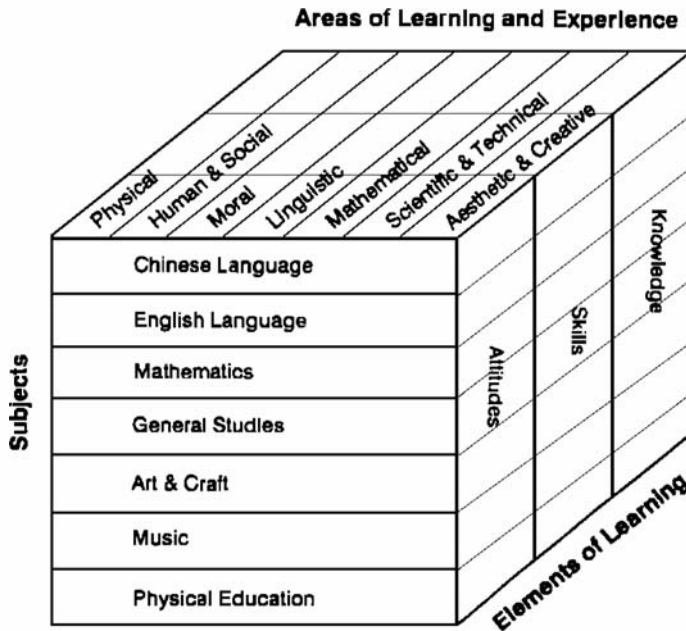
Note: The emphasis of learning and experience may vary in different subjects.

Source: Curriculum Development Council 1993, p.56

The TOC reform proved problematic when implemented in primary schools. Teachers complained of its complexity and inherent contradictions. Schools interpreted the TOC in a wide variety of ways amidst concerns over the tension between criterion-referenced assessment and the high stakes norm-referenced assessment at Primary 6 for placing students in secondary schools. The government, after demonstrating initial commitment to the initiative, appeared to lose interest in pushing through the reform whole-heartedly (Morris 2000). However, as noted above, the curriculum reforms that were instituted at the turn of the millennium had many of the characteristics of the TOC reform. In 2001, the Curriculum Development Council launched a document entitled *Learning to Learn* which advocated primary school curriculum integration, project learning and school based curriculum (Curriculum

Development Council 2001a). Although many teachers felt unprepared for the changes, a number of 'seed' schools pioneered the reforms (C.K. Lee et al. 2002).

Also important to note was a proposal in 2003 to move the secondary school and standard first-degree structure from a 3+2+2+3 system to a 3+3+4 system, i.e. three years of junior secondary, three years of senior secondary, and four years of degree studies. The main official rationale for this (Education Commission 2003b, p.1) was first that the three-year senior secondary structure would facilitate a more flexible cross-disciplinary curriculum, and second that it would reduce the number of public examinations and thereby enable students to spend more time on enhancing their language proficiency and important generic skills. In addition, the change would permit articulation with dominant models in the USA and mainland China. A long period of preparation was proposed, with the Education Commission recommending (2003b, p.9) the commencement "around the 2010/11 school year at the earliest". However, various stakeholders greeted this timetable with concern, and argued for an earlier introduction.

Teachers in Hong Kong

The teaching profession came under the spotlight in the 1990s as part of the movement towards quality mass education. As noted by Li and Kwo in this volume, the provision of teacher education was upgraded and moves were instigated to set benchmarks for teacher performance, most notably in language competence. Teaching in Hong Kong, while not highly prestigious, does not have the low status and poor economic rewards of some Asian countries. It is seen as a haven of stability in times of economic turmoil, and as the source of a respectable salary, comparable with other careers requiring similar qualifications.

A teacher's day typically starts early in the morning (or early in the afternoon for half of the bisessional schools) and comprises an average of around five lessons, plus extra-curricular activities and other teaching duties. Class sizes (around 37 in primary schools and 42 in secondary schools) make for crowded classrooms and a hindrance to more active, student-centred pedagogy, and in some instances encourage the teacher to use a microphone to address the class. Marking exercise books consumes a considerable amount of non-teaching time, as many teachers set great store by the objective results that marks can provide for assessment purposes (Morris et al. 1999, pp.18-19). There is a tendency for teachers to see themselves as 'small potatoes', having little influence over the curriculum. However, while this might be the case in terms of teacher representation on policy-making committees, they are very powerful forces when it comes to implementing the curriculum or resisting change (Morris 1998, p.114). Teachers are well organised, with a strong Professional Teachers' Union and a functional constituency seat in the Legislative Council. Overall, teachers in Hong Kong are better off than their Macao counterparts in terms of salary, status and political influence. This has meant that teaching is a relatively attractive profession and has managed to maintain an almost closed shop. Few foreign teachers work in Hong Kong schools, and most of the foreigners are confined to language teaching. In contrast to Macao, mainland teachers have yet to obtain a strong foothold in Hong Kong schools.

Comparison

Hong Kong and Macao are linked by geography, ethnicity, Western colonisation and postcolonial fate. The geographical convenience for missionaries and traders with designs on Chinese souls and markets brought institutionalised education with Western characteristics to large sectors of both populations, while traces of traditional modes of schooling have endured. Neither colonial government adopted a strong hands-on approach to education, except when the reversion of sovereignty to China was imminent (or, in Hong Kong, in times of crisis). The common destiny of Hong Kong and Macao – their respective reversions of sovereignty took place within two and a half years of each other – meant that the political and social arrangements for Hong Kong provided a convenient blueprint for Macao. This had long been the tradition in schooling. Although the initial provision of schooling in colonial Hong Kong had been made possible by charitable bodies branching out from Macao, most educational transfer took place in the opposite direction because of Hong Kong's more rapid development of a unified system of mass education.

The disparity in the rate of educational development stemmed from the different modes of colonialism and the different impact of socio-economic changes. Portuguese colonial authorities generally limited the provision of education to their own citizens in the enclave, whereas the British system embraced the local population, albeit at first only the elites. This was reflected in the fact that mainstream schooling in Hong Kong dates back to the Education Ordinance of 1913, whereas a similar measure was only passed into law in Macao in 1991. The rapid economic growth of Hong Kong that arose from the exogenous pressure of Britain's decline (fostering Hong Kong's economic independence) and China's mixed fortunes (providing an influx of human resources or stimulating new areas of commercial activity) has been paralleled by attention to the improved provision of mass education. Macao, being a comparatively sleepy backwater belonging to a colonial power whose decline had arrived much earlier, was relatively immune to the kind of shocks felt by Hong Kong. It took the major awakening occasioned by the timetabled return of sovereignty to move the Macao authorities to pay serious attention to mass schooling. Meanwhile, the laissez-faire approach created political problems: Macao was a fertile territory for educators with KMT or Communist Party sympathies, and schooling was also affected by political events in Portugal. In Hong Kong, laissez-faire has been less indolent in this regard. The colonial authorities were more prepared to suppress political issues in education that the authorities deemed threatening to their tenuous legitimacy.

Different attitudes towards the schooling of the local population are evident in the school sponsors. Although the proportion of government schools in Hong Kong is about 6 per cent and in Macao is about 13 per cent, Hong Kong has many aided schools which are run by charitable bodies with financial support from the government. Macao has no aided schools, and most schools are run by the private sector. These arrangements have facilitated a greater degree of horizontal integration across schools in Hong Kong, and have encouraged individual schools in Macao to be more vertically integrated, providing primary and secondary schooling in a single location. As a result, the school curriculum in Hong Kong shows more uniformity than its pluralistic counterpart in Macao.

The curriculum, clearly defined in Hong Kong (mainly by economic and political exigencies) but less so in Macao, has gained a facade of modernism. However, the

implemented reality is academic with firm subject boundaries and oriented towards examination success. As such, the curriculum reflects a union of traditional Chinese education and the more conservative ideas of schooling as access to high culture that have held sway in Europe. The implemented curriculum has been more resistant to progressivist changes because of deeply held beliefs about the nature and purposes of schooling among parents, teachers and other stakeholders. Bureaucratic inertia has also hindered efforts to reform the curriculum. These characteristics are not unique to Hong Kong and Macao. They are typical of schooling developed in territories under colonial administration (such as India under the British), although the interplay of forces that have shaped schooling has been particular to the locality. The postcolonial authorities will face similar resistance if resourcing and educational administration are not improved or if the various stakeholders do not share the goals of change.

The relatively long build up to the restoration of Chinese sovereignty permitted preparatory changes to be initiated in schooling in Macao and Hong Kong, which, even if not implemented whole-heartedly, were generally accepted by the respective communities. There were opportunities for improvements to the quality of provision and the curriculum, as demonstrated by the building of new schools and the curricular reforms, and this may be linked to a desire on the part of the colonial administration to leave with honour. The smoothing of most contentious issues before the handover and Hong Kong's role in the global economy meant that the school curriculum was not radically reformed in an anti-colonial backlash, and it also allowed the incoming administration to gain kudos by promoting the non-controversial goal of quality in education. The return to Chinese sovereignty spurred reform in primary and secondary schooling in Macao. The centre-periphery model began to break down as the old centre virtually disappeared with the handover and its remnants became the new periphery. Education for the Chinese sector of the population is now the central concern, and the curriculum reflects the new political order (as manifested in the increased teaching of Putonghua) and the international economic order (as shown by the importance of English).

The lead-in time allowed alignment with the mainland, as indicated by the increased attention to Putonghua and Chinese cultural subjects in both places. Interestingly, the alignment was with an external rather than innate culture: the emphasis was placed on getting to know the mainland and its official language, Putonghua. Despite a close ethnic bond with China, many inhabitants of Macao and Hong Kong shared the misgivings of Portugal and the UK about features of the political and social systems operating on the mainland, especially when these have fostered turmoil and violence. In terms of schooling, colonial Hong Kong was not been greatly influenced by the mainland, chiefly because colonial status kept the territory hermetically sealed. Macao had greater influence from the mainland, but also had balance through other influences. Consequently there is a large gulf between these two places and the rest of China, most notably manifested in the organisation and orientations of schooling (although the recent drive towards economic modernisation on the mainland has narrowed the gap in the case of the latter). This suggests that the changes to primary and secondary schooling around the time of reversion of sovereignty that moved practices in Macao and Hong Kong closer to those on the mainland also reflect the characteristics of changes to tertiary education that Law (1997) labels 'recolonisation' rather than 'decolonisation'. Comparisons with other places show that the experiences of Macao and Hong Kong are particular but not unique. Planned, non-violent decolonisation has

been experienced, as noted above, in a number of places, and preparatory adjustments have been made to the school curriculum. The cases of Hong Kong and Macao are unusual in the duration of the lead-in time.

Conclusion

This chapter has argued that Macao and Hong Kong share a similar history, geography, ethnicity and postcolonial fate, which is reflected in the development of two similar, cross-referenced systems of schooling. Colonialism provided both places with education systems that are very different from that of the mother country, China. The two ports have been havens from the political vagaries of educational policy across the border. Although the Four Modernisations drive in China narrowed the gulf, by reducing the political components of the curriculum, education in China had goals which were not shared by Hong Kong or Macao until reunification loomed. These included the development of Chinese patriotism and the promotion of Putonghua (based on the northern Chinese dialect) as the national language. Instead, Macao and Hong Kong created a hybrid system of schooling by combining the classical humanism of the West with the rote-learning, duck-stuffing methods of traditional Chinese education to produce a somewhat sterile curriculum that emphasised remote propositional knowledge and avoided awkward questions. At the same time, differences emerged between Macao and Hong Kong. Economic fortunes favoured Hong Kong, turning it into the dominant partner in its relationship with Macao. It also prompted the creation of a more unified, structured system of schooling. This difference was enhanced by the variation in colonial policy. The British approach included the local population in educational provision; the Portuguese enclave system excluded them.

Convergence has been a feature of the respective handovers. Both Hong Kong and Macao have moved towards a degree of alignment with the mainland curriculum, and in doing so Macao has used more of the Hong Kong model. Yet fundamental differences remain across the three parties. Will these differences gradually disappear under Chinese sovereignty? The avowed 'one country, two systems' policy would appear to suggest otherwise. It is perhaps unwise to peer too far into the future, given the historical experiences of China, but it seems likely that Hong Kong and Macao will retain autonomy in preserving their particular brand of schooling so long as the political and economic dynamics that underpin these complex relationships remain.

If the status quo remains – bearing in mind that education policy is always in a state of flux – the only major change will be that international trends among a group of advanced countries may replace the practices of Britain and Portugal as the main point of reference for educational initiatives. Alignment with the mainland will continue to be an influence, but the main determinants of schooling in Hong Kong will probably remain local social and economic imperatives. In Macao, the relative lack of cohesion within the system makes prediction difficult, but past practices suggest that the Hong Kong model will be an important guide, mainland influences will be strong, and local conditions will endow the systems with their own particular characteristics.

3

Higher Education

Yung Man Sing, Andrew

This chapter focuses on the structure and development of higher education in Hong Kong and Macao, paying particular attention to the nature and impact of quantitative and qualitative growth since the 1980s. The chapter begins by analysing higher education in the two territories in the context of broader literatures on comparative higher education and the economics of education. Teichler (1996) pointed out that comparison is a basic methodological approach in the social sciences, and argued that international comparison is indispensable for analysis of macro-societal phenomena in higher education. He identified four "spheres of knowledge" in higher education. This chapter focuses mainly on two of these spheres, namely aspects of organisation and governance of higher education, and quantitative-structural aspects of higher education.

Comparative analysis of the policies and development of higher education in Hong Kong and Macao exposes major issues concerning size, shape, planning, and financing. These matters can be classified under Teichler's first sphere, namely organisation and governance. Concerns about shortfalls or surpluses of qualified applicants for higher education belong to the second sphere, namely quantitative-structural aspects. These matters are frequently discussed by policy-makers, administrators, researchers and students in both Hong Kong and Macao. Identification of patterns and trends helps to chart possible courses for future development in the two territories.

Higher Education Institutions and Enrolments

Hong Kong has 11 degree-awarding higher education institutions, eight of which are funded by the University Grants Committee (UGC). The Academy for Performing Arts is also publicly funded, but not through the UGC. The Open University of Hong Kong and Shue Yan College are self-financing (Table 3.1). Alongside these institutions are various post-secondary bodies offering diplomas and associate degrees. They include Chu Hai College, the Institute of Vocational Education which has nine campuses, and a group of community colleges. In 2002, the UGC-funded institutions provided places for about 18 per cent of the 17-20 age group, on top of which a further 24 per cent of people in the same age group had access to higher education in other forms, including sub-degree programmes and vocational training, or went to universities overseas (Hong Kong, Information Services Department 2003, p.149).

Table 3.1: Higher Education Institutions, Hong Kong

Institution	Funding Status	Year of Foundation
University of Hong Kong	Public (UGC)	1911
Hong Kong Baptist University (formerly Hong Kong Baptist College)	Public (UGC)	1956
Chinese University of Hong Kong	Public (UGC)	1963
Lingnan University (formerly Lingnan College)	Public (UGC)	1967
Shue Yan College	Self-financed	1971
Hong Kong Polytechnic University (formerly Hong Kong Polytechnic)	Public (UGC)	1972
City University of Hong Kong (formerly City Polytechnic of Hong Kong)	Public (UGC)	1984
Academy for Performing Arts	Public (non-UGC)	1984
Hong Kong University of Science & Technology	Public (UGC)	1988
Open University of Hong Kong	Self-financed	1989
Hong Kong Institute of Education (created by merging four Colleges of Education and the Institute of Language in Education)	Public (UGC)	1994

Macao has a much smaller population and thus a smaller higher education sector. However, in proportional terms the number of institutions is quite large. In 2004, Macao had 12 institutions, of which four were public and eight were private (Table 3.2).

Table 3.2: Higher Education Institutions, Macao

Institution	Funding Status	Year of Foundation
University of Macau (formerly University of East Asia)	Public	1981
Macau Security Force Superior School	Public	1988
Macau Polytechnic Institute	Public	1991
United Nations University, Institute for Software Technology	Private	1991
Asia International Open University	Private	1992
Institute of European Studies of Macau	Private	1995
Institute for Tourism Studies	Public	1995
Inter-University Institute of Macau	Private	1996
Kiang Wu Nursing College of Macau	Private	1999
Macau Institute of Management	Private	2000
Macao University of Science & Technology	Private	2000
Macau Millennium College	Private	2002

In both names and orientations, the institutions on each side of the Pearl River Delta mirrored each other. Thus the oldest institution in Hong Kong, the University of Hong Kong, had as its counterpart the University of Macau. Hong Kong's two Poly-technic Universities were matched by the Macau Polytechnic Institute; the Hong Kong University of Science & Technology was matched by the Macao University of Science & Technology; and the Open University of Hong Kong was matched by the Asia International Open University. In all these pairs the Hong Kong institutions were the older ones, and Hong Kong had been a significant model for Macao. However, other elements were distinctive to each territory. Hong Kong did not have a counterpart to the Institute of Software Technology of the United Nations University. Hong Kong did have

a police training school, but unlike the Macau Security Force Superior School it did not operate a degree programme; and while Hong Kong like Macao had provision to train nurses and tourism workers, that training was not undertaken in free-standing institutions.

Table 3.3 shows enrolments in the institutions. In general, Hong Kong institutions were considerably larger than their counterparts in Macao. Questions of economies of scale were periodically raised in both territories, but assertions about the desirability of merger were usually nullified by arguments about distinctive institutional histories and missions. In Macao, the smallest public-sector institution is the Macau Security Force Superior School, which has a specialised focus and role that sets it apart from other institutions. The other very small institutions in Macao are operated by the private sector, and government policy makers have not considered it appropriate to interfere in decision-making on the size of such institutions.

Table 3.3: Higher Education Enrolments, Hong Kong and Macao

Hong Kong	Enrolments[1]	Macao	Enrolments[2]
University of Hong Kong	12,133	University of Macau	3,223
Hong Kong Baptist University	4,494	Macau Security Force Superior School	23
Chinese University of Hong Kong	11,567	Macau Polytechnic Institute	2,020
Lingnan University	2,171	United Nations University, International Institute for Software Technology	94
Shue Yan College	2,500	Asia International Open University	5,480
Hong Kong Polytechnic University	13,102	Institute of European Studies of Macau	83
City University of Hong Kong	13,253	Institute for Tourism Studies	233
Academy for Performing Arts	738	Inter-University Institute of Macau	175
Hong Kong University of Science & Technology	6,806	Kiang Wu Nursing College of Macau	273
Open University of Hong Kong	12,234	Macau Institute of Management	92[3]
Hong Kong Institute of Education	5,024	Macao Univ. of Science & Technology	1,145
		Macau Millennium College	–[4]

[1] Full-time equivalents, 2001/02; [2] Headcounts, 2000/01; [3] 1999/00; [4] Enrolments only commenced in 2002/03.

Sources: Bray et al. (2002), p.20; Hong Kong, Information Services Department (2003), p.150; individual institutions.

In addition to these institutions were enrolments in external institutions which operated programmes in the two territories. For example, in Hong Kong the Australian Catholic University operated programmes in conjunction with Caritas, an education and social service organisation operated by the Catholic church; and many universities in Australia, the United Kingdom (UK), United States of America (USA), Canada and China offered degrees in conjunction with the schools of continuing education of the UGC-funded institutions. Parallel arrangements existed in Macao.

Planning of Higher Education Expansion

Education systems and policies develop under the influence of economic development,

political considerations and social values (Organisation for Economic Co-operation & Development [OECD] 2000; Adams 2004). Higher education systems and policies in Hong Kong and Macao are no exception to this general statement.

Trow (1974) defined higher education systems which enrolled up to 15 per cent of the age group as elite systems. He defined ones which enrolled between 15 and 40 per cent as mass systems, and ones with enrolment rates above 40 per cent as universal systems. On this definition, Hong Kong entered the era of mass higher education in 1993/94.

The Hong Kong government's decision to enter a system of mass higher education was based on a number of factors. First was the postulate of human capital theory that investment in higher education would increase the productivity of the population for further economic growth (UGC 1996). According to economists such as Blaug (1970), Becker (1975), McMahon (2002), and Psacharopoulos & Patrinos (2002), education contributes directly to the growth of national income by improving the skills and productive capacities of the labour force. Based on this notion, from the mid-1970s the Hong Kong government used manpower forecasting as a planning tool for education policy (Bray 1997b; K.M. Cheng 1997b). In the first half of the 1990s, three manpower projections – in 1990, 1991 and 1994 – forecasted higher education manpower requirements up to 2001. The first two forecasts served as basic indicators for manpower requirements in Hong Kong in the 1990s, and higher education expanded correspondingly. The 1994 forecast projected a surplus of graduate labour. This projection, taken in conjunction with the report of a study on Preparation of Students for Tertiary Education (POSTE Team 1996), led to a policy change which slowed the pace of expansion and shifted attention to efficiency and quality.

The expansion in the late 1980s and early 1990s was also embarked upon for other reasons. First, it was to meet the government's long term goal of providing equal access to higher education. Second, it was a response to the strong social demand for higher education. Third, many educators in Hong Kong believe that the decision in October 1989 to accelerate expansion of higher education was a short-term reaction to a perceived crisis of confidence and credibility in the context of brain drain relating to the 1997 issue and the aftermath of Beijing's Tienanmen Square incident in June 1989 (Morris, McClelland & Leung 1994).

In 1994, Hong Kong's two polytechnics were upgraded to university status. In 1997, the Open Learning Institute and Lingnan College were also upgraded and given the status of self-validation. These moves transformed university education from a binary to a unified system, and facilitated the administration of funding for degree programmes. Since then, higher education in Hong Kong has operated in a segmented market where degree programmes are offered mainly by the UGC-funded institutions and the Open University of Hong Kong, and diploma and other sub-degree programmes are mainly offered by such bodies as the Hong Kong Institute of Education, the Institute of Vocational Education, and the Academy for Performing Arts.

The community colleges were established following the publication of the Education Commission's *Education Blueprint for the 21st Century* (Education Commission 1999, p.22). The colleges were designed to expand higher education provision at limited cost to the government, and offer diploma and associate degree programmes. Hong Kong's Chief Executive announced in his 2002 policy address that within a decade 60 per cent of senior secondary school leavers would receive tertiary education (Tung 2002, p.22). To assist the expansion, the government offered loans for

the start up expenses of non-profit community colleges. This policy aimed to develop a diversified higher education system, widen students' choice, and encourage healthy competition (Hong Kong, Education & Manpower Bureau 2001, p.10).

Macao's system of higher education has been less developed, but made great strides during the 1990s (Bray 2001). Portugal did not give Macao as much attention as the UK gave Hong Kong, and education services were not generally regarded as a public good throughout the bulk of Macao's 400 years of colonialism (Tang & Morrison 1998, p.246). Education was almost wholly dependent on private rather than public providers. The main reasons for this were twofold. First, at some points in history Portugal itself had a lower per capita Gross Domestic Product (GDP) than its colony, and lacked public resources for development. Second, the Portuguese colonial regime was little interested in emancipating the peoples of its colonies (Cross 1987; Errante 1998).

In Macao, by the late-1980s it was clear that government neglect of education could no longer satisfy the social and economic needs of the global knowledge-based society of which the territory was increasingly becoming a part. The task at hand was considerable, and in the 1990s higher education in Macao was at an early stage of development. This reflected demand as well as supply. Because Macao's economy greatly relied on tourism and small labour-intensive industries, and because per capita incomes were lower, demand for higher education was more limited than in Hong Kong. On the supply side, before 1988 public investment in higher education was almost non-existent. To some extent the gap was bridged by the private sector, but only in 1981 did a group of entrepreneurs establish Macao's first modern university, the University of East Asia (Mellor 1988). In 1988, the university was purchased by the Macao government and became a public institution. In 1991 it was renamed the University of Macau.

Following the establishment of the Macau Polytechnic Institute in 1991, Macao's higher education system began to resemble the binary higher education system in Portugal (and also Hong Kong and the UK). The Macau Polytechnic Institute was created from the Polytechnic College which had been part of the University of East Asia. The Macau Polytechnic Institute offers diploma and bacharelato programmes, mainly in vocational subjects. The private Asia International Open University (AIOU) had a similar origin, having been formed in 1992 from the East Asia Open Institute which had previously been part of the University of East Asia. The AIOU operates in partnership with the Open University of Portugal, and offers distance courses particularly in business administration. Other institutions were set up to serve particular niches but, as indicated in Table 3.2, were all small.

Shortfalls in Supply of Qualified Applicants and Concern about Quality

During the mid-1990s, Hong Kong educators became increasingly concerned that the supply of adequately qualified secondary school students was insufficient to fill all the places in the fast-expanding tertiary sector. In systems of mass higher education, not only the outstanding but also the average students are admitted to colleges and universities. During the mid-1990s, many educators in Hong Kong queried whether the latter could fulfil the expectations and requirements of this level (J. Cheng 1995; Postiglione 1996b; French 1997). To maintain quality, most higher education institutions introduced extra-academic programmes to enrich their students'

competence. For instance, the HKUST, HKU, the two Polytechnic Universities and the HKIEd set up centres to upgrade their students' language competence.

To ensure that graduates meet international standards, the UGC has undertaken periodic Teaching & Learning Quality Process Reviews (TLQPRs) of all UGC-funded institutions (Massy 1997; Kwo et al. 2004). TLQPR panels examined the internal and external validation processes, peer evaluation and assistance, students' evaluations of teaching, and facilities for teaching and learning. The panels also examined informal communication channels between staff and students to see how well they supplemented the formal processes. In response to the demand for quality assurance, most of the UGC-funded institutions set up centres or units to improve the quality of teaching and learning.

In Macao, the shortfalls in supply of qualified applicants were caused not only by expansion of domestic institutions but also by competition by non-local providers. First were courses offered in Macao by external bodies. Statistics presented by Bray et al. (2002, p.27) showed fluctuation reaching a peak in 1998 with programmes offered by Jinan University, South China Normal University, Zhongshan University and other bodies. Second, institutions outside the territory, such as universities in Taiwan and Australia, attracted many Macao students. Most dramatic has been the expansion in Zhuhai, Macao's neighbouring city in mainland China. The initiative was spearheaded by Zhongshan University, which is a long-established and reputable institution which has had its main campus in Guangzhou but which in 2000 opened in Zhuhai one of the largest campuses in China. Other institutions which opened campuses in Zhuhai included Beijing Normal University, People's University, Beijing Polytechnic University, China Medical University, Jilin University, and Jinan University. These institutions actively targeted Macao as one source of students, which to some extent threatened Macao's own institutions.

Facing such competition, Macao's institutions realised the importance first of identifying their own specialisms and niches, and second of emphasising quality. Among the niches were studies which particularly focused on Macao, including programmes in education and law. Programmes on tourism, business and gambling were also of particular importance. Attention to quality assurance included efforts to expand international links (Bray et al. 2002, p.64).

University Structures

The nature of university structures has major implications for the allocation of finance, design of curriculum, and strategies for teaching and learning. Structures also reflect societies' educational aims, and affect relationships with global academic communities. For instance, structures may affect international recognition and facilitate or obstruct further study by students who wish to go abroad.

When the quality of university students in Hong Kong became a major concern of during the early 1990s, some Hong Kong educators suggested that the basic length of degree programmes should be extended from three to four years. For the CUHK, this would have been a reversion to the basic structure which the institution had between its establishment in 1963 and the 1991 change forced upon it by the government. The change or reversion to a basic four-year degree, it was argued, would facilitate

curriculum reform and strengthen general education as a supplement to students' major fields of study.

The argument about university structure was restarted by a report entitled 'Re-proposing the University Structure' published in 1996 by the Consultative Committee of the CUHK. The report stated that if the government refused to increase funding, the CUHK would rather accept fewer high-quality students than many low-quality students. The report also stated that a three-year degree structure could not satisfy the need to implement general education programmes which the CUHK had been pursuing in its curriculum. The proposal for a four-year university structure was echoed in a subsequent meeting of the heads of the eight UGC-funded institutions. Their request was stimulated by the growing concern about the quality of university education and the demand for a more liberal university education (Yung 2003).

Yet while many educators in tertiary institutions favoured a four-year structure and argued that the extra year would permit improvement in the quality of products, many educators in schools pointed out that the university sector already consumed a huge amount of resources and that an extended university structure would probably be at the expense of lower levels. In 1996 the government rejected the request for a four-year university structure, probably because of funding difficulties and the approach of the transfer of sovereignty. Education Commission Report No.7 (1997, p.47) proposed a review of the entire education system, since the education structures of basic and higher education were interconnected. In 1998, two working groups were set up by the Education Commission to focus on (a) primary and junior-secondary education, and (b) post-junior-secondary education. The first stage of the review focused on the educational aims of different levels of education.

An ad hoc working group convened under the Heads of Universities Committee (HUCOM) was also set up in 1998 to examine the issues associated with the proposal to extend the basic duration of undergraduate education from three to four years. The committee's consultation document proposed a 5+1+4 post-primary education system, i.e. five years of basic secondary, one year of senior secondary, and four years of tertiary. The document proposed to use Hong Kong Certificate of Education Examination (HKCEE) results as the basic criteria for admission to Secondary 6 and universities. Two-thirds of university places were to be reserved for HKCEE candidates, this ratio being subject to revision as the internal secondary schools appraisal system developed. The new admission requirements, it was argued, could minimise examination pressure on students because in one-year matriculation programmes they would not sit for any public examination and therefore could develop talents in other aspects (HUCOM 1998, pp.7-8).

By the end of the consultation period, only 20 responses had been received. Secondary school personnel remained sceptical about the 5+1+4 structure, and were particularly concerned about the interface between post-secondary and tertiary education. School principals feared that the proposed 5+1+4 structure would threaten the survival of the sixth-form colleges; and they pointed out that shortening of the matriculated curriculum would change resource distribution in secondary schools. It was obvious that there were divided opinions. The government decided to stall by preparing another consultation document in 1999.

In 2002, the UGC released a new report on Hong Kong higher education (Sutherland 2002). It suggested (p.9) that the government should encourage higher education institutions to adopt credit transfer and credit accumulation systems to allow

students to attend courses at different universities and enable free flow of resources among the universities. The report also advocated clarification of the division of labour between the universities. Echoing this advocacy, the Vice Chancellor of the Chinese University of Hong Kong, Arthur Li, opined that there were too many degree granting institutions in Hong Kong. In order to allocate education resources more efficiently, he suggested, the number of universities could be reduced to four or five through mergers. Li subsequently joined the government as the Secretary for Education & Manpower, and restated his views from that position. However, the notion of merging the HKUST with the CUHK, and the HKIEd with either of these universities, was controversial. Arthur Li backed off his initial suggestions, and in 2004 the UGC instead announced that it would take positive measures to facilitate and encourage "deep collaboration" as part of its institutional integration strategy (UGC 2004). The government also signalled a desire to move to a four-year basic degree structure at some point within the coming decade, as part of a 3+3+4 system.

Macao has also experienced a change of university structure. At the outset in 1981, the University of East Asia adopted a three-year basic structure. This was partly because the founders and administrators were mostly educators from Hong Kong, the UK and other Commonwealth universities, but was more strongly because the private university aimed to recruit not only local high school graduates but also applicants from Hong Kong, Malaysia, Singapore and other countries in the region which had education systems fitting a three-year university structure.

The change to a four-year structure began after the University of East Asia was purchased by the Macao government in 1988 (Hui 1994). The university became a public institution under the Higher Education Act of Macau. Thereafter, the basic degree structure of the University of Macau matched that of the 13 state and eight private universities in Portugal with which it had close relationships. This provided more convenience to study or work in some of the European Community countries. By chance, it also matched the structure in mainland China, Taiwan, Canada and the USA, but this did not have strong implications for the work of the University of Macau.

Funding for Higher Education

In 2001/02, Hong Kong's higher education system absorbed 26.0 per cent of total public expenditure on education and 1.1 per cent of GDP (UGC 2003a). This figure may be compared with the average for OECD countries, in which public expenditures on tertiary education averaged 1.0 per cent of GDP in 1999 (OECD 2003, p.183). Among the OECD countries, the lowest were South Korea and Japan which both stood at 0.5 per cent. However, these countries had large private tertiary education sectors. At the other end of the scale, Canada devoted 1.8 per cent of GDP to public expenditures on tertiary education, and Finland devoted 1.5 per cent.

Given the range of these figures, it is difficult to reach firm judgements about what the 'right' level of public expenditure might be. Hong Kong's higher education has traditionally been dominated by the public sector – to the extent, as indicated in the chapter by Hui and Poon in this book, that the government actively prevented some private entrepreneurs from establishing institutions. This is very different not only from such OECD countries as South Korea and Japan, but also from such countries as Philippines, Indonesia, Colombia and India (World Bank 1994, p.35). The Hong Kong

government did allow the Open Learning Institute (later called the Open University of Hong Kong) to operate on a self-funded basis following its establishment in 1989, but during the 1980s and 1990s the government seemed to move towards greater rather than less public funding for higher education by providing subsidies to the Baptist College and Lingnan College. Similar moves were evident in Macao, where, as noted, the private University of East Asia was purchased by the government in 1988 and then supplemented by other public institutions.

Within both territories, however, have been major policy shifts on student fees in public tertiary institutions. Internationally, policy makers are split into two major groups on this topic. Some argue that higher education benefits the whole society and so should be financed out of general taxation. Others argue that since individuals gain both financial and non-economic benefits from their education, they should contribute to its cost by paying fees. The latter group points out that governments can still provide subsidies in the form of grants or loans to help students who could not afford to pay the fees without financial assistance (Woodhall 1995, pp.427-428; Bray 2004a, p.39).

In order to cope with the growing cost, in 1991 the Hong Kong government decided on a substantial increase of fees on the principle that the beneficiaries should pay more (Chung 2003; Yung 2003). International survey highlights three main ways through which students can contribute (Williams 1996). First, they can pay fees while studying. Second, their studies can be free of charge but their subsequent taxes can be higher to help pay for their successors' education. And third, students can borrow while they study and repay when they are earning. The Hong Kong government decided on a combination of the first and third options. In 1992/93, students' fees represented an average of 8.2 per cent of the recurrent cost of their education. This proportion was increased to 18.0 per cent in 1997/98 (Table 3.4). The argument behind the policy was that tuition fees combined with student aid were more efficient than fee-free education, and more equitable because fee-free education often favoured the children of rich parents more than the poor (Bray 1993, p.38; Williams 1999, pp.151-157).

Table 3.4: Tuition Fees for Degree Courses, Hong Kong, 1992/93-1997/98 (HK$)

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Degree courses	$11,598	$16,996	$24,000	$30,568	$37,346	$42,096
Sub-degree courses	$8,993	$12,745	$18,002	$23,267	$28,002	$31,574
Rate of increase (%)	16.0	46.6	41.2	29.3	12.7	12.7
Cost-recovery rate (%)	8.2	10.5	13.5	16.0	17.0	18.0

Source: Hong Kong, Education & Manpower Bureau (1997).

In 1996 the government commissioned a management consultancy firm, Ernst & Young, to review the situation. The firm proposed two basic areas of change. First, was that on equity grounds the government should make financial assistance available to all students requesting it. The consultants proposed that any student should be able to borrow up to a ceiling based on the student's tuition fees, academic expenses and living costs. Any grant assistance received would be subtracted from the maximum allowable loan. Second, the consultants recommended an increase in the annual interest charged on loans from 2.5 to 4.0 per cent. Other recommended changes included extending the loan

repayment period from the first five years following graduation to 15 years, and reducing repayment amounts during periods of low or no income (Ernst & Young 1996).

The announcement of increased fees and the proposed changes in interest rates incited opposition from the students and the public. The government extended the public consultation period, during which it negotiated with student representatives. Finally, the Chief Executive (Tung 1997b, p.97) announced that a non-means-tested student loan scheme would be made available for all students. The new scheme would charge annual interest of 1.5 per cent plus the current civil service housing loan scheme interest rate. This formula was expected to allow the government to cover the cost of borrowing and defaults. The new non-means-tested student loan complemented the existing means-tested student loan. It became available to all 70,000 students on UGC funded programmes, 24,000 students on courses of the Open University of Hong Kong, and 3,000 students at Shue Yan College.

However, doubt remained on whether these provisions could meet all needs. Critics asserted that the vetting method for means-tested loans was unable to estimate accurately the assets and incomes of the applicants' families. Also, students considered the 8.2 per cent interest rate charged on the non-means-tested student loan – a rate which was based on the housing loan scheme for civil servants – to be rather high. Most students were reluctant to apply for non-means-tested loans unless they had no alternative, because they were worried about the burden of accumulated debt in circumstances of rising unemployment and economic downturn. Partly because of this, in 1998 the government announced that fees would be frozen at the level of the 1997/98 academic year. In the environment of economic recession and deflation, this policy remained unchanged for the next seven years.

The economic recession also worsened the government deficit, which in turn led to a real reduction of grants to UGC funded institutions in 2004/05 of approximately 9 per cent (UGC 2003b). However, the UGC did provide these institutions with a HK$1 billion matching fund to encourage them to seek funds from private sources. The debate about government funding became a political tug of war, with a majority of legislative councillors refusing to approve the budget unless the government guaranteed that there would be no further cut during the 2005-08 triennium budget. In response, the government proposed a funding formula of "0-0-X" for the 2005-08 budget, declaring that there would be no further cut in the first two years of the triennium but that if the economy deteriorated the government would cut up to 5 per cent in the last year of the triennium. With this compromise, the legislative council approved the budget. However, higher education institutions were forced to step up the process of marketisation in order to increase incomes and reduce costs. This process included offering more self-funded programmes, commercialising research products, reducing the number of non-academic staff, and contracting out some non-academic services such as catering, cleaning, security, building and maintenance to commercial companies. To a certain extent, public higher education institutions in Hong Kong were transforming into enterprising universities like their counterparts elsewhere (Williams 2003).

The private costs of higher education were also high in Macao. The annual fee for a full-time degree at the University of Macau and the Macau Polytechnic Institute was MOP56,000 in 1999/00, which was higher than in Hong Kong. However, all permanent residents of Macao were eligible for a 40 per cent fee reduction; and in the following years the institutions reduced the fees because of competition not only within Macao but also from neighbouring Zhuhai and elsewhere. Thus in 2001/02 the basic fee for a

bachelor's degree had been reduced to MOP32,000 (Bray et al. 2002, p.51). Also, needy students could apply for loans from the Macao government's Department of Education & Youth if they were prepared to work in Macao after graduation, and a few scholarships were provided by local charitable organisations.

Implications for the Future

Higher education developments in Hong Kong and Macao before the 1990s were slow relative to other industrialised societies, chiefly because of the lack of priority in government allocation of resources. During the 1990s, the sector achieved significant quantitative and qualitative progress in both territories. For policy makers, this was a great achievement. However, while students who would otherwise have been excluded benefited from expanded access, the increased private cost of higher education together with competition in the labour market diminished the benefits. Private rates of return declined, at least in the short term, and the investment in higher education appeared more risky from the perspectives of students and their families. Nevertheless, the long term social and individual benefits of higher education in relation to national economic growth should not be underestimated (OECD 2000; McMahon 2002).

The reversion to China of sovereignty over Hong Kong and Macao set the stage for further linkages between the territories' higher education institutions and those in the Chinese mainland. The participation rate in the mainland in the late 1990s was only about 2 per cent. Economic and social reforms in the mainland had already increased demand for highly educated personnel, and both Hong Kong and Macao were obvious locations for some of the necessary training. Both SAR governments were committed to the development of higher education in their territories. The Macao government commissioned a review of higher education in 2000, and released the report in 2001 (Bray et al. 2001). The report projected a vision for higher education development advocated strategic plans based on balancing priorities and finding niches. Hong Kong's review, released the following year (Sutherland 2002) recommended further expansion of community colleges and other restructuring to avoid overlapping of resources.

In terms of governance, Hong Kong's system of higher education system remained modelled on the dominant system in the UK, even after the 1997 change of sovereignty. English remained the medium of instruction in most institutions, and in the CUHK actually become more prominent. Most courses had the type of three-year structure followed in English (but not Scottish) universities. Although requests were renewed by universities to move to a four-year structure, the matter was not immediately settled by the government. However, plans were laid during 2004 for a 3+3+4 system which would take the last year out of secondary school and add it to higher education. In parallel, Macao's institutions of higher education maintained close links with counterparts in Portugal as well as mainland China and Hong Kong. The concept of 'one country, two systems' allowed policies in both Hong Kong and Macao to be decided by local educators, but academic cooperation with universities in mainland China education increased. At the same time, links with Europe did not imply continued ties to a fixed model. Thus, higher education was set to change markedly in the UK and Portugal, in line with the needs of the global economy and learning society (Scott 1995; Dearing 1997). Continued investment in human capital was clearly essential for maintenance of competitive edges in the global society.

From the perspective of continuity and development, higher education in both Hong Kong and Macao was incorporated into the global higher education system. This was greatly promoted by information technology, which speeded up the dissemination of knowledge extensively and effectively (Carnoy 1996; K.M. Cheng 1998; Spring 1998; Hargreaves 2003). Information technology in learning and teaching in higher education around the world has reduced the significance of national boundaries. Higher education has also become an institution of society and not simply an institution in society (Barnett 1994). In both Hong Kong and Macao, higher education is seen as essential for economic survival, not simply for welfare. Being members of the global society, higher education in these two territories will continue to converge with what Kerr (1982) called the huge global multiversity.

4

Teacher Education

Lɪ Siu Pang, Titus & Kwo Wai Yu, Ora

This chapter examines the history and development of primary and secondary teacher education in Hong Kong and Macao. In Hong Kong, formal in-service and pre-service teacher education was initiated in the 19th century, but in Macao its history dates only from the 1930s. The Macao government has worked hard to catch up with Hong Kong; but the Hong Kong authorities feel that much needs to be done to catch up with other advanced societies.

The chapter begins with broad literature, so that Hong Kong and Macao may be taken as a pair for comparison and contrast with other parts of the world as well as with each other. It notes that various debates have taken place over the structure of teacher education, and on its most appropriate locus. A global trend gives universities rather than specialised training colleges increasing responsibility for the training of teachers; but in some countries training is being devolved to schools in which trainee teachers work closely with experienced mentors in the classroom.

Several parts of the chapter refer to institutions for training teachers as 'normal' schools. While this terminology has ceased to be common in both Hong Kong and Macao, it is still part of standard vocabulary in mainland China. The word also remains common in some other parts of the world, particularly French-speaking ones. The term normal education originates from French term *écoles normales* (Collins et al. 1973, p.146).

The Nature and Functions of Teacher Education: International Perspectives

In almost all parts of the world, teacher training has been a neglected activity until relatively recent times. As noted by Dove (1986, p.177) identified several reasons why teacher training has tended to have a low priority. One reason was that teacher training was (and is) only part of larger systems, responsive and reactive to developments in the schools. Another reason is that until recently, the need for training has not been put forward convincingly. Particularly at the elementary level, where the earliest expansion of school systems began, the notion was widespread that any person who had completed a particular level of education could teach students at lower levels. A further factor concerns budgets. Not only does training itself require finance, but trained teachers generally demand higher salaries than untrained ones.

Because of these factors, almost all countries, whatever their level of development, have at some point in history permitted untrained personnel to take teaching positions. Indeed in some countries it remains the norm rather than the exception. UNESCO (1998, p.45) reported that in the mid-1990s in Uruguay, for example, 70 per cent of teachers in secondary schools had not been trained; and in Togo the corresponding figure for lower secondary education was 84 per cent. Even in the USA, which is a prosperous society with high standards, over 12 per cent of new recruits entered the classroom without any formal training, and another 14 per cent arrived without fully meeting state norms. UNESCO pointed out that although on a global basis teachers are better educated than 30 years ago, so are general populations who are not teachers. UNESCO added (p.46) that:

> The fact that society still is willing to accept at all that people can be employed as teachers without having received any specific preparation for the job points to the difficulty for teachers in getting their claims heard. Probably no other aspect of teacher employment policies has done as much to retard progress towards recognition of teaching as a profession.

This observation would apply to Hong Kong and Macao as well as to other parts of the world.

International survey also shows diversity in the emphases between pre-service and in-service training (Gimmestad & Hall 1995; Villegas-Reimers 2003). While some education authorities insist that teachers must have received training before they can be offered jobs, others are prepared to employ untrained teachers and then encourage or require them to undertake in-service training. Pre-service training is commonly provided either in colleges of education or in universities. Where universities are involved, training may be part of an undergraduate degree or it may be a special postgraduate course. In-service courses may vary in duration from days to years. Refresher courses are typically shorter than ones which seek more fundamental training in techniques and approaches. Again, this diversity in the forms of training has been evident in Hong Kong and Macao as much as in other parts of the world.

UNESCO (1998, p.67) reports a "long-term secular trend worldwide … towards the consolidation of pre-service teacher-education programmes at the tertiary level of education". This partly reflects the shifting balance of teacher education as secondary school systems, and therefore the demand for secondary teachers, have grown proportionately to primary school systems and therefore the demand for primary teachers. Hong Kong and Macao have followed the trend towards consolidating teacher education in tertiary institutions. Hong Kong used to have a dual system in which some teacher training was conducted by universities while other training was conducted by colleges of education operated by the government's Education Department. The colleges of education were later merged into the Hong Kong Institute of Education (HKIEd) funded by the University Grants Committee. Likewise in Macao, the expanded work of the University of Macau has greatly shifted the balance between training provided by the tertiary and the non-tertiary sectors. However, in neither Hong Kong nor Macao has an existing college of education been absorbed into a university. Thus the HKIEd was created as a free-standing body, similar in nature to normal universities in mainland China. This contrasted with the model in Australia and the United Kingdom in which many colleges of education were merged with existing multi-faceted universities.

However, the free-standing status of the HKIEd has been challenged, and powerful forces have advocated merging it with one of the universities in order to strengthen the sector and perhaps use resources more efficiently.

As one might expect, the nature of teacher education in colonies around the world was in general heavily influenced by patterns in the colonising country (Dove 1986, p.181). This observation applies to Hong Kong and Macao as well as to other colonies, though in Macao the government's laissez faire approach until the late 1980s meant that government-sponsored forms of teacher education were neglected along with other aspects of education and training. Historically, in many parts of the world churches and other voluntary agencies have been involved in teacher education. This still continues in some settings, but has declined in prominence as governments have generally become more involved in education.

International survey also reveals controversy over the contents of teacher education. Courses typically seek to balance subject knowledge, teaching skills, and general conceptual understanding. This means that biology teachers, for example, must know enough biology to be able to teach their subjects well; but that they must also be equipped with an array of tools for teaching their subjects to different types of pupils and in a range of different circumstances, and they must have general understanding of psychology, sociology, the structure of education systems, and various other domains which will affect their lives and work. One difficulty, however, is a lack of consensus on where the appropriate balance between these different elements should lie. Professionals also differ in their conceptions of the roles of the practicum, appropriate relationships with school-based mentors, and many other issues (F.K.S. Leung 2003).

Finally, one specific factor which affects the nature of teacher education, as well as of education systems more generally, is the scale of the operation. Systems which are fairly large can afford much more specialised training than can systems which are smaller. This is evident in mainland China, for example, which has many normal universities entirely devoted to the task of teacher education. Hong Kong also has a fairly large education system, and is therefore able to provide considerable specialised training by subject, level, and special need (such as mentally handicapped children, or gifted children). As shown in other chapters of this book, Macao's education sector has been not only small but also fragmented. Macao's Portuguese-medium sector, for example, has rather different cultures, traditions and needs from the Chinese-medium sector. Small size and fragmentation has in the past obstructed development of teacher education in Macao; and it remains the case that some forms of specialised training are better sought outside the territory than in Macao itself.

Historical Perspectives

To explain the origins of contemporary patterns, this section charts the growth and development of teacher education in the two territories. It begins with Hong Kong, and primarily focuses on the period up to the late 1980s.

Hong Kong

The Hong Kong government declined to play anything more than a minimal role in teacher education until the 20th century. St Paul's College, an Anglican school founded in 1849, introduced teacher education to Hong Kong in 1853 by setting up a

pupil-teacher scheme which prepared teachers of English. Frederick Stewart, who held a dual appointment as the first headmaster of the government's Central School (later renamed Queen's College) and the first Inspector of Government Schools, launched another pupil-teacher scheme in the mid-1860s in the Central School. This scheme was similar to the monitorial teacher education system in England (Sweeting 1992, p.60). Also, in 1881 the authorities set up the Wanchai Normal School to train Chinese teachers to teach English. However, the school was short-lived. It only admitted 10 student-teachers, and only two managed to graduate before its closure in 1883 (Yau et al. 1993, p.75).

The next government initiative was in 1906 when an Evening Continuation Class for pupil teachers was introduced in Queen's College. The following year the class was transferred to the Technical Institute. Then, a decade later, a four-year undergraduate course was launched at the University of Hong Kong (HKU) by the newly established Department for the Training of Teachers (Sweeting 1998a, p.4). The course aimed to prepare teachers for both primary and secondary sectors.

Vernacular (Chinese) teacher training started in 1914 at the Technical Institute. In 1920, the government opened two Vernacular Normal Schools: one for men and the other for women (Yau et al. 1993, p.76). A third institution, the Government Tai Po Vernacular Normal School, was founded in 1925 to supply teachers for rural schools. In 1926, the Government Vernacular Middle School was founded. It absorbed the Government Vernacular Normal School for Men under its Normal Division.

In 1938, Governor G.A.S. Northcote appointed Mr Justice Lindsell to form a special committee to study teacher education. The following year, as a result of his report, the first Teacher Training College was opened to replace the existing normal schools in temporary premises. It provided teacher training for both Anglo-Chinese and vernacular schools in a two-year full-time course. Thirty-seven of the 48 student teachers graduated in 1941, and in the same year the college was moved to its own premises. However, its activities were interrupted by World War II. At first named the Northcote Training College, in 1967 it was renamed Northcote College of Education (Sweeting 1990; H.T. Wong 1993).

The post-war period brought continued expansion. To serve the New Territories, a Rural Training College was established in 1946; and five years later the Grantham Training College was established in Kowloon to prepare Chinese primary school teachers. The Grantham Training College absorbed the Rural Training College in 1954, and was renamed Grantham College of Education in 1967. The college trained primary and secondary teachers from the outset, and kindergarten teachers after 1981.

Another teacher education institution of this type was set up in 1960 to support the expanding primary school sector. It was initially called the Sir Robert Black Training College, but was renamed the Sir Robert Black College of Education in 1967. In 1981, the college set up a special unit for in-service training of special education teachers. The basic course structure for pre-service primary and secondary teacher education was a two-year full-time Certificate of Education course for Secondary Form 5 or 7 graduates.

To strengthen the expertise for industrial development, the Hong Kong Technical Teachers' College was formed in 1974. The college trained teachers of practical subjects for secondary and prevocational schools. Technical Diploma graduates from Technical Institutes or Polytechnics with industrial working experience were allowed to take a one-year full-time Technical Teacher Certificate course, while Secondary Form 5

graduates had to study for two years. Following the other three colleges of education, the two-year Technical Teachers' course was extended to three years in the 1980s.

Hoping to advance the language ability of teachers, the fifth government teacher education institution was opened in 1982. The Institute of Language in Education was established to provide in-service Chinese and English language courses for primary and secondary teachers. Language teachers were released by schools to attend three-month or six-month courses in the institute.

In addition, much teacher education was provided by local universities. The long history of teacher education at HKU has already been mentioned (Sweeting 1998a, 1998b). In 1965, the Chinese University of Hong Kong (CUHK) also established a School of Education. The university courses mainly provided training for secondary teachers, on a pre-service and in-service basis.

Macao

The history of teacher education in Macao is shorter and more modest than that in Hong Kong, but as in Hong Kong in the initial decades it was mainly provided by churches. The first formal arrangements for teacher education were initiated in the 1930s by a number of bodies. Courses were taught in Chinese, and provision was rather limited and unstructured. Twelve independent institutions provided classes to prepare teachers for Macao Chinese schools between 1935 and 1985 on either an in-service or pre-service basis (S.P. Lau 1997, 2002a). For example, Hou Kong Middle School launched a one-year normal class for junior secondary school graduates in 1952; and St. Joseph's College introduced a normal class in 1953. In the same year, Tak Meng School started kindergarten teacher education for female Senior Secondary 3 graduates; and Zhongshan Normal School and the Anglican Church Teachers' College within Choi Kou Middle School also offered normal classes (Fu et al. 1994; Lai 1995; Feng & Lai 1999).

Few of these programmes were sustained, and the only course still running in the 1980s was that provided by St. Joseph's College (K.I. Chan 1991). Even St. Joseph's changed the structure of training and suspended classes several times. However, it continued with in-service and pre-service courses for kindergarten and primary teachers even when other institutions launched programmes in the 1990s. The private sector gained few resources from the government because until the 1970s the authorities were mainly concerned with education for Portuguese-speaking children (Rosa 1991). Moreover, before the 1966 riots most schools were registered with the Taiwan government. In 1954, for instance, 51 of the 70 schools in Macao were registered in Taiwan (C.F. Cheung 1956). This further distanced the schools from the Macao government. After the 1966 riots, many schools turned to mainland China for assistance (Macau Chinese Education Association [MCEA] 1967, 1968).

Teacher education for secondary schools was even more limited than that for primary schools. The chief reason was that the whole sector was very small. In 1934, Macao had only eight Chinese secondary schools with 350 students, serving a total population of just 120,000 (S.P. Lau 1996). Rather than establishing local institutions for training, sponsoring bodies found it easier to recruit teachers from abroad who had already been trained. Supply of teachers was also increased by immigration. During and after World War II, many highly educated Chinese scholars migrated to Macao and took up teaching posts (S.P. Lau 1996; K.K. Tang 1997). Also, many schools were run by religious bodies in which priests and nuns were available to teach. Finally, teachers were in effect trained on the job. A common practice was to promote teachers of senior

primary to junior secondary classes and then to the senior classes after they had received a few years of experience.

Government-provided teacher education in Macao began in the mid-1960s, when the authorities set up a Division of Initial Teacher Education for Portuguese-medium primary schools in the official Pedro Nolasco da Silva Primary School (later converted to the Luso-Chinese Central Primary School, and then to the Gomes Luso-Chinese Secondary School). In 1973, the two-year full-time primary teacher education course was abandoned because student-teachers preferred to take scholarships for study in Portugal. After a long break, teacher education for Portuguese-medium primary schools was resumed in 1995 at the University of Macau. However, the Portuguese teacher education course was again abandoned at the start of 21st century because of lack of students.

During the 1980s, under pressure from the MCEA and other bodies, the government abandoned its laissez-faire policy in teacher education for Chinese schools. A partnership was arranged with South China Normal University (SCNU) in Guangzhou. In 1985, the SCNU's College of Adult Education launched an external part-time in-service course leading to a diploma in teacher education. The three-year course was conducted by correspondence and without teaching practicum, and was administered by the MCEA (Chiu & Ng 1991; C.L. Wong 1995). Among the 141 enrolled in-service primary and secondary teachers, 120 received full financial support from the Macao government. The government also paid for a two-year in-service special course for primary and kindergarten teachers at the private University of East Asia (UEA). This course was launched in 1987 (Wang 1996).

Developments in the 1990s: Pre-Service Teacher Education

The 1990s brought substantial change and maturation in teacher education in both Hong Kong and Macao. This section comments on pre-service provision while the following one comments on in-service provision.

Hong Kong
Among the most significant developments in Hong Kong teacher education during the 1990s was the establishment of the Hong Kong Institute of Education (HKIEd). It was formed in 1994 by amalgamating the five existing colleges of education (C.K. Leung 1995). The chief goal, following recommendations in Education Commission Report No.5 (1992), was to upgrade the quality of teacher education. The HKIEd moved into a new campus in Taipo in 1997. Two types of pre-service primary teacher education were run by the HKIEd. One was for Form 7 students, who could be admitted to the Certificate in Primary Education (Chinese) course which lasted two years full-time. Form 5 school leavers could enrol in the Certificate in Primary Education (Chinese) course which lasted three years full-time. The students were trained to teach four primary subjects.

Education Commission Report No.5 (1992, pp.45-46), which was subsequently endorsed by the government, had set a target of achieving graduate status for 35 per cent of primary teachers in 2007. Initially, the HKIEd focused on non-graduate teacher education; but graduate teacher education for primary teachers was provided by the CUHK, HKU and the Hong Kong Baptist University (HKBU). Many primary school

teachers also obtained degrees from overseas universities, either through full-time study in those universities or through a combination of residential and distance education. Most of these courses provided part-time or full-time courses for graduates from the colleges of education or the HKIEd. For instance, holders of the HKIEd Certificate of Primary Education could transfer directly to two-year full-time courses at the CUHK and HKU in order to become graduate primary teachers.

The HKIEd also provided pre-service courses for junior secondary teachers and technical teachers. The format of courses and the types of student-teachers selected for the junior secondary tracks were similar to those in primary teacher education. Secondary 7 graduates were eligible to join the two-year full-time Chinese or English Certificate in Secondary Education courses, while Secondary 5 graduates with reasonable results in the Hong Kong Certificate of Education Examination (HKCEE) could join the three-year Chinese or English courses. However, the three-year English Course was terminated in 1998. The one-year full-time Technical Teacher Certificate Course was for post-secondary graduates with technical Diplomas or above as well as a minimum of two years relevant post-qualification industrial experience. These fresh technical student-teachers were prepared to teach one technical subject and mathematics or technical drawing at junior secondary level in prevocational schools.

HKU and CUHK also helped build up the team of specialist secondary teachers. HKU offered a four-year BEd in Language Education (Chinese/English); and HKIEd fresh graduates could join the BEd two-year course in Physical Education & Sports Science at the CUHK. In addition, both HKU and CUHK offered one-year full-time Postgraduate Certificate of Education or equivalent courses. The courses were designed for fresh graduates, though also attracted applicants who wished to move to teaching after having worked for some years in other sectors. Other courses in tertiary institutions (Sweeting 1998a, p.32) included the Postgraduate Diploma, Bachelor of Arts and Master of Arts in the Teaching of English as a Second Language (TESL) at the City University of Hong Kong, and the Postgraduate Diploma and Master of Education operated by Hong Kong Baptist University.

Macao
Realising the urgent need for high quality teachers for rapid educational reform, in 1989 the Macao governor appointed a committee to plan innovations in education. A School of Education was created in the UEA later that year to provide courses in early childhood and primary teacher education. In 1989, 34 pre-service primary student teachers enrolled in the diploma course. The following year, a special one-year advanced diploma in-service teacher education course was initiated for practising teachers who were graduates from St. Joseph's College and similar institutions. From 1992 to 1996, the School of Education offered a three-year Bachelor of Education (BEd) course for advanced diploma and pre-service diploma graduates. Thus, at this stage three different bodies were offering courses for Macao primary school teachers in the Chinese stream: St. Joseph's College, the South China Normal University, and the UEA (F.K. Ng 1992; K.C. Cheung 1996; S.P. Lau 1997).

As before, however, teacher education for secondary teachers received less emphasis. The Macao government did not provide any local training for teachers in Portuguese-medium secondary schools, preferring instead to send personnel abroad for training and to recruit expatriates. For teachers in Chinese-medium secondary schools, a full-time pre-service course was introduced in 1991 at what had previously been the

privately-operated UEA but which in 1988 had been purchased by the government and in 1991 had been renamed the University of Macau (UM). BEd degrees were organised in arts/Chinese, arts/English and science/mathematics. The intention of the university was to prepare teachers for local Chinese-medium and English-medium secondary schools.

In 1995, the UM Faculty of Education launched a three-year pre-service Bacharelato degree of Educational Science (Primary) course, to replace the diploma course. In the Portuguese system, the Bacharelato degree normally takes three years of study while the Bachelor (Licenciatura) degree normally takes four years. Whereas Hong Kong students were expected to have knowledge of English as well as Chinese, UM students were expected to have knowledge of Portuguese as well as Chinese.

Developments in the 1990s: In-Service Teacher Education

In both Hong Kong and Macao, in-service courses were available to give initial training to practising teachers and to upgrade the knowledge and skills of teachers who were already qualified. These are explained and commented upon here.

Hong Kong

Two different types of in-service primary teacher education courses were offered by the HKIEd to give initial training to practising teachers. The three-year part-time in-service course for teachers in primary schools was designed for teachers who had obtained reasonable HKCEE results; and the two-year part-time course was offered to untrained primary teachers with higher academic qualifications. A parallel set of in-service evening courses was offered for teachers in Chinese-medium and English-medium secondary schools.

In 1997, the HKIEd Division of Extension Studies offered 22 professional development programmes. For secondary teachers, the HKIEd offered several in-service courses to advance the professionalism of teachers. Some of the courses aimed to advance the Chinese and English language ability of secondary teachers. Others helped panel chairpersons of Chinese or English Language, and yet others focused on curriculum development and other subjects.

Teachers with Certificate of Education (Primary) qualifications had many channels to upgrade themselves to degree status both within Hong Kong and abroad. The CUHK and HKU offered BEd part-time degrees for primary teachers; and two consortia of local tertiary institutions offered similar courses. One consortium comprised the Open University of Hong Kong (OUHK), the Hong Kong Polytechnic University, the City University of Hong Kong and the HKIEd. The second consortium comprised the School of Continuing Education of the HKBU, the HKIEd and the School of Professional & Continuing Education of HKU. Australian and UK universities offered additional BEd courses through part-time distance learning, sometimes in conjunction with blocks of full-time study.

The HKIEd also provided upgrading courses for non-graduate teachers of cultural, practical and technical subjects with the one-year full-time Advanced Course of Teacher Education. Practising teachers who were nominated by their Heads of Schools were considered to undertake specialised studies in one of the following subjects: Art &

Design, Commerce, Design & Technology, Home Economics (Dress & Design), Music and Physical Education, plus the compulsory professional and general studies.

Certificated secondary school teachers in the past normally either studied in the UK for one or two years to upgrade themselves to graduate status or took the six-year part-time evening bachelor degree of mathematics or science in the Hong Kong Polytechnic or the City Polytechnic. Later, many Australian and UK universities set up teaching points in Hong Kong so that non-graduate teachers could take their part-time distance learning courses in Hong Kong. Another resource was the OUHK, which launched a BEd (Secondary) degree in 1995 and an MEd in 1996.

Macao

Three institutions offered initial in-service primary teacher education courses in Macao. First, the UM provided a three-year in-service part-time Bacharelato degree in primary education for untrained teachers who had at least one year's teaching experience. The course content and structure was similar to that of the pre-service programme. Second, St. Joseph's College offered a mixed two-year evening part-time certificate in primary education for both non-trained in-service teachers and adults with no teaching experience. And third, the SCNU offered a part-time distance three-year diploma course and a five-year BEd course in education and Chinese language teaching for in-service teachers as well as Macao citizens with no teaching experience. All these courses were recognised by the Macao government.

The UM's three-year Portuguese Bacharelato degree of Educational Science (Primary) was a mixed course for untrained teachers and other Portuguese-speaking adults who wished to become teachers (University of Macau 1997a). The course content and structure of the Portuguese programme was similar to that of the Chinese programme.

Opportunity for holders of primary teachers' certificates to upgrade to BEd was more limited in Macao than in Hong Kong. The UM did have a three-year part-time BEd in primary education, but suspended it in 1995. Although the UM introduced an MEd course in 1996, and a number of BEd graduates were enrolled in two MEd courses in management and in psychology, analysts expected Macao to suffer a shortage of graduate primary teachers. As a result, some non-graduate primary teachers took the five-year part-time BEd course provided by the SCNU. This course did not give them credit for their existing post-secondary studies, and in this respect seemed to waste government resources and teachers' energy and time.

Compared to provision for primary teachers, in-service provision for secondary teachers in Macao was neglected. When the full-time BEd secondary teacher education programme was launched, the UM did allowed a small number of in-service initial student teachers to study under a part-time structure. However, the last group of this type graduated in 1996/97.

Nevertheless, since 1991 the UM has offered a two-year part-time Post-Graduate Certificate of Education (PGCE) for practising secondary teachers with Bachelors' degrees in any subject. Fifty six in-service secondary teachers had been awarded the PGCE by the end of 1997 (University of Macau 1997b). The SCNU also provided in-service opportunities for secondary teachers. A number of secondary teachers joined the three-year Education Professional course in 1985; and in 1989 the university extended a two-year Bachelor course for these graduates. In the 1990s, a five-year distance Bachelor degree of Chinese Language was introduced to upgrade the status of

language teachers. In addition, the Macao government established two special Bachelor Degree Courses in Physical Education and Arts & Design under the administration of the Macao Polytechnic Institute and the Institute of Arts.

The University of Macau, in conjunction with the government's Department of Education & Youth, also offered summer courses for practising teachers in all school levels to upgrade their professional knowledge. Several private organisations such as the Macau Chinese Education Association (MCEA) and the Macau Catholic Schools Association have also conducted short refreshment courses or seminars in educational issues.

The Future: Development and Innovation in the 21st century

In Hong Kong, major thrusts have focused on quality school education and excellence in education. Education Commission Report No.7 (1997) stressed that it was time to raise the professional standards of principals and teachers. In 1997, the Chief Executive, Tung Chee Hwa, announced that the government would enhance the professional status of primary teachers by advancing the date for 35 per cent of posts being graduate positions from 2007 to 2001, and would require all new primary and secondary teachers to be trained graduates (Tung 1997b). Thus, Hong Kong was following the steps of other advanced societies to raise the quality of teachers.

However, K.M. Cheng (1997a) asserted that these innovations came 20 years late. Furthermore, Pong (1997) asserted that the quality and quantity of teachers of physical education, music and arts trained by the HKIEd could not meet the demand of the primary schools. One problem was that these subjects were treated as minor subjects, and thus given less time and attention. Secondly, many full-time primary student-teachers who learned arts subjects at secondary school were weak in science. Hence, the quality of primary science teachers was not up to standard. Further, the reform of subject curriculum to integrate Social Studies, Science and Health Education into General Studies made the situation even more complex.

Secondary teacher education was not seriously discussed by the Chief Executive or by Education Commission Report No.7. The most challenging tasks in secondary schools were to raise the language ability of both Chinese and English teachers, promote mother-tongue language teaching in secondary schools, and increase the use of information technology in teaching.

In 2000, Hong Kong's Education Commission launched a reform proposal entitled *Learning for Life, Learning through Life* (Education Commission 2000). In response, many in-service curriculum courses were organised by the tertiary institutions, and the government's Education & Manpower Bureau (EMB) worked with schools to provide on-the-job training and supervision. This was part of an expansion of in-service training for practising teachers in theory and skills to promote the education reform.

The language proficiency benchmark system was another new issue in Hong Kong. Language Proficiency Tests were launched for serving English Language teachers and Putonghua teachers, for all pre-service student-teachers, and practising teachers who did not want to take in-service courses (SCOLAR 2003). However, the initiative was not smooth, especially when a significant number of teachers failed the test.

At the same time, falling birth rates led to closure of kindergartens and primary schools and a crisis for the teaching profession. As the demand for fresh graduates decreased, the Hong Kong Institute of Education began to phase out its Certificate of Education course for secondary school leavers. In 2003/04, only students with good A Level results were admitted to the Bachelor of Primary Education/Secondary Education courses.

To ensure the progress of the education reform in Hong Kong, the Education Commission and the Education & Manpower Bureau organised various projects for teachers' professional development. One big issue was the licence system for principals. All aspiring principals were required to attend special courses, and practising principals had to engage in professional development through study, research or social service. These moves brought a great change in teacher education during the initial years of the 21st century. The focus shifted to in-service teacher education and lifelong teaching professional development to meet the needs of the rapid changes in the society (Education Commission 2003a).

In Macao, the authorities commenced with a lower starting point but during the 1990s achieved great strides in upgrading the teaching force. In 1995/96, 60 per cent of primary teachers had completed both secondary schooling and teacher education, while 20 per cent of secondary teachers had received training and 71 per cent of secondary teachers had received tertiary education (Macau, Direcção dos Serviços de Estatística e Censos 1997b). This situation may be compared with that in 1983/84, when only 24 per cent of teachers at all levels had teaching qualifications. In 1996, the Macao government issued the 'Regulation on Teachers for Private School Organisations' to raise the status and academic qualification of teachers. The Department of Education & Youth also prohibited schools which had joined the Free Education Scheme from employing new untrained teachers. As a result, by 2001/02 78 per cent of teachers in kindergartens, primary schools and secondary schools had teacher education certificates, and the majority were Bachelor Degree holders or above (Macao, Department of Education & Youth 2003).

Foreseeing a shortage of students for initial in-service primary teacher education, in 1999 the UM resumed the in-service evening Bachelor degree to upgrade the Bacharelato degree for kindergarten and primary teachers. Even though the UM did not plan to provide a pre-service BEd in kindergarten and primary education in immediate future, Bacharelato graduates could upgrade their qualifications through evening in-service courses or distance learning. Furthermore, the SCNU had built an annex in Zhuhai, across the border from Macao, in order to change the model from distance teaching to face-to-face teaching. This programme was expected to grow, and was an interesting way through which Macao could benefit from the rapidly-expanding city just beyond its gate. However, Macao suffered from a dispute about the standard of teacher education, particularly comparing the quality of graduates from SCNU, UM and St. Joseph's College. This matter needed resolution for harmonious future development.

In addition, more local institutions in Macao began to offering teacher education courses in the initial years of the 21st century. The Macau Polytechnic Institute offered Bacharelato degrees in Music, Arts & Design, and Sports & Physical Education. Bacharelato degree holders in the second two categories could advance to Bachelor degrees through advanced courses lasting one and a half years. The Inter-University Institute of Macau, a private higher institution run in conjunction with the Catholic diocese and the Catholic University of Portugal, offered a number of teacher education

courses ranging from one-month certificates for Form Five secondary school leavers to PhD programmes. These courses used English as the medium of instruction.

Conclusions

This chapter has highlighted several similarities in teacher education in Hong Kong and Macao. Beginning with historical features, in both territories teacher education was mainly developed by the private sector before the governments started to offer formal programmes. When the governments did commence activities, they were more inter-ested in the colonial languages than in Chinese.

Allied to this point, the nature of provision in each territory was strongly influ-enced by traditions in the colonising country. Hong Kong's colleges of education were initially run by the Education Department, which commonly invited experts from the UK to evaluate and supervise programmes; and the UM's Bacharelato degree had a similar duration, curriculum and length of practicum to its counterparts in Portugal. Another similarity lay in the linkage between innovation and political events. Most obviously investment and reform during the 1990s was strongly related in both terri-tories to the prospect of reunification with China.

In addition, the objectives and aims of teacher education shifted from pre-service teacher education to lifelong in-service teacher education to ensure the healthy development of teaching profession in the 21st century as both SAR governments undertook education reform. The initial teacher education qualification was upgraded from Certificate of Education or Bacharelato Degree to higher qualifications; and more local tertiary institutions offered in-service teacher education courses to meet the practical needs of daily teaching and education reform. A comparative study with mainland China indicated that teachers in Hong Kong and Macao were more willing than their counterparts in Beijing and Shanghai to take in-service courses to extend their professional knowledge and qualifications (Wu & Kwo 2003). However, as the Hong Kong and Macao teachers had heavier teaching loads, they were not willing to conduct educational research or engage in peer sharing in their own schools. The researchers argued that both SAR governments needed to create more reasonable working condi-tions for teachers to practice what they had learned for the benefit of the children.

On the other hand, several important differences have been observed in this chapter. One concerns the stage of development of teacher education and pace of change. Although the Macao government started proper teacher education much later than its counterpart in Hong Kong, it made major strides during the 1990s. Hong Kong was taken as a specific reference point, and the authorities were anxious to catch up. Indeed, in some respects they endeavoured to overtake Hong Kong, setting the goal that all Macao student teachers should have graduated from the four-year BEd course. In Hong Kong, by contrast, the target was for all secondary teachers to be graduates before aiming for them all to have been trained.

However, several features of Macao teacher education needed special attention. For instance, in the mid-1990s over half of Macao's teachers were migrants from the mainland who had qualifications from their places of origin. At the same time, many Portuguese teachers had been recruited from Portugal, and very few Portuguese teachers had been trained in Macao. As a result, the number of locally-trained teachers was rather small. In 1995, over 40 per cent of practising teachers had been trained by SCNU

through the part-time distance learning. These features raised the question how far the Macao government could build an education system which was separate from and independent of that in mainland China. According to the Basic Law (China 1993, Article 121), the government was allowed to operate its own education system independently from the rest of China. However, the large proportion of teachers who had received teacher education in mainland China could create obstacles in this respect. To some extent, this reflected Macao's small size and limited domestic capacity to provide specialised training for teachers.

Another distinctive feature of Macao was the large proportion of teachers who had received in-service teacher education. This was chiefly because full-time pre-service teacher education was only offered by the UM, and had only been launched relatively recently. In 1997/98, just 54 secondary and 25 primary Year One student-teachers were enrolled at the UM. Such numbers were very small compared to Hong Kong; and it seemed to show an imbalance between in-service and pre-service initial teacher education. Besides, the small number of secondary student-teachers restricted the variety of courses provided. Even though the UM offered a minor in Chinese History for Chinese-stream student-teachers and Physics for Mathematics-stream student-teachers, many subjects did not have proper teaching training.

In summary, this chapter has highlighted the development and innovation of teacher education in the two territories. By the beginning of the 21st century the Hong Kong government had achieved major quantitative targets, and was making a qualitative transition, while the Macao government was still trying its best to make both quantitative and qualitative achievements in teacher education. Further innovation was needed in both territories so that all teachers could be equipped with enough professional knowledge, skills information technology and professional ethics to face the continuing challenges in their profession.

5

Lifelong Learning and Adult Education

Leong Man Wai, Aliana

This chapter describes the evolution of lifelong learning and adult education in Macao and Hong Kong. It is concerned with all levels of education, though has particular emphasis on higher education. Detailing the reasons for the similarities and differences in the two territories, the chapter examines continuities and changes over time. Linkages are identified not only between Macao and Hong Kong, but also between those territories and other parts of the world.

Lifelong Learning, Adult Education and Related Fields

Lifelong learning is best understood as a process of individual learning across the life span, from cradle to grave. It thus includes learning in early childhood, and learning in retirement. It embraces not only education in formal settings, such as schools and universities, but also 'lifewide' learning in informal settings at home, at work and in the broader community (Organisation for Economic Co-operation & Development [OECD] 1996). The concept of lifelong learning is related to various other fields, including adult education, continuing education, and further education (Knowles 1980, pp.24-39; Jarvis 1983, pp.29-53). Lifelong learning is commonly said to embrace the following five characteristics (Huang 1995, pp. 324-325):

- *openness*: available for all;
- *continuity*: emphasising linkages between various educational activities;
- *integration*: including all education activities in the life-span;
- *flexibility*: in objectives, methodologies, time, place, content and processes; and
- *appropriateness*: the content of education relates to the learner's life and/or work.

Tuijnman (2002, p.7) observed that contemporary concepts in lifelong learning were preceded by rather similar ideas with different labels in the late 1960s and early 1970s. Examples were 'permanent education' advocated by the Council of Europe, and 'recurrent education' proposed by the OECD. These concepts were considered utilitarian and tied closely to the world of work (see also Tuijnman & Bengtsson 1994). The notion of recurrent education originated in Sweden in the 1960s, and was linked to human capital theory and ideas about rolling reform and social engineering. The overarching goal of recurrent education was the redistribution of educational

opportunities over the entire life span, in alternation with work and leisure, and as an alternative to the lengthening of education in the first part of life. Recurrent education was defined as a long-term strategy to achieve lifelong education. The ultimate goal was the development of a lifelong learning strategy to build the 'learning society' (Husén 1986).

UNESCO has also been an advocate of lifelong learning (Faure 1972), and has encouraged its inclusion in the policies of economically advanced countries. Tuijnman (2002, p.7) indicated that a framework for lifelong learning should foster the personal development of the individual, counter risks to social cohesion, develop civil society through promoting democratic traditions, and enhance labour market flexibility. In this sense, lifelong learning can have a strong instrumental value.

Much of this chapter will also embrace what many people call adult education. Huang (1995) noted that adult education might have three basic dimensions. First, the term refers to systematic, continuing learning undertaken by people who seek to enhance their knowledge, develop skills and/or change behaviours and values. Second, adult education represents all organised education curricula for adults, regardless of content, standards and methods, but in practice it tends to be distinguished from formal mainstream educational activities. Third, adult education can be considered as a programme, a process, a social movement and a discipline. Adult education can be defined as embracing organised part-time learning activities provided for adults who are no longer participating in full-time formal education. The purposes are to enhance knowledge, to develop hobbies, and/or to change attitudes and values.

Orientations

The thrusts of lifelong learning have been significantly shaped by the structures of societies. In both Macao and Hong Kong, two prominent factors are levels of economic development and the age structures of the populations. Economic development has brought major changes in the nature of education over time. The rapid development of sciences and obsolescence of knowledge has increased demand for learning. Both Macao and Hong Kong are ageing societies. According to official statistics, in 2000 8.0 per cent of the population of Macao was aged 65 or above, while the figure for Hong Kong was 11.6 per cent (Macao, Department of Statistics & Census 2001; Hong Kong, Census & Statistics Department 2001). In both territories these proportions were expected to rise during the coming years.

Developments in mainland China are another major influence on patterns in both Macao and Hong Kong. The impact of China joining the World Trade Organisation (WTO) in 2001 may be particularly significant. Neither Macao nor Hong Kong has ever been able to view itself in isolation; but contemporary policy-makers must conceive of the territories being part of the global village within the framework of developments in China. Both Macao and Hong Kong have entered what Bell (1973) called the post-industrial knowledge society. Knowledge is the fundamental resource for such societies, especially theoretical knowledge. As Stehr (1994, p.10) pointed out, when these societies emerge they signal a fundamental shift in the structure of the economy because the primacy of manufacturing is replaced by knowledge. It is not knowledge per se that is significant to the knowledge society, but scientific – including social scientific – knowledge (Stehr 1994, pp.99-103). Such knowledge underpins the

production of new commodities and services, and consequently has economic value. Indeed, new knowledge is a scarce resource. Every marginal addition to the body of scientific knowledge is potentially valuable in the knowledge economy.

Reich (1991) has divided work into three main categories: routine production services (repetitive jobs following standardised production procedures), in-person services (person-to-person supervised service occupations), and symbolic analysis (including knowledge workers, researchers and designers). In the West, knowledge-based jobs are growing in number and in proportion of the workforce. Service societies witness a growth in these occupations, many of which are still routine and highly monitored, and the nature of the knowledge used is changing rapidly. The West has become to a considerable extent a knowledge society and a service society, and much of its manufacturing has been relocated elsewhere.

Since one of the driving forces of the global competitive market is knowledge, universities are having to adapt to the idea of lifelong learning. And since the adult workforce has to continue its education, the field of adult education has also been affected. Consequently, the boundaries between university education and adult education sectors have become more blurred.

As lifelong education becomes stronger, it brings major changes to education systems. It tends to shift the balance of providers from public to private, and the nature of learning from single discipline to integrated and practical knowledge (Jarvis & Griffin 1998). Higher education has had to adjust to the wants and needs of adults, and adult education has lost some of its distinctive characteristics as higher education has become more employment-oriented. These changes have affected Macao and Hong Kong as much as other societies.

The Macao government introduced 'continuous and university extension education' as a strategic priority in the 1999 Annual Policy Guidelines (Ieong 2000). The following year, Edmund Ho, the Chief Executive of the Macao Special Administrative Region advocated special attention to higher adult education. This brought higher adult education into greater prominence, and promoted integration with other parts of higher education development (Chui 2000). Subsequent years brought attention to on-line education, for which higher education institutions were encouraged to organise joint programmes and to provide professional training for private enterprises and the public sector.

In Hong Kong, the concept of lifelong learning has been welcomed by the government as embodying the perception that economic success in the knowledge economy will only be secured through a workforce that continually refreshes and updates its skills. The mainstream secondary and tertiary education sectors are recognised to be insufficient to meet existing and future demands, particularly in terms of information technology. Therefore, the government has turned to the continuing education sector to seek solutions. Most continuing education provision is self-financing and market-driven, and the sector is very diverse.

Historical Development

To understand the nature of contemporary patterns, it is valuable to see changes over time. This section begins with Macao, and then turns to Hong Kong.

Macao

The history of adult education in Macao dates back to the early 20th century, and can be classified into four periods. In each period, the dominant objectives changed according to broader social movements, and the roles of the government also evolved. At the beginning adult literacy was the main goal, but this later evolved into professional training. In more recent times, the adult education movement has merged with the framework of lifelong learning.

The initial stage: The early 20th century to the late 1950s

The initial years of the Republican period in China brought important reforms in education, some of which had an impact in Macao as well as in mainland China. One dimension of reform focused on basic Chinese literacy among adults. In the mid-1920s, the Chinese People's Education Association initiated a People's Education Movement, which had a significant impact on Macao. However, the population was very small at that time.

World War II brought dramatic changes because Macao had official political neutrality and thousands of people migrated from mainland China and Hong Kong. Many of the migrants had received higher education, and some of them organised adult education classes in basic business skills, Putonghua, and other subjects. Some of these activities persisted into the post-war period. After the war, some commercial and language schools appeared. Night schools were established on a voluntary basis to teach basic concepts, and enrolled large numbers of people. Some of the schools were run by individuals and others by associations motivated by altruism and patriotism.

During this period, the government did not subsidise any educational institutions and was not involved in the planning of adult education. However, in 1946 the government did announce a requirement for private schools, including adult education institutions, to register. The law did not set standards for operation or requirements for inspection, and did not imply official recognition of the diplomas issued by the institutions. At that time the Macao government was mainly concerned with Portuguese-medium education, and little attention was given to Chinese-medium instruction.

The development stage: The 1960s and 1970s

Economic reform during the 1960s and 1970s pushed adult education into a new era with widened boundaries, raised status and increased public concern. During this period, adult education institutions broadened their courses to include English, music, cookery, business, engineering, etc.. As before, the government neither controlled nor limited the courses offered by private institutions. The main purpose of adult education during this period changed from eliminating illiteracy to elevation of cultural levels and serving various professional needs. These changes required adult education to advance in both content and variety. However, the government attitude restricted some aspects of development. The 'do-not-interfere, do-not-supervise' policy allowed diversity in the quality of trainers and courses, and duplication of programmes.

The institutionalisation stage: The 1980s

The 1980s were a period of institutionalisation of adult education, caused by a need for technological, managerial and technical personnel to serve the rapidly-growing economy. The private University of East Asia (UEA) was founded in 1981 and established a Continuing Education Centre (CEC) to help meet this need. The Amateur Continuing Study Centre (ACSC) was established in 1982; and the umbrella Macau Association for Continuing Education (MACE) was established in the same year with support from the regional Asia-Pacific Adult Education Committee (APAEC). Courses focused on languages, computer studies, business and other domains. Demand was expanded by immigration from mainland China. Milestone events during this period included the Workshop for Adult Educators in Designing Courses, organised in 1985 for the International Council for Adult Education (ICAE). The following year, Macao hosted the Asia-Pacific Adult Education and Social Development Conference.

During this period, the government also began to take an active interest. A Division of Adult Education was created in the government's Department of Education & Culture. Adult education was linked to vocational training, and the Vocational Training Centre under the Division of Adult Education was made responsible for promoting both adult education and vocational training. Law No. 44/82/M, enacted in 1982, set out the framework. The sector remained dominated by the private sector, but the government began to provide adult education and training in order to promote economic competitiveness.

The stage of government involvement: The 1990s onwards

During the 1990s and the initial years of the 21st century, Macao adult education underwent tremendous transformation, much of which was the result of active government involvement. In 1991, Law No. 11/91/M was enacted with the name 'Macao Education System'. This was Macao's first comprehensive law on education. Article 2 stated that adult education was an important part of Macao's education system, and Article 53 added that adult education should have detailed complementary legislation. Four years later, the government enacted another law, No. 32/95/M entitled 'The Organisation and Development of Adult Education'. This law established a framework for the sector. Further regulations on primary recurrent education and junior recurrent education were introduced in 1996 and 1999. The sector expanded rapidly, and by 1998/99 there were over 90,000 students in one or more adult education courses. These students accounted for one quarter of the adult population.

In 2002, the sector received a further boost from government concern over unemployment. Facing the challenges from cancellation of textile quotas, the authorities tried to create new employment opportunities through training, with the hope of equipping the unemployed with new skills in tourism, gambling and other industries. The government allocated MOP400 million to create 4,000 vacancies for training. Three public higher education institutions were made responsible for this work. The University of Macau (UM) took responsibility for applicants who had finished secondary school and higher levels, and provided 300 places for one year. The Institute of Tourism Studies (IFT) was made responsible for unemployed people who had been engaged in the tourism and services industries. Some had only primary school qualifications, but others had secondary schooling. The IFT provided programmes of four to 12 months' duration for 1,200 people. The Macau Polytechnic Institute (MPI)

was responsible for those who had not yet completed secondary schooling. It served 2,500 people on programmes lasting from one to two years. The qualified students received MOP2,000 as monthly allowances, plus MOP1,000 per month after successfully completing the entire programme. The rapid increase of student numbers in a short period created considerable pressures for these three institutions, especially the IFT and MPI, but the programme had some success. At the UM graduation ceremony in 2003, over 50 per cent of the 300 students were reported to have found jobs (*Macao Daily News*, 9 August 2003, p.A6). However, the cost-effectiveness of this endeavour was still being evaluated.

According to Article 5 of Law No. 32/95/M, "primary recurrent education specifically aims at eliminating illiteracy". At the time that the law was enacted, in 1995, approximately 40,000 adults in Macao had not completed primary education. Private organisations such as Tong Sing Tong and Kiang Vu Charity Association had long offered primary night school courses. In 1996 the government also launched such courses. Chinese was used as the teaching medium, and students were accepted at any time of year. A cumulative credit system and special examinations were used. The certificate issued had the same value as that conferred by regular primary schools. Following the initial thrust for primary adult education, in 1999 the government launched a scheme along similar lines for junior secondary adult education.

In 2001, 54 adult educational institutions were officially registered, among which 12 were categorised as non-profit. Since 1995, the authorities had provided subsidies to private adult educational institutions in order to encourage their work. The government also remitted the tax of adult education teachers and institutions. The range of programmes was considerable, and included computer applications, languages, management and nursing. Adult education institutions still enjoyed administrative and financial autonomy.

Hong Kong

Adult and continuing education has also developed in an impressive way in Hong Kong. The sector had been placed in a marginal situation before the 1990s, and the importance of adult education in higher education institutions was not widely considered comparable to the traditional ways of educating talents for the society (Ma 1997, pp.361-377). In the 1990s, adult education became more popular due to the market demand of a professional work force. During the 12 months to May 2000, 550,000 adult learners participated in some sort of adult education programme, and over 1,200 continuing education courses were provided by various education establishments (Cribbin 2002).

Hong Kong had had literacy education and leisure activities organised by religious groups for over a century, but systematic adult education provision in higher education dates only from the second half of the 20th century. The development of this provision can be divided into four stages.

The initial stage: The 1950s and 1960s

The Hong Kong government began to establish adult education centres in the 1950s. At that time Hong Kong was relatively undeveloped, and adult education played the role of complementary education. The sector also provided entertainment and leisure activities to people after working hours. In the domain of higher education, universities were oriented towards the elite, and did not provide second learning chances for adult

students. The departments of extramural studies established in the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK) only provided technical skills, language training, and cultural courses. Nevertheless, during these two decades the seeds of contemporary adult higher education were sown.

The changing stage: The 1970s

In the second stage, the Hong Kong economy began to develop rapidly and workers sought to increase competitiveness by enhancing their knowledge and skills. The content of adult education began to evolve from skills training and leisure to accredited programmes. Adult students demanded qualifications to meet the ever-increasing competition. Alongside the universities and other educational bodies, an increasing role was played by unions, libraries and community centres. The course contents, standards and levels become very diversified, but university adult education did not yet provide the most popular programmes because few adult learners could meet the strict requirements of formally accredited education.

The advanced stage: The 1980s

The advanced stage of adult education began in the 1980s. Through continued economic growth, Hong Kong's trade and finance reached to the top level of the world. The society demanded many talents to serve the ever-growing economy, and people who gained extra professional training were usually rewarded through increments in their salaries. At the same time, rapid development of science and technology required people to keep their knowledge up to date. During this period, accredited adult education programmes were keenly demanded by adult learners. Demand was also stimulated by competition and the general rise in educational qualifications. With the nine years of compulsory education and the enhanced opportunities to be educated in post-compulsory sectors, adults sought second chances to be educated at higher levels. Almost all universities and polytechnics expanded their divisions of adult education and started to recruit part-time students in the faculties. Some overseas universities also provided offshore programmes to tap the market demand.

Besides meeting individual goals, adult education promoted social changes including reduction of gender gaps, improved labour regulations, and stronger environmental protection. The government introduced subsidies for adult education programmes that generated social benefits.

1990s and onwards

In the 1990s, adult education developed new features. The expansion of university adult education enabled the implementation of lifelong learning plans. Clients could now gain access through more flexible systems with fewer limitations of time, space and distance. University adult education, therefore, was formed by the important components of the changing society, economics and politics, the changing organisation and structure of adult education systems, the evolution of learning modes, adult education in non-education institutions, the participation of the employers, the co-operation among higher education institutions and agencies, and the diversification of demands. For example, the School of Professional & Continuing Education (SPACE) at the University of Hong Kong was created out of the Department of Extramural Studies that had been founded in 1955. By 1999/00, HKU SPACE had eight departments with 90,000 students. In terms of full-time equivalents, this enrolment reached 14,000

students (Young 2001, p.214). In effect, HKU SPACE had more students than the main body of the university.

Contemporary Features and Issues

Macao

The Macao government adopts open policies for the operation of higher education. Although Macao is small in area and population, many public and private higher institutions compete for students.

As noted by Yung's chapter in this book, external universities also recruit many students. Some of these institutions are geographically very close to Macao, being situated immediately across the border in Zhuhai. These institutions could pose a considerable threat to their counterparts in Macao, because they can operate at much lower costs. Moreover, many of the campuses in Zhuhai are branches of prestigious institutions from other cities. They include Beijing Normal University and the People's University. Since the institutions in Macao cannot easily compete on price, they have to emphasise quality and distinctiveness of programmes such as gaming, hospitality services, tourism, and entertainment.

Despite the development of the sector, relatively little research has been conducted on adult education in Macao. Moreover, the status of adult education in the government remains insecure (Tsui 1999). During the 1990s, adult education became a centre under the Division of Continuing Education in the Department of Education & Youth. Its status was thus equivalent to the Language Promotion Centre. However, in mainland China the status of adult education in the government parallels that of general education, higher education and professional education.

A more serious problem arises from insufficient communication between the government and the professional bodies, and the lack of coordination of the sector. Adult education providers commonly launch programmes with inadequate market research. This causes wasteful competition and ineffectiveness (P.L. Lei 1999).

Since 2000, the children of Macao residents born in the PRC have been allowed to apply for permanent residence in Macao. Many of these and other immigrants were beyond school age, and the changing picture brought new challenges and opportunities for adult education. Under such circumstances, the government did not yet have a comprehensive plan for adult education to rectify the deficiencies of the colonial regime.

Some senior adult education practitioners criticised the subsidised unemployment retraining programmes organised by the government, asserting that the programmes harmed the private adult education institutions (*Macao Daily News*, 6 August 2003, p.A3). They further charged that adult education resources were not allocated evenly, and that processes were not transparent. Government projects were directly allocated to public institutions which had not gone through the procedures of bidding. The public funding also directly went to the institutions rather than to individual adult learners. All these factors narrowed the room for expansion of private bodies and threatened the efficiency of resource utilisation.

Hong Kong

The infrastructure for higher education in Hong Kong is much larger. As a result, the

establishment of the higher education institutions in Shenzhen, which is Hong Kong's counterpart to Zhuhai, has had less impact on Hong Kong. Nevertheless, many over-seas providers have offered programmes to adult learners, in competition with local providers.

Lifelong learning in Hong Kong has needed to develop in several significant directions. K.M. Cheng (1999) noted that 18 per cent or 23,000 senior secondary school students failed their examinations and were unable either to proceed to further studies or to gain employment. In previous decades, such people could have joined the cheap labour force; but the opening of access to mainland China and the relocation of many manufacturing processes had to a large extent removed that possibility. These people therefore need new opportunities through the adult education sector. Second, horizons of duties have been enlarged and many positions now need generalists rather than specialists. Those who can survive are aware of the need for constant retraining. Many individuals are now gaining degrees and postgraduate qualifications through part-time studies either face-to-face or at a distance. In the transformation of Hong Kong's economy, the service sector has grown dramatically. During the 1990s, the proportion increased from 67 to 80 per cent of the labour force. A similar pattern has been observed in Europe and North America. Marked growth has also been evident in the PRC, but from a much lower base: from 21 per cent to 33 per cent.

In a knowledge era, with endless expansion of knowledge, no one can be a really learned person. Professions are constantly changing, concepts and ideologies are being renewed over time, and no partners stay forever. Thus, in K.M. Cheng's (1999) con-ception, the lifestyle of the new era has neither perpetual success nor permanent failure: it only has non-stop learning.

K.M. Cheng (1999) further questioned whether Hong Kong's school system had been transformed from that which fitted an industrial society to a model for the in-formation society. If lifelong learning is encouraged, he asked, why are there so many barriers and pitfalls in the system? If learning is gradually individualised, students should not have to follow the same curriculum leading to common examinations. When learning opportunities are available everywhere, learning is not limited to classrooms and evaluation is no longer based only on narrow subject matter. If the society needs generalists and the careers are ever changing, students should not be trained in specific skills too early.

Conclusion

The above trends have influenced educational policy in multiple ways, and have their counterparts worldwide. Tuijnman (2002, pp.12-13) identified four major outcomes from such changes. First, lifelong learning has led people to a new appreciation of early childhood education and care. Second, there has been a new emphasis on the role of cross-curricular and foundation skills, with schools and universities providing learners with an adequate foundation for later acquisition of new knowledge and skills. Third, education systems have been given a larger role in facilitating the movement of workers between industries, occupations and firms; and fourth, because of their deepening links with labour markets and the economy, education systems have had to respond more flexibly to changes in individual demand.

These patterns have been evident in Macao and Hong Kong as well as other parts of the world. Developments have moved at different speeds, partly because up to the late 1990s the colonial governments in the two territories chose to play different roles. Since the resumption of Chinese sovereignty, some aspects of development have converged but other aspects have continued on separate paths. Macao is a much smaller society, heavily influenced by external forces and operating in a policy context which permits multiple domestic providers and free rein to market forces. Hong Kong has a stronger centre of gravity, but it too is influenced by external forces and global trends.

Concerning the processes of learning, traditional education can be integrated more strongly with adult education in order to establish the patterns of lifelong learning. Even after the remarkable developments of the 1990s and the initial years of the present century, the ideologies and practices of lifelong learning had not yet been sufficiently cultivated (Leong 1999; H.I. Lei 2000). China's joining of the World Trade Organisation in 2001 set the stage for further economic growth and global interflow of people, products and ideas (Leong 2001). Macao and Hong Kong have always been part of that flow, but will in the future be even more integrated with cross-national forces. Expanded provision and improved quality in adult education and lifelong learning will be needed in this new era. And, as the populations age, further development will be needed to support the older groups. Certainly the future will bring many excitements and challenges; and it will be especially fascinating to analyse the extent to which Macao and Hong Kong lead each other or follow separate paths.

Political, Economic and Social Issues

6

Church, State and Education

LEUNG Kit Fun, Beatrice

In different parts of the world, the relationship between church and state has historically ranged on a scale extending from relatively mild tensions in western democracies to fundamental conflict of authority in authoritarian and especially Communist states (Weigel 1987; 1992). In many colonies, church and state worked in partnership, sharing the workload in education and other services, with the government granting land and financial aid for recurrent expenditure to church schools (Holmes 1967; Igwe 1987). However, colonial education was usually designed for facilitating colonial rule rather than for national development (Tsurumi 1977; Altbach & Kelly 1991). To make the programme of education for the maintenance of imperialism more acceptable, colonisers commonly sought the cooperation of missionaries (Boutilier 1978; Blakemore & Cooksey 1980; Brock & Tulasiewicz 1988; Carmody 1992). Since church-run education played an important role in colonial education systems, the decolonisation process has also involved church-run education. However, some scholars argue that education can be a vehicle for resisting as well as promoting decolonisation of attitudes and structures (Lee & Bray 1995; Bray 1997a).

This chapter particularly focuses on the Roman Catholic church, since it has been the largest single provider of education in both Hong Kong and Macao. Education provided by the Roman Catholic church calls for attention not only because its missionaries were among the first educators to establish Western-type schools in the two colonies, but also because its schools remain prestigious and continue to attract many applicants.

The chapter begins by discussing the partnership between the church and state during the main colonial period. It then turns to Catholic education and its interaction with the societies of Hong Kong and Macao in the processes of decolonisation. This includes consideration of the degree to which the return of sovereignty over the two territories to the People's Republic of China (PRC) has affected Catholic educational policies. Discussion is in the context of Catholic-China relationships, which have been an underlying problem for Catholic education policy in the decolonisation processes (B. Leung 1992; J.K. Tan 1997).

All religions, including Catholicism, hold a world view which is irreconcilable with the atheist ideology of Marxism-Leninism, and the Chinese Communist Party (CCP) has indicated that it has no intention of endorsing any religious beliefs. CCP leaders from the beginning held negative feelings towards all religions because

religions were considered to be part of cultural imperialism. Being nationalists, CCP leaders who treasured national pride and dignity particularly disapproved of Christianity, which they considered to be a foreign religion. The Catholic problem was aggravated by the claim of the Vatican to exercise authority over its clergy in organisational and theological terms, and by the Vatican's sovereign status in international law (Hanson 1978; Lazzarotto 1982; B. Leung 1992). Article 26 the Chinese constitution (China 1982) prohibited any education run by Christian churches.

Catholic Education during the Main Colonial Period

Hong Kong

The British rulers did not show strong favour to the French and Italian Catholic missionaries who headed the Catholic church in Hong Kong at different periods, as the British had a closer affinity to the Anglican Church. However, soon after the British occupied Hong Kong in 1841, both Protestant and Catholic missionaries started to provide care for abandoned and other children (Sweeting 1990, pp.143-153). Italian missionaries began to provide education for both British and Chinese boys in 1843. Later, both Catholic and Protestant missionaries became allies with the government in education and other services. In 1848, with the arrival of the Catholic French Sisters of St. Paul de Chartres, an orphanage and an old people's home were established (Ticozzi 1983). Many church schools received financial support from the Hong Kong government (Hong Kong Public Record Office [HKPRO], series 147 2/1). These church schools included many prestigious institutions, including the Diocesan Boys' School, the Diocesan Girls' School, the French (St. Paul's) Convent School, De La Salle College, Maryknoll Convent School, Wah Yan Branch Senior School, and St. Mary's School. In the government's Board of Education during the initial period after World War II, three church leaders (two Catholic and one Protestant) were among the 17 appointed members who advised the government on education policy (HKPRO, series 147 2/2 (2)).

The civil war between the Kuomintang and the Chinese Communist Party broke out in China after World War II with the withdrawal of the Japanese from Chinese soil. The defeat of the Kuomintang and the establishment of the People's Republic of China caused hundreds of thousands of mainlanders who refused to live under a Communist regime to migrate to Hong Kong. Most of them needed relief services, including medical assistance and education for their children.

During the early stages of the influx, the Hong Kong government viewed the immigrants as temporary asylum seekers, and made no long term plans to provide education or housing for them. Because resources were limited, government officials and local newspapers felt that priority provision should be given to people who had been born in Hong Kong (Editorials, *South China Morning Post [SCMP]* 15 and 19 December 1949, 10 April 1950). However, the refugees from the mainland were accompanied by missionaries who had been expelled by the atheist CCP for political reasons. The influx of personnel and relief goods enabled the Christian churches in Hong Kong to initiate some social services for refugees including education and housing. The American Foreign Missionary Society (Maryknoll Fathers) was an example. From 1945 it was affiliated to the American Catholic Relief Service, which was headquartered in New York and which had provided social services including education to backward areas of China (Maryknoll Archive no. MPBA Hong Kong

9/8). After the arrival of the Maryknoll Fathers in Hong Kong in the 1950s, the China projects funded by the Catholic Relief Service were diverted to Hong Kong for Chinese refugees. Thus, large scale relief and education services were launched by churches in Hong Kong even before the government was stimulated to begin refugee services by such disasters as the Shek Kip Mei squatter fire of 25 December 1953.

The initiative taken by Hong Kong churches in education and relief work not only reduced the burden on the government but also presented the churches as an ideal partner when the government later sought contractors in a channelling mechanism for education services. During the 1950s, this channelling in the education field was only through Christian churches and not through Chinese traditional civil organisations such as the Tung Wah Group of Hospitals or the various workers' unions.

Political considerations were the principal determinant of this policy. In the international political arena, Soviet-American rivalry dominated international relations during the Cold War period (1945-91). The United Kingdom was a traditional ally of the USA, and was anxious to minimise the spread of Communism in Hong Kong. The CCP's policy during this period was to spread its ideology in Hong Kong, and to encourage Hong Kong workers to support activities in Southern China (Deng & Lu 1997, p.228). The CCP also exported its ideology and provided financial aid to political groups in Vietnam, Cambodia, Burma, Thailand, the Philippines, Indonesia and Malaysia.

The Hong Kong government's stand may be illustrated by the remarks of its governor, Sir Alexander Grantham, when opening a school in 1948. He highlighted what he called the Communist practice of "deforming and twisting … youthful mind[s]", and stated that the government would not tolerate political propaganda in schools (*SCMP* 16 December 1948, p.7). For political reasons, the government deported the principal of Heung Tao Middle School in 1950, reregistered several teachers at the Portland Street Motor Car Workers' Children's School in 1950 and 1951, and closed Nanfang College in 1951.

In each of these cases, the Hong Kong Teachers' Welfare Association and the leftist press printed sharp criticism against the government action (Sweeting 1993, p.53). However, support for such a stance was provided by the views of Malcolm Macdonald, British Commissioner-General for South East Asia. Macdonald had experience with the CCP's subversion of British rule in Malaya and Singapore, and after a visit to Hong Kong stressed the dangers of infiltration there. One safeguard, he suggested, lay in prohibition of political parties. Macdonald argued that it would be better to prevent the birth of the CCP than to try to control it later. He also recommended the government to work with Christian churches rather than with the traditional Chinese associations when it sought partners or contractors in education and other social services (HKPRO 1949, April 30).

The challenges facing the government were greatly exacerbated by rapid population growth. After the Japanese occupation of Hong Kong, Chinese civilians, many of whom had moved into China during the war, returned to Hong Kong at the rate of almost 100,000 a month. The population, which by August 1945 had been reduced to about 600,000, rose to 1.8 million by the end of 1947. In 1948-49, Hong Kong received an influx unparalleled in its history, and by mid-1950 the population reached 2.2 million (Hong Kong, Information Services Department 1998, p.393).

To assist in the education sector, in 1950 a British expert, Norman Fisher, was invited to advise on policies. However, his report gave little attention to the immediate needs of the Chinese refugees (HKPRO, series 147 2/2 (1), 127). The Board of

Education met from time to time to discuss strategies to cope with the rapid increase of children and the great demand for primary education. One member was Bishop R.O. Hall, the Anglican bishop of Hong Kong. He suggested that only Christian church schools, not non-religious secular schools, should be used to provide the urgently needed primary education. One of his memoranda included the statement that:

> In view of what was said by two members of the Board who do not share my Christian faith, I could not say publicly that my main concern is with the use of Christian churches by subsidy in primary education. The government both in UK and in its colonial policy recognises that by and large only religion can resist Communism and that non religious secular primary education on a large scale will produce atheistic proletariat as prepared ground for Communist sowing. I very much hope that the Roman Catholic Church will with encouragement from the Department strengthen and enlarge their primary school work. I think the Director understands my view on this matter, but it's not easy to say it publicly (HKPRO, series 147 2/2 (1), 119).

> The reply from the Secretary of Board of Education on 21 September 1950 reveals support for Bishop Hall's perspective:

> I agree entirely with your view.... I consider myself that religion should play a more and more important part in school since it is the very essence of cultured civilisation.... I read the report of your address with interest and can well sympathise with your feelings (HKPRO, series 147 2/2 (1), 120).

The Anglican bishop's stance may be interpreted as one of Christian compassion for school-aged children who would otherwise have been denied access to schooling; but it was clearly also influenced by political considerations and by anxiety to resist the possible spread of Communism.

As a result of such forces, the cooperation between the government and church leaders led to tremendous growth of church schooling. In 1953, 22 new Catholic schools were opened (14 in the New Territories, and eight in Hong Kong and Kowloon); and by 1963 a further 33 Catholic schools had been added (16 in the New Territories, and 17 in Hong Kong and Kowloon). During this period, the number of students going to Catholic schools increased from 3,909 to 28,029 (Hong Kong Catholic Diocesan Archive no. HK-DA S.6-01, F/03). In most cases the government constructed the school buildings and then invited the church to run the schools with government subsidy covering the recurrent expenditure. The government at first allowed school halls and playgrounds to be used for Sunday worship, and later provided land adjacent to schools for two thirds of the lease prices, together with land for the priests' living quarters at full lease prices.

These measures gave a political dimension to the partnership or contractorship between the Hong Kong government and Christian churches. The two parties cooperated closely for their own interests with the common foundation of anti-Communism. Subsequently, however, the partnership created a serious problem for the Catholic and other Christian churches. The churches were instruments for the government to achieve its political ends in the 1950s and 1960s, but after the 1967 pro-leftist riot in Hong Kong had been crushed and the CCP's underground network had been cracked (Xu 1995 p.75), Communist influence in Hong Kong was greatly reduced. The government then redistributed some of its subsidies to schools sponsored

by religious bodies to those sponsored by traditional Chinese associations such as the Po Leung Kuk and the Tung Wah Group of Hospitals. The move signified that the value of Christian education to the government had considerably decreased in the 1970s. However, the anti-Communist label remained attached to the Catholic church and its education, and the ideological incompatibility created a heavy psychological burden for local Catholics vis-à-vis the handover of Hong Kong to Chinese rule (Chan & Leung 1996). The anti-Communism within the Catholic education circle nurtured by the British in Hong Kong gave extra anxiety to Hong Kong Catholic leaders responsible for running Catholic education in the postcolonial framework. In Macao, the Catholic church did not have a similar direct link with the government in anti-Communist activities, and the Catholic leadership there found it easier to adapt to the prospect of the postcolonial era in both education and other domains.

Macao
The Macao Catholic church, with its first Portuguese bishop, Melchior Carneiro, became part of the governing group before Lisbon sent its first governor to Macao in the 16th century (Teixeira 1969, 1991). This laid the foundation for the harmonious church-state relationship in Macao. Like the church-state cooperation in Hong Kong, this relationship was strengthened by the partnership between the Macao Catholic church and the government in education and other social services.

Shortly after their arrival, the Jesuits in Macao opened a school for reading and writing (Santos 1968, p.8) in 1572; and, as recounted by Hui & Poon in this book, in 1594 the General of the Jesuits in Rome authorised the creation of a college offering university-level level instruction in Macao by upgrading the Madre de Deus school. The resulting St. Paul's University College offered degree courses from 1597 to 1762. Also worth noting is that educational provision was initiated for Portuguese orphans in 1718 (Teixeira 1982, p.280). This was the origin of what today is the prestigious Catholic school, Colégio Santa Rosa de Lima, with Portuguese, Chinese and English sections. In Hong Kong, the government 30 years after the arrival of the British took up leadership in education even at the risk of a row with the Catholic church in the period 1873-78 on the issue of religious education in schools (HKPRO series HK-DA S6.2, F/01). In Macao, by contrast, the government avoided responsibility for education even of Portuguese children until nearly 300 years after commencement of the colonial era. Even then, the government paid no attention to education for Chinese children. Nevertheless, in 1819 the first Macao Chinese private school, run by a Chinese association, came into being. Then in 1903, both the Canossian Sisters and the Salesian Fathers opened girls' and boys' schools for Chinese orphans, which in the course of time developed into Chinese primary schools for the public (Cheong 1991). This was the beginning of Church education for the Chinese who constitute 95 per cent of Macao's population.

In terms of education policy and administration, for many decades even in the 20th century the Macao authorities held a non-interventionist attitude. This led to a great diversity of models of educational provision; and the environment depended heavily on Catholic education. Although the Macao government formed a Department of Education in the 1960s, its initial role for the non-government sector was limited to registration of schools. In the 1970s the government began to subsidise not-for-profit private schools, but Catholic education in poor areas like Green Island received only a small subsidy.

Even with the great flow of refugees to Macao from mainland China in the 1950s, the Catholic church rather than the government took up the responsibility to provide education, building 12 primary and secondary schools for the refugees. As in Hong Kong, many of the personnel operating these schools were missionaries and others who had either been expelled or had fled from the mainland. The Macao branch of the American Catholic Relief Service was established, and provided food and medical care for refugee children in the schools.

The December 1966 riot in Macao, which was a spill-over of the Cultural Revolution in the mainland, was a turning-point in economic, social and political spheres. While the Hong Kong government was able to stand firm in the face of similar pressures, the Macao government crumbled. This led to Lisbon's humiliation, and the Portuguese government sent the Macao governor to make a public apology to the local Chinese. The Portuguese lost much of their popular support in Macao, and for some years social order and security were chiefly maintained by the pro-China neighbourhood associations and other influential social, religious and economic organisations rather than by the government.

During the 1966 riot, the Macao Catholic church, being a traditional ally of the Portuguese government, was also a target. The largest diocesan secondary school, St. Joseph's, was surrendered to pro-leftist demonstrators. Slogans were chanted, and big character posters were put on the exterior wall of the school. The posters demanded the removal of the pro-Taiwan principal, a Macao diocesan priest, who had to make an immediate departure to Hong Kong and spent the rest of his life there. After this incident, the rise of pro-China influence was mirrored in reduced support for the Catholic church. The victory of the pro-leftists in Macao frightened the Catholic personnel, including many of those working in education.

For political and ideological reasons, even before the riot the Catholic church had become introverted and had begun to give up its leadership in education. The history of the Macau Chinese Education Association reflects this change. The Association was a trade union for teachers, which had been founded in 1920 under the leadership of a Chinese Catholic priest, Fr. James Liu. When the Association became pro-China in the 1950s, Catholic priests and nuns who were members left the Association in disagreement with the new political stance (Lai 1996). The leadership vacuum in the Association was filled by pro-leftist educationists, and has remained with them. After the riot, religious congregations in Macao transferred some of their personnel to Hong Kong and elsewhere, which further weakened Catholic services including education and encouraged further growth of the pro-China sector.

The departure of some religious orders from Macao led to the restructuring of Catholic schools under the Catholic Macao diocese. A network of six diocesan secondary schools under the name of Colégio Diocesano de São José was established, with six schooling locations scattered around the territory. In 1993, the six campuses had 6,024 students and 132 classrooms, and formed the largest school in Macao (Macau, Direcção dos Serviços de Educação e Juventude 1994c). The restructuring of diocesan schools improved the management and quality of education, and helped Catholic sector to regain some of its strength and bargaining power.

Catholic Education during the Decolonisation Period

Hong Kong: A Paradigm Shift

Immediately before and at the time of the 1984 Sino-British declaration on the future of Hong Kong, dominant attitudes within the Catholic church in Hong Kong were apprehensive about the postcolonial future of the territory. In September 1983, for example, the diocesan spokesman stated that it was "very likely" that priests, particularly foreign priests, would not be allowed to maintain ministries to nurture their believers after 1997 (J.K. Tan 1997, pp.74-75). One month after the signature of the 1984 declaration, *Kung Kao Po,* the Chinese diocesan weekly newspaper, interviewed nine principals of diocesan schools. Five of them expressed doubts that the promises in the declaration would be honoured by the Chinese government, and none of the other four expressed confidence (J.K. Tan 1997, p.76).

As time progressed, however, attitudes became more positive. The Hong Kong prelate's 1989 pastoral exhortation was entitled *March Towards a Bright Decade*, and included education as a focus of attention (Wu 1989, section 6). One result of the focus on education was a reform of the Catholic Board of Education, which had been founded in 1977 to increase unity among Catholics schools. In 1995 the Board was restructured to include superiors of religious congregations which sponsored large numbers of schools. With their leaders in the restructured body, there was a stronger chance that religious congregations and the diocese could work together and even adopt a common stand on important issues. The Board was convened by the Cardinal, the highest Catholic leader in Hong Kong, and chaired by the Episcopal Delegate for Education. A Catholic Development Committee was added, with representatives from Catholic schools as members, to implement policies made by the Board. The Catholic Education Office was created to serve the Board and the Committee.

The restructuring promoted unity and communication among Catholic schools, and was considered particularly important in view of the impending political transition. Although no one could predict the exact changes in the first few years of postcolonial rule, preparation was considered prudent and a way to strengthen the bargaining power of Catholic education. One project of particular importance, examined in Tse's chapter in this book, focused on textbooks and teaching materials for civic education. The project covered both primary and secondary levels, and was a joint effort of the Catholic Education Office and the Catholic Centre for Religion & Society. The Catholic Board of Education also addressed the question whether secondary schools should teach in English or Chinese. While this topic had a pedagogical element, it was also widely considered politically significant in the prevailing climate (J.K. Tan 1997, pp.77-78).

The issue of medium of instruction was indeed among the first matters addressed by the government following the change of sovereignty. As noted elsewhere in this book, in 1998 the authorities required the majority of government and aided secondary schools to use Chinese language as the medium of instruction. The shift of language policy was widely criticised, including by Catholics (B. Leung 1999). However, the bishop's representative, Lo Kong Kai, was among the first educationists to support the change. Lo did this even at the risk of splitting the Catholic opinion, and his support showed the goodwill in recognition that the government continued to provide major funding for Catholic education.

Yet despite such demonstrated Catholic goodwill, the Special Administrative Region (SAR) government appeared to wish to reduce dependence on churches in the

provision of education. In addition to the matter of language, government policy was problematic to Catholics in two other major areas. First, the government redefined the goals of education. Previously they had been to enrich moral, emotional, spiritual and cultural life, but now they were defined as advance of material prosperity and a healthy life (Brown 2001). The Catholic position was that material matters and health could be subsumed under the previous heading of moral, emotional, spiritual and cultural life.

The second area concerned School-Based Management (SBM), which the government advocated to advance openness, accountability and democracy in all schools. Catholic educators, together with other Christian colleagues, saw SBM as a direct challenge to religious education and as a policy that could infringe religious freedom. This was because under the SBM system, not more than 60 per cent of school managers could be appointed by the sponsoring bodies, while the remaining 40 percent were to be representatives of teachers, parents and alumni. Many of the latter group would not be Catholics, and values in the school management committees were therefore likely to be diluted. Over 90 per cent of the teachers in Catholic schools were laity, and among them over two thirds were non-Catholics. Given such change in school management pattern, the priority for Catholic education values could be easily overrun.

Further tension concerned textbooks. Some participants believed that the SAR government was taking steps to have mainland-produced texts at the core of the educational curriculum, perhaps within five years. Catholic leaders feared that such a step could be the beginning of compulsory teaching requirements that might contradict the tenets of Christianity, and that texts could include positive views on matters offensive to the Catholic church such as abortion. The Catholic leaders' worries were to some extent confirmed by the director of pre-1997 Central Policy Unit, who perceived a desire within the SAR Government to lessen the dependence on religious organisations for the provision of education (Goodstadt 2003, p.xiv). Such matters indirectly forced the Catholic church to distance itself from government initiatives.

A 2001 speech by the Chief Executive to commemorate the 90th Anniversary of the University of Hong Kong (HKU) spread further worries because he criticised the colonial education represented by HKU (Tung 2001). Catholic schools had been part of the colonial education system by offering the best primary and secondary education and subsequently contributing to the making of the colonial elitism which Tung criticised. Although Tung praised the HKU alumni, he did not praise HKU as an institution. Tung's discreet criticism indirectly signalled that colonial education was wrong and that he might make a break from it in the postcolonial era.

Macao: Proud to be Small

Parallel developments were evident in Macao. During the 1980s, the Macau Catholic Schools' Association had been formed to bring Catholic school principals together to discuss common problems. When Catholic education did not have specific problems calling for action, the Association still gave members a framework for mutual collegial support. Perhaps the most obvious policy domain in which the Association played a role was in opposition to the government proposal to make Portuguese a compulsory second language starting from primary school. The Macau Catholic Schools' Association acted as a focal point for opposition not only by Catholic schools but also by other schools, arguing that the proposal aimed in an inappropriate

way to perpetuate Portuguese culture in the postcolonial period. In this particular instance, rather in contrast both to previous patterns in Macao and to patterns in Hong Kong, church and colonial state were in conflict. Moreover, for the first time in history the Macau Catholic Schools' Association discussed the problem of teaching Portuguese with the pro-leftist Macau Chinese Education Association. The Catholic schools and pro-leftist schools did not agree to publish a joint communiqué, but on this particular issue they operated in harmony. Catholic leaders learned that strength lay in collaboration, and that such collaboration sometimes needed concession and compromise (Leung & Chan 2003, p.66).

One way through which antagonism was reduced was through public pronouncements of philosophy. For example, Bishop Domingos Lam expressed that Macao was so small that its Catholics would not be a threat to Beijing, and that they could operate in harmony with the SAR government (Zhang 1999). The church also accepted that pro-Communist schools would gain greater government subsidies than Catholic schools. The student population of St. Joseph's Diocesan School was shrinking, and at least one branch school was expected to close because of a lack of qualified educational leaders. However, the Anglican education sector seemed to gain a new burst of leadership and to be expanding.

Like its counterpart in Hong Kong, the Catholic church in Macao also embarked on significant initiatives in civic education. The bulk of the materials were prepared by a priest who was also principal of the Instituto Salesiano da Imaculada Conceição. The initiatives were less comprehensive, and were undertaken later than in Hong Kong. As explained in Tse's chapter in this book, however, they were another important dimension of the education sector in Macao's transitional period.

Preparation of civic education materials was not a simple task because it demanded delicate balances. Since in both Hong Kong and Macao the materials were intended for use in the postcolonial period as well as during the transition, the writers had to heed the perspectives of the PRC government as well as of the church. It seems that they achieved the necessary balances, for the Hong Kong books were endorsed by the Catholic Education Office and then accepted for republication and sale throughout the PRC by the Lanzhou People's Press. Finance for the Macao project was provided by the Salesian congregation.

The preparations for Chinese rule by Hong Kong and Macao Catholic leaders in the education sector were influenced by political considerations. The fear of revenge in the postcolonial period because of the church's explicit anti-Communist partnership with the government in Hong Kong, and the fear in both territories of being undermined by patriotic schools, prompted Catholic leaders to take two steps for protection. First was an effort to promote unity within the Catholic education circle for mutual support in case of adversity; and second was the decision to prepare civic education materials before pro-China materials were launched. Concerning the latter, the leadership hoped that early action would permit their materials to be accepted by both the Catholic church and the governments of the respective Special Administrative Regions (SARs).

In general, however, the Catholic churches in Hong Kong and Macao lacked comprehensive policies on education. As had been the case before the decolonisation period, they mainly reacted to government policies and social pressures. The civic education issue was a response to the criticism that mission schools were insufficiently patriotic. The compromise in the civic education materials was a point

of departure which showed that the Catholic authorities in both Hong Kong and Macao were willing to be flexible in cooperating with the postcolonial regime.

Conclusions

Issues in church-state relations in Hong Kong and Macao have had both similarities and differences. Historically, the chief commonality was in the ways that churches and governments worked together to provide education. During the 19th century the Hong Kong government gave more active support to the churches, but the Macao government was ideologically well-disposed towards the mission schools. In more recent times, the chief commonality has been the China factor. The nature of the church-state partnership in Hong Kong education during the 1950s was strongly influenced by the British goal of curbing the spread of Communism from China. On the other side of the Pearl River estuary, there was a power struggle between the leftists and the Macao authority in the 1966 riot, and the Macao government, which had been the traditional partner of the Catholic church, was humiliated. Subsequently, the education sector had to be shared more evenly with pro-China groups. Left-wing patriotic schools grew substantially in number, and by the early 1990s embraced almost one third of the student population in the private sector (Chen 1994). By that time the share of Catholic education had declined from above 80 per cent in the 1950s to just 52 per cent.

Due to ideological incompatibility between Marxism-Leninism and church teaching, in the international arena the Catholic church in general has had a cool or even negative relationship with socialist states. However, both the PRC and the SAR governments have considered it appropriate to cooperate with civil organisations including the Catholic church to maintain prosperity and stability in the two territories after the handover. On their side, the Hong Kong and Macao Catholic churches wish to survive and to continue their service to their peoples. MacKenzie's international portrait (1993, p.47) pointed out that in general:

> The decline of missionary school provision in the latter part of the twentieth century, and the diminution in the status of colonialism as an acceptable relationship between nations, has evolved new interactions between Church and state, which despite their many variations, can rarely be characterised any longer as 'religion supporting imperialism'.

Some of the changes in Hong Kong and Macao occurred later than in other colonies, chiefly because the colonial transition itself occurred later. However, MacKenzie's observation was applicable to both Hong Kong and Macao in the late colonial era. In both Hong Kong and Macao, the long period of political transition allowed the churches to find new roles for themselves and to anticipate relationships with their new government counterparts. This was facilitated by the termination of Cold War political tensions, and circumstances in the 1990s were very different from the clashes between churches and Communists in post World War II Czechoslovakia, Hungary, Yugoslavia and Romania (J.K. Tan 1997, p.71). Thus, broader forces softened the hard stances previously evident both in the Roman Catholic church and in the PRC. It remains to be seen how much further the two sides will go in their adjustment and mutual compromise. Meanwhile, the new political frameworks have permitted considerable continuity as well as requiring various changes.

7

Higher Education, Imperialism and Colonial Transition

Hui Kwok Fai, Philip & Poon Lai Man, Helen

This chapter poses a historical question: how did colonial states intervene in the development of higher education and use it as a means of colonisation and imperialism as evidenced by Macao and Hong Kong? The history of higher education in the two colonies illustrates how higher education was controlled by the two colonial states and served the interests of their suzerains, Portugal and the United Kingdom (UK).

A case-based comparative strategy is employed in the chapter. Four institutions are selected to illustrate the practices and rationales underlying higher education development and its relationship to state intervention. Table 7.1 lists the institutions at different periods of colonial rule. The two oldest institutions selected are St. Paul's University College (SPUC) which was founded in Macao in 1594, and the University of Hong Kong (HKU) which was founded in 1911. These were the only universities in the two territories during the main colonial period. The other two institutions selected are the University of East Asia (UEA) which was founded in Macao in 1981, and the Hong Kong Baptist College (HKBC) which was founded in 1956. These institutions were established as private bodies and then transformed into public ones during the late colonial period. Colonial governments commonly try to maintain their influences in postcolonial periods, and education is one of the major social institutions for actualising such influence. This is what Law (1997, p.42) defines as neocolonialism, i.e. "the adjustment of colonial mechanism, practice or traditions or creation of new ones by the departing sovereign power or its allies to support the preservation of their interests". In Hong Kong and Macao, the colonial governments initiated higher education expansion during the period of political negotiation over sovereignty, and the change of status of HKBC and UEA occurred within the same period.

Table 7.1: Four Higher Education Institutions in Macao and Hong Kong, Compared in Different Periods

	Macao	Hong Kong
Main colonial period (before 1970s)	Establishment of St. Paul's University College	Establishment of the University of Hong Kong
Late colonial period	Establishment and transformation of the University of East Asia	Expansion and transformation of the Hong Kong Baptist College

Using the four cases, the chapter compares the development of higher education in the two colonies across a time span of four centuries, and explores how the colonial governments intervened and determined the pace and course of higher education development. Despite decades of neglect of higher education, both Macao and Hong Kong witnessed rapid expansion and reform during the period of state power transition. During this time, the higher education systems of the two colonies were used as an instrument for Portuguese and British imperialism. Hong Kong was treated as a British pawn in relationships with China and in international political manoeuvres, and Macao was the base for disseminating Portuguese culture to China. Colonial policies, including higher education policies, were influenced by Sino-British and Sino-Portuguese relationships. The chapter builds on existing literatures on comparative higher education and on education and colonialism.

Theories of Imperialism, Colonialism and Education

Theories of Imperialism

'Imperialism' is a catchword that has brought people together in both self-assertion and self-defence. Reynolds (1981) identified four modes of imperialism: the power-security theory of imperialism, economic imperialism, ideological imperialism, and socio-biological imperialism. The first two are the most relevant here. The power-security hypothesis argues that by seeking and gaining power, the state can create its own security and achieve a position of hegemony in international politics. Such imperialism extends power through the subjugation of weaker states by force or diplomacy.

Most economic theories of imperialism revolve around Marxism, in which contradiction and conflict emerging from the capitalist mode of production and the notion of capital accumulation are the essence. According to this perspective, the main reasons for imperialist expansion were the needs to guarantee sources of raw materials, to provide outlets for surplus capital, to create profits from investment, and to ensure markets. When the advanced capitalist states entered into that mode of production and were forced to compete for economic territory, it is argued, wars and the partition of colonies were inevitable (Reynolds 1981, pp.70-75).

Colonialism and Education

Colonialism has been defined as "the oppression, humiliation, or exploitation of indigenous peoples" (Nadel & Curtis 1964, p.3). Hong Kong and Macao were colonised in the classical manner. Altbach & Kelly (1984) collected case studies of colonial schooling to illustrate colonial educational practices and their underlying rationales. For example, France gained control of Indochina between 1858 and 1900, and provided some schooling from elementary to university level for the colonised; but by 1937 only 631 indigenous students had enrolled at the university level (Kelly 1984). The United States adopted an inequality policy in the Philippines, expanding the school system in agricultural villages but encouraging private schools from elementary through college to serve the urban and provincial elites (Foley 1984). Treating Taiwanese as second-class citizens, the Japanese colonial government implemented ethnic discrimination in education in Taiwan during the colonial period (Tsurumi 1977).

Carnoy (1974) has conceived of colonial education as an instrument through which the imperial powers attempted to train the natives to do the empire's bidding. This may be exemplified by the impact of colonialism on African education. Nkabinde (1997, p.184), with particular reference to South Africa, has noted that:

> Colonial education for Africans did not lead to true knowledge and understanding. Such education prepared Africans to be servants to their colonial masters.

Nkabinde added (p.185) that "educational expansion, far from rendering social upliftment and/or economic development, served to render education little more than a sophisticated mechanism for the recruitment of elites". Throughout the continent, Africans were not generally allowed to plan or structure their own education systems. The colonial languages (mainly English, French and Portuguese) were used as the principal languages of instruction in formal schooling. This has left a legacy in which colonial languages remain dominant in many African states and indigenous languages are devalued. Similar phenomena may be observed in Hong Kong and Macao, though with some distinct features arising from the complex socio-economic structures of the two societies.

Macao and Hong Kong under Colonial Rule

Review of the history of Macao and Hong Kong helps clarify understanding of the development of higher education in these two small but distinctive colonies. Despite development along different paths, the histories of the two colonies were directly influenced by the relative political strengths of, and relationships between, their original and colonial mother states, namely China, the United Kingdom and Portugal.

Hong Kong under British Rule

Table 7.2 classifies the 155-year colonial history of Hong Kong into five periods according to political changes in Hong Kong and China. In 1842, China was for the first time opened up to international mercantile interests when the Qing Dynasty was defeated by the British in the First Opium War. Using Hong Kong as the stepping stone, Britain became the dominant Western imperial power compelling China to open its treaty ports to trade, and set up the extra-territoriality system to enjoy foreigners' privileges (Tang 1992). From this point onward, China, which was militarily weak, became a semi-colony of the Western imperial powers. As Hong Kong was chiefly a base for penetration of China, the welfare of the people living there was not a strong concern of the British colonisers. Accordingly, the colonial regime held an indifferent attitude in social welfare, including education.

After the establishment of the Republic of China in 1911, the British changed their colonial policy in Hong Kong. While keeping a harmonious relationship with the Republican government, the British took a more aggressive approach towards education in Hong Kong, especially higher education. They felt that educating the youths in Hong Kong helped actualise Britain's imperial education policy. The development of the University of Hong Kong following its establishment in 1911 is a good case in point. The higher education policy resonated with British diplomatic policy of appeasement.

Table 7.2: Relationships between Hong Kong, Britain and China, Mid-19th to Late 20th Centuries

Period	Polity		Colonial status of Hong Kong	State power		Diplomatic policy		Higher education policy in Hong Kong
	China	*Britain*		*China*	*Britain*	*China*	*Britain*	
1842-1911	feudal empire	monarchy/ parliament	British colony	weak	strong	ignorance, tolerance	expansion by gunboat	indifference
1911-1949	Republic	monarchy/ parliament	British colony	weak	strong	tolerance	balance of power appeasement	State inter-vention
1949-1971	Communist republic	monarchy/ parliament	British colony	strong	strong	self-reliance, anti-imperialism	conciliatory	State inter-vention
1971-1984	Communist republic	monarchy/ parliament	British territory	strong	strong	full diplomatic relations	full diplomatic relations	State inter-vention
1984-1997	Communist republic	monarchy/ parliament	British territory	strong	strong	cooperation, conflict	cooperation, conflict	State inter-vention

In 1949, the Communist Party seized power in China and became a strong regional force. The British government employed a policy of 'keeping a foot in the door' in China, and attempted to accord formal diplomatic recognition to revolutionary China in order to preserve British interests there. Britain and China exchanged chargés d'affaires in 1954, and maintained bilateral relations until the two countries established full diplomatic relations in 1971. In the same year China established formal diplomatic relations with the United States, and subsequently resumed its seat in the United Nations. In 1972, China successfully demanded that Hong Kong and Macao be removed from the United Nations' ordinary category of colonial territories, setting a necessary precondition for future resumption of Chinese sovereignty.

From 1911 to 1984, the colonial government in Hong Kong controlled the development of higher education by restricting financial support for private tertiary institutions and denying recognition of their qualifications. Even at the end of the period, only 2 per cent of the age-appropriate population was admitted to local universities. However, in 1984 when the British government realised that its reign over Hong Kong would definitely end in 1997, the Hong Kong authorities started to plan for major expansion of tertiary education. Official recognition of the Hong Kong Baptist College and granting it university status was a step in the expansion plan. It was a clear example of linkage between higher education policy and wider diplomatic policy.

Macao: From Portuguese Settlement to Portuguese Colony

Table 7.3 shows interrelationships between Macao, Portugal and China, with the corresponding higher education policies during different colonial periods. Macao has a distinctive history in that the strategies of settlement employed by the Portuguese were neither superior military strength nor diplomatic efforts, unlike those in most parts of Africa and Asia, but by through bribery and deception. In 1557, the Portuguese were able to break through China's enclosure policy and lease Macao for trading by bribing the Chinese officials (Shipp 1997). As an entrepôt in China, Macao played an important role in the Portuguese sea trade.

Table 7.3: Interrelationships between Macao, Portugal and China, 16th to 20th Centuries

Period	Polity		Colonial status of Macao	State power		Diplomatic policy		Higher education policy in Macao
	China	*Portugal*		*China*	*Portugal*	*China*	*Portugal*	
1557-1643	feudal empire	feudal empire	Portuguese self-governing city	strong	strong	rejection, monitoring	bribery for settlement	missionary participation
1664-1841	feudal empire	feudal empire	Portuguese self-governing city	strong	strong	rejection, enclosure	maintenance of privilege	missionary participation
1842-1910	feudal empire	feudal empire	Portuguese colony	weak	strong	ignorance, tolerance	trickery, expansion	indifference
1911-1948	republic	republic	Portuguese colony	weak	weak	tolerance	expansion	indifference
1949-1971	Communist republic	authoritarian state	Portuguese overseas Province	strong	weak	no mutual recognition	no mutual recognition	laissez-faire
1972-1986	Communist republic	democratic state	Chinese territory under Portuguese administration	strong	weak	hidden, secret negotiation	cooperation, secret negotiation	state intervention
1987-1999	Communist republic	democratic state	Chinese territory under Portuguese administration	strong	weak	negotiation, firmness	cooperation, subservience	state intervention

In 1887, the Qing government was forced to sign the 'Treaty of Peking', affirming the "perpetual occupation and government of Macao and its dependencies by Portugal as any other Portuguese possession" (Chang 1988, p.28). Within Portugal itself, the First Republic was established in 1910, the year before establishment of the Republic of China. Yet the changes in polity in Macao's mother state and suzerain did not affect its colonial status. The Portuguese Republican government inherited the colonial system, and in most parts of the world continued existing policy. Although the Communist Party took over China in 1949, it deferred making a claim of sovereignty over Macao. Yet China assumed a stern attitude towards colonial antagonism. For instance, in 1955 the Beijing authorities prevented official celebrations of 400 year of 'Portuguese' Macao, which was seen by the Chinese as an event planned to boast Portuguese sovereignty (Marques 1972; H.C. Wong 1987).

Case 1: Establishment of St. Paul's University College

The History of SPUC

In the 16th century, Macao was called, at least by some observers, the "City of Schools" because many Catholic and Protestant missionaries came to the colony and provided schooling for upper-class European and Chinese residents (Chapple 1993; Thomas 1983a). In 1594, Claudio Aquaviva, the General of the Society of Jesus in Rome, authorised the creation of a college offering university-level instruction in Macao by upgrading the Madre de Deus School. The new institution was called St Paul's University College, and also called the College of the Mother of God (Lei 2001). The

college consisted of two seminaries for lay brothers, a university with faculties of arts, philosophy and theology, a primary school, and a school of music and arts. In 1597, the first degree courses were organised in theology and arts. The Portuguese declared that the college was the first Western university in the Far East. Indeed, the establishment of this college was 25 years earlier than the founding in Manila of St. Joseph's College and Seminary and the College of St. Thomas (Santos 1968), and 285 years earlier than the foundation of Shanghai's St. John's University (S.P. Lau 1994).

From 1597 to 1645, the period known as Macao's 'golden age', SPUC was at the height of its splendour. The college library had 4,000 books, a precious collection of paintings, atlases and maps, and a printing press. Many famous scholars taught at this college. However, due to complex theological and political disputes, Portugal seized all the Society's properties within its domain in 1759, and the Jesuits were expelled from Macao in 1762. The closure of St. Paul's University College soon followed. In 1835 a fire destroyed three quarters of the college, leading to the symbolic truncation of the history of Macao as a base for spreading Christianity in China.

The Aims, Finance and Impact of SPUC
SPUC owed much of its origin to the work of Alessandro Valignano, the head of the Eastern mission and Jesuit Visitor. Valignano recognised that Macao was not only a Portuguese trade centre in the Far East, but also the frontier for disseminating Christianity in China. He initiated an evangelical policy of cultural accommodation, and believed that the goal could be achieved by establishing a higher education institute to train prospective missionaries. SPUC's task was to train missionaries in the Chinese language as well as in Chinese rituals and culture, so that they could travel inland "garbed in the dress and manners of Confucian literati to cultivate the friendship of Chinese scholars and members of the ruling class" (Thomas 1983a, p.299). SPUC was a bilingual training centre for missionaries so that they were able to proselytise effectively. Cultural exchange was a by-product: Chinese culture was spread to the Europeans, while Western knowledge was spread to the Chinese (Correia 1994; S.P. Lau 1994).

Valignano organised the educational and institutional life of SPUC according to the Regulations of the College of Arts of Coimbra in Portugal, with adaptation to the needs for missionary assignment in China. The curriculum consisted of 1) Humanities – Chinese Language, Latin, Greek, Portuguese, Rhetoric and Music; 2) Philosophy – Metaphysics and Theology; and 3) Science – Mathematics, Physics, Astronomy and Medicine. S.P. Lau (1994) pointed out three features of the curriculum: first, it was an advanced programme for nurturing missionaries for the Roman Catholic Society of Jesus; second, it was a Middle Ages European university, with a comprehensive programme aiming to foster generalists; and third, the Chinese language was a compulsory subject and an essential tool for preaching purposes.

Money for setting up the college came primarily from donations by local people and the city Chambers, as well as taxes levied by the local government. At the outset, the Portuguese government drew 1,000 cruzados from Malacca tax every year to subsidise the college. On this basis, S.P. Lau (1994, p.2) argues that "St. Paul's University College was a government-subsidised Catholic school from its beginning". Even the money needed to rebuild the college after destruction by fire in 1603 was obtained from donations. In essence, Portugal shared little responsibility in terms of resources for the college.

SPUC had an examination system similar to that of its counterparts in Europe. Students passing the examinations were awarded university degrees, which were recognised by the Chinese government and which made the graduates eligible for official appointments in China. About 200 students attended the college, of whom 109 graduated and became missionaries in various Chinese provinces. SPUC played a major part in the persistent efforts of the Jesuits over a period of two centuries, which led to conversion of 300,000 Chinese to Christianity.

SPUC was a centre of learning for over 150 years. The historical value of this college was to achieve Macao's role as "the bridgehead of Christianity in the Far East as missionaries came from the west to China from 1583 to 1841" (Teixeira 1991, p.43). Guillen-Nuñez (1984) believed that the primary purpose behind the Portuguese voyages of discovery and trading was the search for Christians and spices. Therefore, it was under the religious zeal of the Portuguese that higher education flourished for a period in Macao.

Case 2: The Establishment of the University of Hong Kong

The History of HKU

In the 1900s, the conditions for establishing a university in Hong Kong seemed mature for several reasons. First, the demand for university education in China and in the colony was growing, and there was a steady supply of qualified secondary school graduates. In 1910 an estimated 5,174 Chinese students were attending universities in Japan, and 400 were in Britain and the United States. Second, the early 20th century was a period of rapid expansion of university education in Britain, and the expansion policy there influenced colonial education policies. Third and perhaps most important, with national interests moving into the university field in China, various Western powers were beginning to set up colleges. For example, the Americans helped establish Tsinghua College in Peking, and the Germans were planning a university in Kiaochow. Because of this, the British were anxious to set up a university to secure imperial relations with China (Endacott 1962; Lin 2002).

Sir Frederick Lugard, Governor of Hong Kong from 1907 to 1912, was a central advocate of Hong Kong's first university. The institution was formed by merging the Hong Kong College of Medicine and the Technical Institute. The Hong Kong University ordinance was passed by the Legislative Council in 1911, and the university, which was regarded by the British as the first imperial university in the Far East, was opened in 1912 by Lugard.

The Aims and Finance of HKU

Although the University was situated in Hong Kong, the major educational target was China. As noted by Harrison (1962, p.xv), "the higher educational needs of the Colony alone were for long regarded as insufficient to justify a full scale university-type institution, and the University's main raison d'être was therefore thought to lie in service to the Chinese people as a whole". The prime goal of the institution, as Lugard (1912, p.3) stated in the preamble to the ordinance of incorporation, was "the maintenance of good understanding with the neighbouring Empire of China". Other purposes were to serve the higher education needs of an awakening China, to be a symbol of Western cultural tradition in the Far East, to be a meeting-place for Chinese and Western cultures, to help to maintain British prestige in Eastern Asia, and indirectly to benefit British

business through dissemination of modern knowledge and the English language (Harrison 1962). HKU was clearly part of Britain's broad imperial education policy. The educational needs and welfare of the local people were not the priority on the political agenda.

The take-over of China by the Communist Party in 1949 changed the relationship between Hong Kong and its motherland, and rendered questionable the purpose of HKU to serve the whole of China. To accommodate the political change, the Secretary of State for the Colonies announced in 1948 (quoted by Priestley 1962, p.96) that:

> the University should reflect in the realms of science and intelligence the success of the Colony in the realms of trade and industry ... [and] at the same time be a University for Hong Kong.

This was the first time that the colonial government formally regarded HKU as a university for the people of Hong Kong. Yet such an acknowledgement did not mean that Britain had given up its imperial education policy: it was only a change in emphasis. As stated in the 1952 Keswick Report on higher education in Hong Kong (quoted by Priestley 1962, pp.96-97):

> Hong Kong should certainly be a centre for the diffusion of English ideas and for interpreting the West to China. It should also be a centre for interpreting Chinese concepts to England and the West, a centre where Chinese and English thought can meet at all levels.

In this new context, local youths were to be trained to develop Hong Kong into a modern British colony.

From the outset, HKU was required to be financially self-sufficient even though, in Lugard's words (1910, p.1), it carried the role of "upholding the British name and fame in the Far East". Lugard added (1910, p.1) that it was:

> neither just nor practicable to expect the taxpayers of Hongkong (sic) to bear the entire burden of discharging these Imperial obligations, and of promoting single-handed, interests which are common to both the British and the Chinese Governments. It is for this reason that we desire that the new step forward shall be met by a University which is largely self-supporting.

For the first few decades, the university suffered from under-financing which hindered the institution's long-term balanced development as a teaching and research centre (Mouat Jones & Adams 1950). In addition to finance from the Hong Kong government, the foundation of the university was based on support solicited from local merchants, Chinese residents and the government of the neighbouring province of Guangdong. Only after World War II did financial commitment from the government increase gradually. In the 1960s onward, the Hong Kong Jockey Club became another source of financial support. From the very beginning, the British government made little contribution. Every time commissions were set up to investigate the financial position of HKU and to recommend alternative solutions, the question of the financial responsibility of the British government arose. The idea that the university was an imperial asset and therefore an imperial responsibility was emphasised in all commission reports, urging greater financial commitments from both the British and the colonial governments. Yet positive response from Britain was rarely heard (Mouat Jones & Adams 1950).

The Impact of HKU: Chinese Ruling Chinese for Imperial Interests

The colonial government expected that HKU students would come from all parts of mainland China, and after graduation would return to China to take up leadership positions in government (Harrison 1962). Indeed, six students who graduated in 1922 had been sent to the university by the central government in Peking (Mouat Jones & Adams 1950). The future of the graduates of the university was anticipated to be very bright, at least as conceived by Lugard. The Objects of the University stated that "the graduates from the Hong Kong University will have before them all the limitless opportunities which the Empire of China offers, both in the ranks of official life, and in the fields of commerce, and the professions of Medicine, Engineering, etc. in addition to the opportunities offered by our own and neighbouring Colonies" (Lugard 1910, p.7). Such was also true at the time when China was ruled by the Nationalist government and there were diplomatic relations between the Chinese and the British governments. As Lugard had foretold, graduates served as talented representatives of the colonial motherland. Britain benefited from the graduates' British-style heritage acquired during their training at HKU, which was translated indirectly into commercial benefits.

After 1949, the linkages described above totally disintegrated. The university turned inward to serve primarily the educational needs of the colony. Consequently, the graduates of the 1950s and 1960s became the elite of the local society, and, by serving either in official capacities or in the business fields, helped the administration of Hong Kong. These people were ethnic Chinese with British-style education and excellent working knowledge of both English and Chinese. As a result, they became the best tools for explaining and implementing government policies, permitting successful implementation of the British strategy of "the Chinese ruling the Chinese".

British rule over Hong Kong was further secured by the use of English as the medium of instruction in higher education. Lugard (1909, p.4) believed that English should be the medium of instruction at HKU because the language was "the best medium for imparting Western knowledge", and because "by acquiring a fluency in it students will best fit themselves for success in after life whether they adopt a profession or become officials in the service of their country at the Capitals or abroad". However, Lugard's underlying motive was spelled out in the preamble to the ordinance of incorporation of HKU (Lugard 1912, p.3):

> the Hongkong University will be largely instrumental in making King's English the predominant language in the Far East, as pidgin English is already in business and commerce. Such a result would no doubt bring in its train important political and commercial benefits.

This strategy helped English to secure its high position in the Far East, and remained a steadfast policy at HKU. Even at the early foundation stage in 1908 when the financial situation of the University was so stringent that the scheme was almost aborted, Lugard firmly rejected a proposal to attract donations from China by launching a secondary parallel course in Chinese. Lugard insisted on English as the sole language, even risking the fate of the university (Endacott 1962; Lugard 1910).

The English-language policy remained intact throughout the decades. Although it is only one of many university academic policies, its impact has been far-reaching because it has influenced the medium of instruction in secondary schools. Since universities in Hong Kong before the early-1980s could cater for less than 2 per cent of the age cohorts, graduation from the university guaranteed a ticket to a bright future. Use

of English became the most important tool for gaining access to the university. Many parents felt that they had no choice but to force their children to learn English as early as possible in order to increase the chance of entry into this prestigious university. Chinese was relegated to second class status, both in the university and in the school system. As a result, the British were successful in transplanting not only the British university model, but also parts of the British academic system and infrastructure, which in many respects dominated the indigenous culture. This may be instructively compared with SPUC (Table 7.4).

Table 7.4: St. Paul's University College and the University of Hong Kong: Similarities and Differences in Origins and Functions

	St. Paul's University College	University of Hong Kong
Founder	• established by a religious body, the Roman Catholic Society of Jesus, in 1594	• established by the government of Hong Kong in 1911
Functions and Roles	• training missionaries for Japan and China • graduates preached and taught in China and translated Chinese Classics • tool for cultural (religious) dissemination; base for Christianity in China	• training of intellectuals to serve China and Hong Kong • graduates worked as high ranking officials or experts in China before 1949, and as members of the social elite and bureaucrats in Hong Kong after 1949 • tool for cultural dissemination and economic exploitation
Funding	• funding from colonial government and merchants • little support from the suzerain (Portugal)	• funding from colonial government and merchants • little support from the suzerain (UK)
Colonial higher education policy	• no central higher education policy in Portuguese colonies • College closed down because of struggles between religious orders	• Imperial higher education policy • formation of Inter-University Council for Higher Education in the Colonies for coordination of universities in the British Empire
Use of language and its impact	• Chinese a compulsory subject, a tool for cultural accommodation in order to propagate Christianity • promote European understanding of China and Chinese culture	• English the medium of instruction, enhancing spread of British culture • suppress Chinese language, promote British academic model, facilitate cultural domination

Case 3: Transformation of the University of East Asia

The University of East Asia as a Private Institution
No university education was available in Macao between the closure of SPUC in 1762 and 1981. In the latter year, a private university, the University of East Asia, was established. It consisted of five colleges working at several educational levels. Three languages were employed: English was the medium of instruction and administration; and Chinese and Portuguese were the second and third working languages.

In 1978, Peter Wong King-keung, a Hong Kong soils engineer serving as a consultant to the Macao government on industrial development, together with his friends Edward Woo Pak-hay and Ng Yuk-lun, had made a proposal to the Macao government to develop a university (Mellor 1988). The following year, the Macao government

signed a land lease agreement for 100,000 square metres to be the site for this new university. At almost the same time, Portugal and China signed an agreement stating that Macao was a Chinese territory. Ng Yuk-lun, one of the founders of the university (quoted by Mellor 1988, p.117), noted that because:

> Macau [is] small, a university there must be capable of attracting students and faculty from the rest of East Asia and other parts of the world in order to grow, and indeed to survive, and such an institution would reflect the character of Macau itself as a multilingual and multicultural society.

That was why the university was titled the University of East Asia rather than the University of Macau. The policy of serving the wider East Asian region was reflected in the student and academic staff recruitment strategies. The university obtained economic support through operation of joint programmes with other institutions and through the use of distance teaching materials originally prepared by other universities.

In 1987, a new group of officials recruited from Portugal joined the government's Department of Education as senior administrators. They began to conduct educational research, and tried to reduce Macao's educational problems by initiating various reforms. At the same time, the Portuguese government realised that in the transitional period of Macao lay the last real chance to spread the Portuguese language and culture in East Asia. In order to achieve this, the government provided grants of 5,000 patacas per class per year to schools in which Portuguese was included in the curriculum. One Portuguese educational planner, Rosa (1990, p.19), pointed out that the grants were part of a:

> review of the current Portuguese language diffusion sub-system, with the overall redefinition of educational goals, methods and programs, so as to bring them in line with the Territory of Macau's specific needs and expectations, and to serve fully a global policy of widespread bilingualism.

In addition to providing grants to promote the Portuguese language in primary and secondary schools, the Macao government decided to purchase the University of East Asia. After some negotiations, the Governor and the Directors of the company which owned the university signed a protocol in 1988, and the Macao government paid 130 million patacas to the company. Most of the institution's physical assets were transferred to the Macao Foundation, which was a public body set up by the Macao government in 1987 for cultural and educational purposes. The money for purchasing the university came from government revenue (78 million patacas), from the Sociedade de Tourismo e Diversões de Macau (Macao Travel and Amusement Company) which donated 26 million patacas, and from several commercial, industrial and financial bodies which together contributed 26 million patacas. The university was thereby transformed from a private to a public institution. In 1987, Carlos Montez Melancia, then Governor of Macao and Chancellor of the University (quoted by Mellor 1988, pp.110, 116), explained that the intention of the change was:

> to guarantee conditions which will enable [the university] to serve the interests of Macau with stability and continuity in the fields of education and scientific research, especially in the field of law studies and other types of study relevant to the training of cadres, both during the period of transition and beyond.... The University of East Asia is a reality. History will not forgive us if we do not plan wisely and ensure its future.

The University of East Asia in the Publicly-funded Stage

After becoming publicly-funded, the university was managed by the Macau Foundation, which was structured by the Macao government specifically to assume the trusteeship of UEA with safeguards for its academic autonomy. The Governor appointed an administrative board from the private sector. The change also brought adjustment to the aims of the university. Instead of serving the wider East Asian region, the focus was shifted to Macao. The original 1979 land-lease agreement had contained a clause requiring the university to develop a centre for Portuguese studies, in which were to be offered courses in philosophy, linguistics, language, literature, culture and history. However, local Portuguese students did not choose to enter the UEA because few courses in Portuguese were available until an Institute of Portuguese Studies was set up in 1987. In 1986, for example, only 37 students enrolled in classes on Portuguese language and culture (Mellor 1988, p.107). Financial constraints had delayed progress in extensive provision for Portuguese Studies.

The change in institutional philosophy following the change of ownership was reflected in remarks by the President of the Portuguese Republic, Dr. Mário Soares, during an official visit to the University of East Asia in 1989. "To some of the Portuguese who are living in Macau," he declared (Soares 1989, p.1), "the attempts to spread and defend the Portuguese language have been a failure". However, he continued, "there is sufficient reason to support that from now on we need to double our effort". This speech indicated that the Portuguese government intended to use the university as a base to spread Portuguese culture and language in Macao, and in line with this goal, moves were made to strengthen the Portuguese presence at the university. One of the objectives added in the revised university charter was "to provide programmes which will educate Macau persons for positions of responsibility in the Macau community" (Mellor 1988, p.196). The university was expected to provide training of more direct relevance to the immediate needs of the territory, and to make significant contributions to Macao's stability, prosperity and further development including through localisation of the civil service. Such programmes included teacher training and courses in law, public administration, and Portuguese and Chinese translation and interpretation.

Another consequence of change in ownership was alteration in the university's composition and power structure. The governing authority was reorganised so that the university could achieve the functions required by its new role. In 1988, in a speech delivered at the Centre of Portuguese Studies, Rangel (1989, p.16) approvingly quoted an anonymous person who declared that "a university built according to the modern mode" would be "the greatest heirloom that Portugal can leave in Macau". He added:

> This university will be the focus point of knowledge transmission and the bridge for eastern and western communication. For this I have for years been advocating the establishment of the Portuguese Oriental Academy and East Asia University (for short why not name it Macau University). This will be an invaluable tool. But they need the technological and academic support of the organisations of our country. Its special function will be to spread the cultural value of Portuguese; promote the dialogue between the Portuguese culture and those countries with whom Portugal has cultural or commercial relationships; study the cultural, political and economical problem of the residents of Macau and Portugal.

The Macao government gave very little financial support to the University between 1981 and 1987. After 1988, however, the university enjoyed a pub-

licly-acknowledged mandate which, in the words of Governor Melancia (quoted by Mellor 1988, pp.116-117), was "backed by the wealth of the Territory". The university's income included fees, donations, and subventions from the Macao Foundation. Many programmes were subsidised by the government, including the in-service teacher training programme which was fully sponsored by the Department of Education & Youth. Taxation revenue from lottery tickets and other gambling businesses was another major source of income.

Another change following the government's purchase of the university was a shift from a three-year to a four-year basic curriculum. The shift was not purely for academic reasons, but was also for reasons of academic recognition since basic degree courses in Portugal followed a four-year model. The new arrangement permitted recognition by both the Portuguese and the Macao governments. In addition, programmes were set up to cater for Portuguese applicants. The Institute of Portuguese Studies offered courses in education, research, journalism and secretarial skills. Koo (1998b, p.6) observed that the Institute:

> preferred to employ teaching staff with academic backgrounds from Portuguese institutions to teach Portuguese language and culture. Only one staff did not receive his academic qualification from Portugal.… The FL [Faculty of Law] was dominated by professors from the Portuguese empire.

The governing structure, staff recruitment and curriculum of the university were also greatly influenced by Portuguese traditions.

Case 4: Transformation of the Hong Kong Baptist College

The Baptist College as a Private Institution
The Hong Kong Baptist University, originally known as the Hong Kong Baptist College, was founded in 1956. The institution, registered with the Hong Kong government's Education Department as a private non-profit making Christian college, was established by the Hong Kong Baptist Convention. The reasons for setting up such a college, as recorded by Y.L. Wong (1996, p.8), were:

- to educate young people to become competent individuals who would serve the Baptist church and the society;
- to provide further education opportunities for graduates of Chinese middle schools, who lacked such opportunities because the sole university in Hong Kong admitted students only from schools with English as the medium of instruction; and
- to offer a channel for international cultural exchange and connection with universities overseas for students who intended to pursue further study.

In 1957, 132 students enrolled in the college, which offered a four-year programme with biblical knowledge as a compulsory subject for all Year 1 to Year 3 students (Y.L. Wong 1996). The student number rose to 623 in 1959/60, becoming the greatest enrolment among all full-time post-secondary institutions at that time. In the same year, three other post secondary colleges, Chung Chi College, New Asia College and United College, joined together to form the Association of Chinese Post-secondary Colleges and began to receive government subsidies. The three colleges then

amalgamated to form the Chinese University of Hong Kong (CUHK) in 1963. This brought new pressure to the Baptist College because the CUHK was explicitly set up to meet the further education needs of students from Chinese-medium schools.

In order to compete with the publicly-funded universities, the Baptist College raised its requirements on student academic performance, restructured its departments to form Arts and Science Faculties, promoted research, and refined its constitution. The chief goal was to achieve registration as an approved post-secondary college eligible for government subsidy. Initially, however, the college was denied registration on the grounds that its standards were still too low. Only in 1970, 14 years after its establishment, did the college finally achieve approved post-secondary college status. Graduates were then recognised to have qualifications equivalent to diploma level, and were permitted to teach in primary and secondary schools. However, government finance remained denied until 1979, when the college accepted a government proposal to restructure its five-year academic programme to the one outlined in the 1978 White Paper on Senior Secondary and Tertiary Education.

The new structure was a '2+2+1' system, and was introduced in exchange for being accepted into the government funding scheme. In the words of an official publication (Hong Kong Baptist College 1988, p.9):

> The first two-year programme was an integrated course designed to provide all rounded education for secondary school graduates. The third and fourth years provided students with the opportunities to enter the fifth (or final) year which allowed students to pursue in-depth studies in their chosen fields.

Under the new scheme, the government agreed to subsidise the first four years of the programme. In the view of Tse Chi-wai, President of the College, six factors lay behind the government's insistence on a 2+2+1 structure (Y.L. Wong 1996, pp.214-215). Three of them were related to the colonial state's higher education policies, namely:

- subsidising only the first four years of study helped to declare the government's stand of financially supporting only post-secondary education but not university education;
- allowing the government to recognise the qualification of the four-year programme in these colleges as diploma level but not degree level; and
- permitting the existence of the fifth year so as to satisfy the need of the colleges to maintain their academic standards.

The reason why the Baptist College was willing to change its programme to a 2+2+1 structure was, as revealed by a senior administrator of the college (see Hui 1999, p.243) that:

> We came to a conclusion that unless we became a publicly-funded and publicly supervised institution, it would be very unlikely that the government would ever accept our programme for degree recognition. We got approval for some funding in the late 70's and early 80's. But that was on the condition that we restructure from 4-year to 3-year, admitting students one year later. There was also an agreement that if we did this, the government would bring in a review panel to look at further development, and that occurred in January 1981.

This account clearly shows that the government was intervening in the development of higher education, even in the private sector.

The Baptist University in the Publicly-funded Stage

In 1983 the college became a publicly-funded higher education institution, formally taken into the ambit of the University & Polytechnic Grants Committee (UPGC). The college modified its programme structure to a 2+3 structure, aspiring to degree-granting status and meanwhile providing two years of basic studies plus three years of diploma studies. The intake of students for the first two years was expected to diminish until it was completely phased out in 1985. In addition, under the advice of the UPGC, the college had to give up the Department of Civil Engineering, and to develop departments of humanities and natural science. The college was unwilling to close its Department of Civil Engineering, but was forced to do so as another compromise. The college authorities were aware that refusal to follow government's advice would mean withdrawal of government subsidy, which in turn would seriously hamper the development of the institution.

In 1984, the Hong Kong Baptist College was permitted to launch degree programmes, one year after becoming publicly-funded. The aim of the new programme was education of the 'whole person' through a liberal education with some emphasis of vocational training. The college admitted its first batch of degree students in 1986. By 1987, all courses had a duration of three years, conferring either degree or diploma qualifications, and in 1991 the college became a fully-degree-granting institution. In 1995, it was renamed the Hong Kong Baptist University. It took 30 years for this institution to become a university, and it would certainly have taken much less time in the absence of state controls and intervention.

For the first 23 years, the Hong Kong Baptist College was running totally on non-government funds. Some of its running expenses in the early years were met by the American Southern Baptist Foreign Mission Board, by churches and institutions connected with the Hong Kong Baptist Association, and by other donors (Hong Kong Baptist College 1957). Up to 1979, the college always faced financial stringency. The government had denied many times the college's requests for financial support with such reasons as:

- the government had been satisfied with the role that the college had been performing in providing sub-degree education for the community;
- the government had to support the newly-established CUHK, and to make sure that its development would not be affected by support channelled to other post-secondary institutions including the Baptist College;
- there would not be enough job vacancies to absorb so many four-year tertiary education graduates, and one-year or two-year diploma courses would be more economical, practical and beneficial to society's needs; and
- there was still considerable capacity for growth in HKU and the newly established university.

The College President, Tse Chi-wai, remarked that it was the government's policy to run universities itself, and that the idea of promoting private universities was received coldly (Y.L. Wong 1996, p.167). He felt that the government was afraid that once the Baptist College was granted a government subsidy, it would appear that the government was approving the establishment of the third university.

The college was able to get a small amount of funding from the government in 1979 on the condition that it restructured its programme from four to three years, which

was compatible with the English model. A senior administrator at the institution (see Hui 1999, p.246) admitted that:

> The primary reason to become a public institution in the early 1980s was to obtain recognition for academic work so that degrees could be awarded and the graduates would have a proper credential. It also required more funding to do that, which was the secondary reason to go public. The government would never accept degrees without the institution becoming public.

The college did not insist on its four-year programme. The same administrator revealed further that:

> The only condition [for funding] about four-year to three-year was laid down directly by the Education & Manpower Branch in the late 1970s…. We did not propose a four-year degree programme in the early 1980s because we knew that the government and UPGC were towards three-year degrees.

The college obtained full government subsidy in 1983, and its academic qualifications were then recognised. To achieve this, the administrators sacrificed their control over programme structures. The government also restructured the institution's governing bodies through legislation, and monitored its development through official representatives on these bodies. The Council, which is the highest governing body, was chaired by a person, usually a member of the Legislative Council, appointed by the Governor. After restructuring, the college's religious emphasis and connections with the Baptist community diminished.

Conclusion

Macao and Hong Kong have been geographically significant bases for the West to enter China. The territories were on the one hand a bridge for the Portuguese and British to penetrate China for economic exploitation and cultural dissemination, and on the other hand a base for power struggles with other imperial powers. Higher education development in Macao and Hong Kong was inevitably influenced by Portuguese and British colonial heritages.

The lack of formal higher education in Macao between 1762 and 1981 was due to the Macao government's generally laissez-faire social policies, the lack of demand for manpower in the small commercial sector, and, most importantly, the fact that Macao was administered by a colonial regime which did not make education a high priority. In Hong Kong, the establishment of a university in 1911 was mainly motivated by the British colonial interests to serve China rather than Hong Kong (Sweeting 1990). Tables 7.2 and 7.3 in this chapter contrasted the two developments.

It is argued that in general, colonisers control and resist the development of higher education of the colonised. However, higher education systems expanded rapidly in both colonies after China had made the agreements with the United Kingdom and Portugal that Hong Kong and Macao would revert to China in 1997 and 1999 respectively. In 1989 the Hong Kong Governor announced that the number of first-year, first-degree places would increase from 7,000 to 15,000 between 1990 and 1995, implying that university capacity would cater for an increase from 2 per cent to over 18 per cent of the relevant age group within only five years (Morris, McClelland & Leung 1994). Though

no target figures have been made public in Macao, the number of local students studying at the university increased from 62 non-government-subsidised places in 1981 to 2,836 government-subsidised placements in 1995/96 (Rangel 1991; Macau, Direcção dos Serviços de Estatística e Censos 1997b).

Different observers provide different interpretations. Regarding the development of higher education in Hong Kong, Mak and Postiglione (1996, p.57) attributed such development to three factors: "its status as a colony, its reliance on international trade, and social demand for higher education". Bray (1992a, p.332) argued that:

> The timing and the scale of these higher education expansion policies appear to be directly linked to the '1997 factor'.... The government aimed through bold initiative to demonstrate that it had confidence in itself.

And Joseph Cheng (1995, p.257) pointed out that:

> Shortage of educated manpower has created a bottleneck hampering economic growth. Substantial emigration flows relating to 1997 is also a problem. Development of higher education and infrastructure are means to ensure sustainable economic growth.

Some scholars use the concept of decolonisation to explain the function of higher education institutions. Concerning Hong Kong, Postiglione (1992, p.3) stated that "educational reforms have the potential to act as vehicles for negotiating social transition processes, as well as instruments for resisting decolonisation"; and concerning Macao, Bray (1994; 2001) contended that education may not only be an instrument of the preparation for decolonisation but also a vehicle for extending Portuguese culture in the twilight of the colonial period. Noting examples in Central and East Africa, in the Caribbean, and in southeast Asia, Bray (1997a) concluded that the establishment or expansion of higher education was typical in colonies during the period of decolonisation.

Yet an interpretation using only the concept of decolonisation seems incomplete. This chapter proposes that the ultimate aims of establishing Western universities in the two colonies were to achieve imperial initiatives in cultural and economic expansion in China. The kind of cultural imperialism through higher education exhibited by the Portuguese was different from that by the British, as illustrated by the four cases.

In sum, the chapter argues that state control of higher education institutions, which in turn permitted control of social mobility, was one of the most effective tools of colonialism and imperialism. Hong Kong and Macao were used by their suzerains for economic exploitation, political influence and cultural dissemination in China, and higher education policies in these two colonies served political more than educational needs. Bray (1997a) has noted that the immediate postcolonial periods of most former colonies brought more dramatic changes in the scale of education systems than in the nature of education systems. Yung's chapter in this book shows that that observation had some validity in both Hong Kong and Macao. The further changes and/or continuities in higher education in the two territories as the postcolonial period advances will be an instructive topic for continuing research.

8

Higher Education and the Labour Force

MA Hing Tong, William

Macao and Hong Kong have greatly benefited from economic links between China and other countries, acting as entrepots and service bases for foreign investments. During the restructuring of their economies from dominance of manufacturing to dominance of services, a large supply of highly educated personnel was needed. Recently, the governments of both Special Administrative Regions (SARs) signed agreements for Closer Economic Partnership Arrangement (CEPA) with the national government in Beijing. These agreements aimed to forge even stronger economic cooperation between the two SARs and mainland China.

In Macao, educational enrolments expanded rapidly after the late 1980s. However, the need for overseas graduates remained strong because of the previous neglect of local higher education, and because of constraints in the number of specialist forms of training which could be offered in a small society. The main destinations for Macao's external students were mainland China and Taiwan. Hong Kong had greater training capacity than Macao, but even in Hong Kong local universities met less than 60 per cent of the territory's needs for highly educated personnel. Hong Kong depended on North America, the United Kingdom (UK), Taiwan and Australia for much higher education and training.

This chapter begins with a broad conceptual framework which shows why Macao and Hong Kong are instructive places for study and comparison of links between education and the labour force. Discussion then turns to the development of Macao's economy, the effects of that development, and the supply of skilled personnel. The chapter then provides similar commentary on Hong Kong, which sets the stage for identification of similarities and differences. The final section draws out the conceptual implications of the analysis.

Education, Development and Technological Change

Concerning the general relationship between the economy and education, a widespread perspective is that the investment of public money in 'human capital' is the one of best ways to promote economic development (McMahon 2002; Little 2003). Many human capital theorists (e.g. Becker 1975; Psacharopoulos 1995; Psacharopoulos & Patrinos 2002) have investigated the contribution of education to economic growth, and have endeavoured to measure rates of return to schooling. These theorists have focused on inputs and outputs, rather than on what actually happens in the processes of education.

Such analysts have also emphasised the value of systematic predictions of demand for skills. Manpower planning has been linked to educational provision with the goal of maximising rates of return from investment in human capital. In many situations, manpower planning has led to expansion of investment in tertiary and technical education (Maglen 1993; Bray 2004a). However, an alternative set of explanations for economic progress emphasises cultural forces. In East Asia, analysts have focused on the Confucian ethic, which is believed to have fuelled and motivated both labour and management (Tai 1989).

Most advanced industrial countries have moved from economies largely based on manufacturing to economies largely based on services. This change has affected demands on education and training systems. In general, skill requirements are higher in the service sector than in the manufacturing sector. Harris (1995) pointed out that more highly educated labour produces more output, and that the larger the stock of human capital, the more likely labour will find ways to improve production processes and to develop new and profitable products.

In both Hong Kong and Macao, the existence of a literate and numerate workforce has contributed to economic development (Bray 1995a; Sweeting 1995). However, as the second half of the 20th century progressed, mere literacy and numeracy rapidly ceased to be an adequate underpinning for continued growth. One new element became the link between technology and education. Carnoy's (1995) review of the effects of information technology highlighted the increased demand for highly skilled labour because of the more complex requirements of information systems and flexible production. Carnoy further pointed out that intensified global competition and the development of new information technologies altered the international division of labour. Competition in the production of the most advanced technologies sharply increased among the highly industrialised economies, shifting manufacturing jobs from these economies to a group of newly developing countries in Asia and elsewhere. Training of highly skilled labour became an important public policy issue in both industrialised and less developed economies.

Although Macao and Hong Kong both had fast-growing economies during the 1980s and 1990s, their governments' higher education and skill-training policies were rather different. Comparison brings into focus questions about the quantity of higher education, the types of higher education, and its planning. The labour market in each place has differed significantly. Hong Kong moved from an economy largely based on manufacturing in the 1970s to an economy largely based on tourism and other services in the 1980s. It then moved again in the 1990s to an economy strongly based on financial services. Macao's economy has also depended on tourism, but it has a large gambling sector not found in Hong Kong. Since skill requirements are generally higher in the service sector than in the manufacturing sector, the growth of service employment has tended to increase the average skill demands of work. These and other patterns are best discerned by considering each territory in turn.

Macao

The Economy and Labour Force
According to government statistics, the real average annual growth rate of Gross Domestic Product (GDP) in Macao rose from 5.7 per cent in 1986, reached a peak of 13.4 per cent in 1992, dropped to negative figures in 1996, and again increased slightly to positive figures in 2002 (Table 8.1). The main factor in growth was a construction boom in 1992 and 1993. A surge in public investment helped to sustain GDP growth early in the decade, but after the completion of Macao's airport fixed investment dropped. In 2002, tourism and gambling together accounted for 40 per cent of Macao's GDP and over 70 per cent of government revenue. Manufacturing output, largely textiles and clothing, accounted for about a third of GDP.

Table 8.1: Major Economic Indicators, Macao, 1986-2002

	1986	1990	1992	1994	1996	1998	2000	2002
Real GDP growth %	5.7	5.0	13.3	4.6	-0.4	-7.1	4.6	9.5
Population (thousand)	426	340	381	410	416	425	431	441
Consumer price inflation %	1.9	9.6	7.7	6.3	6.5	n.a.	-1.6	-2.6
Exports MOP million	8,630	13,638	14,080	14,854	15,898	17,083	20,380	18,925
Imports MOP million	7,318	12,343	15,684	16,925	15,930	15,596	18,097	20,323
Trade balance MOP million	1,312	1,295	-1,604	-2,071	-32	1,487	2,282	-1,398

Sources: Macao, Department of Statistics & Census, *Yearbook of Statistics*, various years.

During the 1980s, diversification of exports had short-lived success. Toys, artificial flowers, textiles and garments were the major export products to the USA and the European Union in the mid-1990s. Textiles and apparel were still locked in by the requirements of the Multi-Fibre Arrangement (MFA). With the phasing out of the MFA, the textile industry faced difficulties. Toy exports resumed their long-term decline in 1995, but footwear exports showed a steady increase. Electronics showed the best performance, but demand then fell, especially for computer components in the USA and the European Union. To promote domestic economic growth, the government formulated various strategies including increased infrastructure investment through public funding, reform of the gambling industry, and development of Macao's tourist appeal through large scale cultural and sport activities.

In 1996, 206,000 people, representing 66.7 per cent of the population, were said to be economically active. This was a proportionate as well as an absolute increase on the situation in the 1980s, though the figure declined again to 62.3 per cent in 2002 (Table 8.2). These figures included an estimate of the many outside workers on short-term contracts. Unemployment was moderate at 4.3 per cent in 1996, but reached 6.8 per cent in 2000 and remained high in the following years. Manufacturing, hotels, restaurants and personal services were the largest employers. As the structure changed among the various sectors, between 1989 and 2002 the proportion of workers in manufacturing declined from 35.9 to 20.4 per cent, but the share of workers in service sectors (restaurants & hotels, financial & business services, and public, social & private

services) grew from 47.8 to 50.8 per cent. Less than 0.1 per cent of the labour force was employed in primary industries. The median monthly earnings of workers reached a peak of MOP5,050 in 1998 but dropped to MOP4,670 in 2002.

Table 8.2: Macao Labour Force Characteristics, 1981-2002

	1981	1989	1994	1996	1998	2000	2002
Labour force participation rate (%)	n.a.	50.8	63.9	66.7	65.3	64.3	62.3
Unemployment rate (%)	n.a.	1.5	2.5	4.3	4.6	6.8	6.3
Median monthly earnings (MOP)	1,741	2,382	4,476	4,925	5,050	4,822	4,672
Share of employment (%)							
Manufacturing	45.0	35.9	22.9	20.6	21.1	19.4	20.4
Construction	8.0	9.6	7.5	7.5	10.4	8.3	7.5
Restaurants & hotels	18.5	19.0	26.1	27.5	11.5	10.8	11.5
Financial & business services	1.7	4.0	6.3	6.6	6.9	8.9	8.5
Public, social & private services	15.4	24.8	30.4	30.5	32.1	31.7	30.8
Others	11.4	6.6	6.8	7.3	n.a.	n.a.	n.a.
Cultural recreation, gambling & other services	n.a.	n.a.	n.a.	n.a.	10.0	11.0	11.5

Note: Data after 1998 are not totally comparable with those in and before 1998 because industries were classified differently.

Source: Macao, Department of Statistics & Census, *Yearbook of Statistics*, various years.

A 1994 survey showed that 44.9 per cent of Macao's employed persons had attained only primary education, and that 44.7 per cent had attained only secondary education. Just 4.9 per cent possessed university degrees, and another 1.7 per cent had non-degree tertiary qualifications (Macau, Direcção dos Serviços de Estatística e Censos 1994, p.98). In 2001, 31,425 persons, or 7.4 per cent of Macao's employed population, held higher education qualifications (Macao, Public Administration & Civil Service Bureau 2002). The figures showed that the stock of higher education qualifications was still very low, and that more resources were needed for training of vocational, technical and professional workers. Moreover, Feitor & Cremer (1991) and Sit et al. (1991) pointed out that some holders of tertiary qualifications were not working in sectors which made use of those qualifications. Many immigrants had gained their qualifications in mainland China and elsewhere from institutions which were not recognised by the Macao authorities, and therefore had to adjust to labour-market niches which did not use their formal qualifications.

The civil service also needed more local personnel with appropriate skills, especially to replace the Portuguese expatriates in the top echelons and to reduce the over-representation of Macanese (mixed-race Portuguese-Chinese) in middle-level positions. During the period of political transition between 1987 and 1999, the Macao government greatly increased local recruitment and promotion in the civil service. The goal was to meet the requirements of the Sino-Portuguese Joint Declaration and the Basic Law, which indicated that the government of the Macao SAR would be composed of local inhabitants and that the principal officials would be Chinese citizens who had been permanent residents of Macao for at least 15 years. Hence the supply of qualified

local top-ranking administrators was an emergency issue for the Macao government. As shown in Table 8.3, the pace of localisation had been slow between 1987 and 1992. However, the proportion of locally-born people in top ranking positions increased from 43.7 per cent in 1992 to 75.8 per cent in 1999, and the proportion of people born in Portugal declined from 45.4 to 6.3 per cent in 1999. This was a remarkable change, though continued attention to higher education and training was still needed because in 2002 over 17 per cent of top ranking officials did not hold higher education qualifications (Macau, Direcção dos Serviços de Administração e Função Pública 2004).

Table 8.3: Place of Birth of Top-ranking Civil Servants, 1987-99 (%)

	Place of birth			
Year	Macao	Portugal	Others	Total
1987	48.6	42.4	9.0	100.0
1989	44.6	44.9	10.5	100.0
1992	43.7	45.4	10.9	100.0
1994	55.5	33.1	11.4	100.0
1999	75.8	6.3	17.9	100.0

Source: Macao, Government of, *Human Resources in the Macao Public Administration*, various years.

Stock of Highly-Educated Personnel

The foundation of the University of East Asia (UEA) in 1981 gave Macao a university for the first time in the modern period. In 1988, the university was purchased by the Macau Foundation with funds provided by the government. In 1991 the UEA was renamed the University of Macau, and it has since operated as an autonomous, not-for-profit public institution. In the early 1990s, the university was joined by two other institutions of higher education: the Asia International Open University (AIOU) and the Macao Polytechnic Institute. All courses were employment-oriented, and included both two-year, full-time diploma programmes and three-year bacharelato (professional degree) programmes. By 2002, Macao had 12 higher education institutions under different modes of financing. The four public institutions were the University of Macau, the Macao Polytechnic Institute, the Institute for Tourism Studies, and the Macao Security Force Superior School. The eight private institutions were the AIOU, the Inter-University Institute of Macau, the Kiang Wu Nursing College of Macau, the Macau Institute of Management, the Macau Millennium College, the Macao University of Science & Technology, and the United Nations University International Institute for Software Technology (Bray et al. 2002).

Before 1981, all personnel with higher education had obtained their qualifications abroad. Even in the late 1990s, external sources provided the greatest supply of skilled personnel in Macao, and it is likely that this will continue to be the case. No official statistics were compiled on the number of Macao citizens studying abroad, but information was available on the number of official scholarships for external study. The government commenced provision of such scholarships in 1981. At first the main intention was to support Macao students for study in Portugal; but in 1983 the scheme

was extended to include studies in Macao, and in 1991 the scheme was further extended to provide loans and grants for overseas study (Rangel 1991; Bray 1993). Table 8.4 shows that the number of Macao students receiving assistance had increased markedly since 1981/82. The number of students who went to Portugal was always modest and peaked in 1991/92. However, larger numbers went to mainland China and Taiwan, and those numbers continued to rise as the 1990s progressed. Particularly dramatic was the increase in the numbers going to mainland China, from 17 in 1981/82 to 1,130 in 1999/00, though the figure fell to 891 in 2002/03. A large proportion of Macao secondary schools used Chinese as the medium of instruction, and mainland China became a politically more acceptable destination for study. Also, universities in mainland China and Taiwan were generally less expensive than universities in English-speaking countries. The numbers of Macao students in Hong Kong were always modest, chiefly because Hong Kong institutions were unwilling to allocate places. As the 1990s progressed Hong Kong's tertiary sector expanded, but the numbers of Macao students fell because they had alternative destinations.

Table 8.4: Numbers of Macao Students Receiving Government Assistance, by Place of Study, 1981/82-2002/03

Destination	1981/82	1984/85	1987/88	1990/91	1993/94	1996/97	1999/00	2002/03
Macao	0	23	178	716	1,092	1,023	1,208	1,651
Mainland China	17	31	128	210	313	745	1,130	891
Portugal	54	86	74	91	68	55	36	12
Hong Kong	8	21	32	22	17	4	8	9
Taiwan	25	141	252	338	432	575	475	465
USA	1	10	34	30	17	18	26	17
Canada	0	10	14	9	0	2	4	4
Australia	0	2	6	10	0	4	9	7
Others	4	9	13	5	6	8	9	5
Sub-total	109	310	553	715	853	1,411	1,697	1,410
Total	109	333	731	1,431	1,945	2,434	2,905	3,061

Source: www.dsej.gov.mo.

While these figures are an indicator of the numbers of students going abroad, statistics were not available on the numbers who chose not to return home, or who chose to work in fields other than those for which they had been trained. Planners thus faced major difficulties in getting the balances right when trying to match supply with demand. The task for planners in small economies is even more difficult than for their counterparts in larger societies, because the arithmetic demands such fine tuning (Bray 1992c; Bray & Kwo 2003). Small size also requires a different approach to training. Even in the long run, it is not conceivable that Macao will provide local training in all specialisms that will be needed by the economy. This contrasts with mainland China, for example, which is so huge that whole universities can be devoted specifically to agriculture, medicine, aeronautics, and various other specialisms. Small states may also find it more sensible for specific tasks, particularly ones with short durations, to recruit expatriates who are already skilled rather than to try to train locals.

Characteristics of University Graduates

In the absence of detailed figures on courses of study by local and external students, it is not easy to be precise about changing patterns. Nevertheless, some data are available from a 1993 study of university graduates in Macao (Ma 1994). Also, data have been compiled by some host countries in which Macao citizens are studying.

These studies indicate that business was the most popular specialisation both in Macao and abroad, though the popularity of other courses differed according to the destination of students. Ma's (1994) survey of local graduates indicated that 57.8 per cent had studied business, 18.8 per cent science and computer science, and 15.6 per cent arts and social science (Table 8.5). On the other hand, one quarter of the external graduates had chosen business administration, 22.2 per cent had studied engineering, and 19.3 had chosen science or computer science. The 1996 and 2002 surveys of Macao students in Australia showed a similar pattern: around one third to half of students had chosen business administration, 18 to 26 per cent had chosen science or computer science, and 10 to 17 per cent had chosen engineering.

Table 8.5: Macao Local and External University Graduates and University Students in Australia by Courses of Study (%)

Courses of study	Survey in 1993		Student enrolment in Australia	
	Local	External	1996	2002
Architecture/Building	0	0	6.3	2.5
Arts, Humanities & Social Science	15.6	12.5	6.3	3.8
Business Admin. & Economics	57.8	25.0	47.6	37.8
Education	0.0	1.9	0.8	2.1
Engineering	0.0	22.2	16.7	9.8
Health, Community Services	0.0	0.0	3.2	11.1
Science, Computer Science	18.8	19.3	18.3	25.7
Law	0.0	1.8	0.0	0.0
Others	7.8	17.3	0.8	7.2
Total	100.0	100.0	100.0	100.0

Note: The 1993 survey assumed that the respondents were local Macao people, because only Macao residents were included. The survey used a questionnaire to collect information about local and overseas university graduates in the local labour market. Out of 1,407 sent questionnaires for which mailing addresses were supplied by the government, 212 responded. Zero in this table means that there was no such sample in the surveys.

Sources: Ma (1994); Australia, Department of Employment, Education, Training & Youth Affairs (1997; 2003).

The survey of university graduates in Macao (Ma 1994) showed that professional, technical, administrative or managerial positions seemed to be the target for the majority (67 per cent of local graduates and 71 per cent of external graduates). Only a small proportion were attracted by clerical, agricultural, production and related jobs. Figures for the first and present jobs showed movement to the government sector by both local and external graduates (local from 12 to 27 per cent, and external from 16 to 46 per

cent). Graduates generally preferred the government to the private sector. Data on salaries revealed that 27 per cent of external graduates earned more than MOP300,000 per annum, with 23 per cent of them earning over MOP500,000 per annum. Table 8.2 showed median monthly earnings in 1994 of MOP4,476 or MOP53,712 per annum. Thus the university graduates enjoyed substantially higher salaries than the general workforce.

Hong Kong

The Hong Kong Economy and Labour Force

During the 1980s and 1990s, the Hong Kong economy shifted significantly from manufacturing to services (Table 8.6). In 1981, manufacturing industries employed 42.6 per cent of the labour force; but by 2002 the proportion had declined to 8.1 per cent. In contrast, the employment share of service industries, which included restaurants, hotels, financial & business services, and community, social & personal services, increased from 40.1 per cent in 1981 to 80.8 per cent in 2002.

Table 8.6: Hong Kong Labour Force Characteristics, 1981-2002 (%)

	1981	1986	1991	1995	2001	2002
Labour force participation rate	66.3	65.1	63.5	62.0	61.5	62.0
Unemployment rate	3.9	2.8	1.8	3.2	5.1	7.3
Share of employment						
Manufacturing	42.6	35.8	26.0	18.4	8.9	8.1
Construction	8.2	6.2	8.2	7.9	3.4	2.9
Restaurants and hotels	19.8	22.3	26.6	28.4	43.6	43.5
Financial & business services	4.9	6.4	8.3	11.8	19.0	19.5
Community, social & private services	15.9	18.4	19.5	21.0	16.8	17.8
Others	8.6	10.9	11.4	12.5	8.3	8.2

Source: Hong Kong, Census & Statistics Department, various years.

At the same time, a general upgrading of the occupational structure within individual industries was anticipated, shifting the employment demand in favour of highly skilled workers. Administrative & managerial workers and professional, technical & related workers were expected to account for increasing shares of employment across industries. Upgrading of occupational structure was expected in other services, and even within the declining manufacturing industries.

The rapid growth of employment in highly skilled jobs was expected to increase demand for better educated workers, in particular those with university education (see Table 8.7). While only 6.2 per cent of those employed in 1991 were graduates, 14 per cent of the workforce was expected to need a first degree or higher qualifications by 2005. Global and local events in the initial years of the 21st century changed the scenario from that which had been projected, but the general trend of upgrading workers to more skilled and knowledgeable levels was still expected to account for increasing shares of workers across employment sectors.

Table 8.7: Employed Persons by Educational Level, Hong Kong (Thousands)

	1991		1996		2001*		2005*	
	No.	%	No.	%	No.	%	No.	%
Lower secondary or below	1,469.6	53.3	1,484.3	49.9	1,410.8	45.4	1,202	36
Upper sec. & matriculation	949.0	34.4	1,021.9	34.4	1,080.8	34.8	1,120	33
Craft level	13.1	0.5	25.7	0.9	3.4	1.1	32	1
Technician level	46.0	1.7	64.3	2.1	80.1	2.6	n.a.	n.a.
Non-degree	106.8	3.9	43.2	4.8	180.2	5.8	536	16
First degree & above	173.0	6.2	235.4	7.9	320.8	10.3	485	14
All levels	2,757.5	100.0	2,974.8	100.0	3,106.1	100.0	3,375	100.0

* projected

Source: Hong Kong, Education & Manpower Branch (1994); Hong Kong, Education & Manpower Bureau (2000).

Compared with Macao, the pace of localisation of the civil service had been more effective. The Hong Kong government began a strong localisation policy in the 1980s. It would only consider non-local recruitment if no suitable local candidates were available, and even then expatriates were only recruited on contract terms. Of directorate officers, the most senior ranks in government, the share of local appointees was 62 per cent in 1991. At the secretariat level, nine of the 16 Secretaries were locals (A.B.L. Cheung 1991). At the end of 1995, only three branches or departments were headed by non-local officers. Localisation of the Hong Kong policy secretary team and department heads was basically completed in 1995 (K.K. Leung 1995).

The Stock of Higher Education Graduates
According to census data, in 1995 19 per cent of Hong Kong's working population held higher education qualifications (Table 8.8). This was about the same level as Taiwan, but was substantially higher than Macao. On the other hand, the stock of graduates in Hong Kong was considerably lower than that in Australia and the USA.

Table 8.8: Working Population with Higher Education Qualifications

	Hong Kong	Macao	Taiwan	Australia	USA
Year	1995	1995	1995	1994	1995
%	19.0	5.5	20.6	49.1	56.1

Sources: Australia, Bureau of Statistics (1994) p.5; US Bureau of the Census (1996) Section 13, no.618, p.395; Hong Kong, Census & Statistics Department (1996), p.18; Taiwan, Director General of Budget, Accounting & Statistics (1996), p.55; Koo (1997), p.229.

This situation partly reflected the fact that local university education was very restricted until the mid-1980s. However, restricted local supply was eased by an outflow of Hong Kong students for university studies elsewhere. The most popular destinations

were Australia, Canada, Taiwan, the UK and the USA. In 1975, 26,206 Hong Kong students were studying in these locations – a figure which was more than twice the number of students in local tertiary education (Table 8.9). By 1994 the proportion had changed, but these five destinations still hosted 42,650 Hong Kong students, who were equivalent in number to 80 per cent of full-time tertiary students in Hong Kong. In 1998, the overall number of Hong Kong overseas students dropped to the level of the early 1990s and then slightly increased to around 40,000 in 2000.

Most Hong Kong overseas students went to English-speaking industrialised countries. The main reason was that they had competence in English from their schooling in Hong Kong, and considered it a valuable language in which to gain further competence. Industrialised countries had more prestige than less developed countries, and some courses provided skills that could not be obtained in local universities. Some industrialised countries vigorously marketed their services in Hong Kong. This is the major explanation for the large numbers of students in Australia.

Table 8.9: Enrolments of Hong Kong Tertiary Students, Various Countries, 1975-2000

	1975	1984	1986	1988	1990	1992	1994	1998	2000
Australia	572	1,658	1,687	1,889	*3,864	*6,707	*11,932	17,135	20,739
Canada	6,644	7,723	6,730	5,840	6,372	6,600	+6,589	5,000	5,000
Taiwan	2,626	3,817	#3,854	3,850	3,633	3,450	2,663	1,487	1,171
UK	4,434	6,500	6,935	7,300	7,700	7,600	7,400	5,450	5,200
USA	11,930	9,000	9,720	9,160	12,630	14,018	12,940	8,730	7,545
Sub-total	26,206	28,698	28,926	28,043	34,199	38,375	41,524	37,752	39,455
Local enrolment	11,575	21,538	25,995	29,591	34,556	42,721	52,494	59,528	59,408

* Full-fee Overseas Students; + figures for 1992/93 only; # applies to 1987

Notes: (1) Local enrolment refers to the enrolments on full-time courses in institutions funded by the University [& Polytechnic] Grants Committee. (2) Figures for mainland China are not shown because before 1994, the number of Hong Kong students in mainland China was small compared to other countries.

Sources: The British Council, *Statistics of Students from Overseas in the United Kingdom*; Hong Kong, Census & Statistics Department, *Hong Kong Annual Digest of Statistics;* Australia, Department of Employment, Education & Training, *Overseas Student Statistics*; United Kingdom, Department of Education & Science, *Statistics on Education*; Institute of International Education, *Open Doors*; Taiwan, Ministry of Education, *Educational Statistics of the Republic of China.*

Through comparison with other societies, policy-makers may gain insights into the functioning of their own societies. Economically advanced countries, such as Australia and the USA stand out for the fact that 50 per cent or more of their workers have higher education qualifications. During the mid-1990s, about one-fifth of employed persons in Hong Kong and Taiwan had higher education qualifications.

Rates of Return

Psacharopoulos (1994), McMahon (2002) and others have argued that the concept of

rates of return in education may be an important guide for decision makers in allocating resources to education by different levels. Advocates of rate of return analysis suggest that both private and social rates of return should be considered. The former views the calculation from the viewpoint of the individual, whereas the latter views the calculation from the viewpoint of the whole society. When societies subsidise education, individuals get the benefit of education without having paid the full cost. In this case, the private rate of return is higher than the social rate, unless individuals have to pay very heavy taxes on their extra earnings.

However, rate of return analysis in education has been subjected to criticism (e.g. Bennell 1996; 1998). Among the criticisms are:

- The rates are calculated on past data. They are not necessarily a good guide to the future.
- It is not always clear how much differences in earnings can be attributed to differences in education, and how much is due to other factors such as natural ability, socio-economic background, and labour force status.
- Some figures were not gained from a large or representative samples across all economic sectors and geographical locations.

Moreover for Macao, no detailed studies were available. In Hong Kong the most recent data during the late 1990s were from a study using Hong Kong Census and By-census data sets to estimate rates of return to various education qualifications (Hong Kong, Education & Manpower Bureau, 1999). Both the private and social rates of return to first degree had experienced an increase in the 1980s but started to decline in the late 1990s, which might be a result of the fast expansion in higher education from the late 1980s to the early 1990s (Table 8.10). Most of the estimated social rates of return to education were close to 10 per cent – a very attractive return to investment – and both the private and social rates of return were generally higher than those for OECD countries. In part because of these high returns demand for university education in Hong Kong remained strong in the late 1990s.

Table 8.10: Rates of Return to Education in Hong Kong (First Degree over Matriculation Level) %, 1981-96

	1981	1986	1991	1996
Private	13.5	16.0	19.6	14.5
Social	9.3	9.9	12.1	10.0

Source: Hong Kong, Education & Manpower Bureau (1999), Tables A.3.1, A.3.2.

Nevertheless, it was clear that in Macao arts graduates generally enjoyed high earnings compared with graduates in other disciplines. Overseas graduates in this category tended to be at the upper end of the income range. One reason may have been that the category included some Macao Portuguese who had studied overseas and then entered high ranks in the government sector. In general, the average annual earnings of overseas graduates were 16 per cent higher than those of the local graduates. However, patterns varied in different occupations.

The situation in Hong Kong appeared somewhat different. Overall, overseas graduates had lower earnings than local graduates: 24 per cent lower in 1986, and 14 per cent lower in 1991. However, differences in earnings depended on fields of study and employment. Generally, overseas graduates had lower earnings in professional fields such as medicine and education. They had higher earnings in computer studies, construction, civil engineering, accountancy, business, and finance. Differences were more pronounced in 1991 than in 1986 (Chung & Ma 1997). Furthermore, 1986 data showed that male overseas and local graduates working for the government had earnings about 38 per cent higher than their counterparts in private sector, while overseas graduates working in the same sector had an earnings advantage of only 17 per cent.

Neoclassical economic theory assumes that shortages or surpluses of manpower are only temporary, and that in the long run the labour market operates in equilibrium. Competition in the labour market for limited expertise will tend to increase wages. As wages rise, the quantity demanded falls since employers substitute other types of expertise or other factors of production. Then the system reaches a short-run equilibrium stage. At the same time, the high wage rate increases the supply of skilled personnel. The adjustment process continues until the system is in long-run equilibrium with a new wage rate and employment level (Ahamad & Blaug 1973; Hinchliffe 1995). In both Hong Kong and Macao, overseas graduates in construction, civil engineering and computer studies may have had short term benefits from the massive airports constructed in each territory during the 1990s. The airports demanded outside connections, international standards and high technology. In such aspects, Hong Kong and Macao needed professionals from overseas or with overseas higher education qualification in those areas. However, this was not a sustained need.

In the real world, moreover, many inflexibilities and rigidities obstruct the efficient operation of markets. The government may use monetary incentives to bring about equilibrium in the labour market. Paying higher salary to attract expatriates and overseas graduates to return to Hong Kong has been one government policy to meet the needs of labour market. Other strategies include protection of the market by local professional bodies for medical practitioners, architects, engineers, etc..

Conclusions

What conclusions can be drawn concerning the pool of skills in the two territories? Higher education in Macao expanded rapidly during the late 1990s and immediately after the change of sovereignty. The sector included many private institutions, and even the public ones were closely tied to the demands of the market (Bray et al. 2002). The increased supply caused the volume of higher education to resemble that in Hong Kong. To meet future needs, government may consider carrying out periodic manpower surveys. This would provide more information for decision-makers to reduce the imbalance between labour supply and demand, such as an expansion or contraction of the public sector, the adaptability of skills in one occupation to another, and the mobility of the labour force.

Turning to Hong Kong, previous analysis suggests that workers will require higher skills to cope with their jobs as the economy becomes more knowledge- and technology-intensive. Hence there will be heavy demand for higher educational qualifications. Overseas sources of supply are subject to a number of factors, including

economic and political conditions both locally and overseas. Any change in these factors will affect these inflows of graduate workers. Countries experiencing political uncertainty are likely to lose particularly large numbers of students overseas. Estimates showed that the proportion of overseas graduates who returned to Hong Kong was quite high, ranging from 72 per cent between 1962 and 1976 to over 90 per cent in 1994 (Huang 1988; Hong Kong, Education & Manpower Branch 1994).

The motives for migration of students and highly skilled workers are complex. For the case of Hong Kong, it is clear that the higher the level of education, the higher the tendency to emigrate. The major reason is that well-educated people have a better knowledge of the consequences of emigration, and are more adaptable to life in foreign countries, partly because of their better language skills. Also, the tendency to emigrate increases with income.

The demand for highly skilled workers has been on the rise since the 1970s. In the future, Hong Kong will continue to expand the rail network in the north-west of the New Territories. This will require many professionals in the fields of construction and civil engineering. In the financial sector, the Hong Kong stock exchange aims to attract listings from companies operating in China and elsewhere in Asia. More accountants, business and finance professionals will be acquired to match the needs of expanding services, particularly in information technology and entertainment (Hong Kong, Financial Secretary 1999). Although Hong Kong expanded the local higher education sector in the first half of the 1990s, demand for tertiary graduates, at least up to the late 1990s, increased faster than local supply. In consequence, overseas universities remained major suppliers of high-level personnel for Hong Kong.

Prior to the changes of sovereignty, the Hong Kong and Macao governments often gave preference to individuals with qualifications from the United Kingdom (or selected Commonwealth countries) and Portugal. The change of sovereignty brought increased attention to the possibilities for study in mainland China. In both cases, external studies helped Hong Kong and Macao students to act as a bridge in the external knowledge network.

Finally, as mentioned at the beginning of the chapter, the governments of both SARs have signed agreements for Closer Economic Partnership Arrangement (CEPA) with the national government in Beijing. Economic integration has long been significant, and seems set to become ever stronger. Together with this integration are flows of people which mean that labour forces become increasingly fluid. In some respects, the integration and personnel flows will cause Macao and Hong Kong to resemble each other more closely. However, differences will remain. They will be based on historical factors, the fact that Macao's economy is dominated by gambling as well as tourism, and continued differences in the government policies in education.

9

Language and Education

Mark Bray & Koo Ding Yee, Ramsey

A considerable literature focuses on language and education in Hong Kong. Parts of this literature are related to policies, and other parts focus on processes of teaching and learning. The literature on language and education in Macao is smaller, but is also significant. In the space available, this chapter cannot present a comprehensive summary of these literatures. However, it does highlight core themes, particularly in the domains of policy formulation and implementation. It shows that, as in other topics, instructive insights can be gained from juxtaposition of patterns in the two territories.

The chapter analyses patterns within the framework of colonialism and post-colonialism, and accordingly commences with broad remarks on those matters. It then looks separately at developments in Hong Kong and Macao in historical sequence. A further section focuses on international schools; and the final part identifies major lessons from the comparison.

Colonialism and Postcolonialism

In the literature on colonialism and education, language has been recognised as a crucial determinant of identity and power relations (see e.g. Carnoy 1974; Phillipson 1992; Pennycook 1994; Clayton 2000). Language was often used as a tool of domination and exploitation, allowing those in power to reinforce their will and privileged position.

Beyond such general observations, Hailey (1957, pp.1226-1229), in remarks which focused on Africa but which also had wider application, noted differences in the policies of different colonial powers. French colonial policies, he observed, stressed the use of the French language from the first day of primary school. British policies, by contrast, encouraged the use of vernaculars in primary school and the shift to English only at higher levels. Portuguese policies were in some respects similar to French ones, but the Portuguese colonial authorities gave little encouragement to the education of local peoples in any language. In all colonies, of course, policies and practices moved through different phases at different points in time.

Postcolonial eras brought both expansion and reorientation of education. Some postcolonial states vigorously promoted local languages in place of colonial ones. For example, the Tanzanian government replaced English with Swahili in much of its education system; the Pakistan government emphasised Urdu instead of English; the Indonesian government stressed Bahasa Indonesia instead of Dutch; and the Malaysian government emphasised Malay rather than English.

Nowhere was the shift unproblematic, however. The choice of single national languages in those countries was made despite the existence of other languages. Also, the emphasis on national languages reduced channels of communication with external communities that did not use those languages. Further, national languages were easier to justify at lower levels of education than at higher levels, since essential domains of scientific and technical knowledge could not all be translated into national languages.

In other postcolonial contexts, policy makers retained an ongoing major role for the colonial languages. In some cases this was because their countries did not have single dominant languages which could become national languages without serious dispute. In this sense, the colonial languages had an element of neutrality in the face of competing claims among other national languages. Thus Kyrgyzstan, for example, retained Russian as the only official language despite the existence of significant local languages; and similarly Papua New Guinea retained English as the only official language. Other states, such as India and Madagascar, did make local languages official ones, but did so alongside the colonial ones. In some settings, the colonial language was a force for unification and for differentiation from neighbouring states. This was a strong emphasis in Singapore, for example, which used English to bring together different racial and language groups and to distinguish Singapore from Malaysia and other countries. More recently, Portuguese has been made an official language in East Timor in order to strengthen the country's identity and distinguish it from Indonesia.

Some patterns have however changed with the advance of globalisation and the need for strong international discourse (Watson 2001; Crystal 2003). Perceptions of international isolation caused a relaxation of advocacy of national languages in Pakistan and Malaysia, and some resurgence of what had been the colonial language but what was now perceived more as an international language than as a colonial one. With a similar goal of access to international affairs, English has become the favoured foreign language in Cambodia, Laos and Vietnam, displacing the French colonial language; and in Rwanda, English has been made an official language alongside French and Kinyarwanda. Hong Kong has the benefit that its colonial language is also an international language (Johnson 2001), whereas Portuguese has much more limited use as a lingua franca. Yet even if English can be described as an international rather than a colonial language, its spread and use still has political implications and is arguably part of a neocolonial framework which has replaced one form of colonialism with another (Phillipson 1992; Maurais 2003).

Language and Education in Hong Kong

The Main Colonial Period

Sweeting (1991b) presented a comprehensive account of the history of language policies in Hong Kong, from which key elements may be extracted here. He began by noting (p.67) that the first government-aided schools in the initial years after 1842 had been founded by Chinese people in some of the villages on Hong Kong island. The language of instruction in these first government-aided schools was Chinese. After about a decade, attempts were made to spread the use of English in some schools, though they formed a small minority.

In 1862, the authorities opened the first government-run institution, the Central

School. Sweeting reported (1991b, p.68) that within a few years its first headmaster, Frederick Stewart:

> was able to begin to satisfy the demand of Chinese parents for education in English and the Central School gradually became famous for this…. At the same time, Frederick Stewart remained convinced that, however much the parents might seek education in English for their sons, it was his duty to insist that education in his school be based on a very firm foundation of Chinese. For this reason, he maintained Chinese studies, through the medium of Chinese and taught by local Chinese teachers, as one of the two major streams in the Central School.

The first main signs of conflict over language policy developed in the mid-1870s. A newly-appointed Governor, John Pope Hennessy, declared himself shocked at the poor standard of English in the Central School. Heated discussions between Hennessy and Stewart led to an "Educational Conference" in 1878 which tilted the balance towards English. This decision, however, was made only by a narrow vote and on the claim that that was what the local Chinese parents wanted. Also, it only applied to the Central School; and the vast majority of pupils were being educated in Chinese schools which substantially increased in number as the century proceeded.

The next major development occurred at the beginning of the 20th century. A 1902 report (quoted by Sweeting 1991b, p.70) asserted the need to "enlighten the ignorance of the upper classes of the Chinese" and advocated stronger attention to Anglo-Chinese schools than to Vernacular schools. During the following decade, the balance was tilted further with the establishment in 1911 of the English-medium University of Hong Kong (Lin 2002).

Nevertheless, during the next three decades enthusiasm for Chinese-medium education was promoted by increased migration to Hong Kong from mainland China, nationalist identity among segments of the local population following the establishment of the Republic of China in 1911, and, during some periods, sympathetic views in the colonial hierarchy (Yu 1987, p.23). During the 1930s and 1940s, many educators in mainland China fled to Hong Kong where they established schools and continued their educational endeavours. Also, from 1926 onwards the government itself set up a number of directly-maintained vernacular schools. A 1935 official report (Burney 1935, p.25) added weight to the Chinese orientation with the view that:

> educational policy in the Colony should be gradually re-orientated so as eventually to secure for the pupils, first, a command of their own language sufficient for all needs of thought and expression, and secondly, a command of English limited to the satisfaction of vocational demands.

However, this recommendation was not followed up decisively for some decades, and all forms of planning were disrupted by World War II.

After the war, some schools moved back to the mainland. Further, following the establishment of Communist China and particularly during the Cold War and the Cultural Revolution, Hong Kong as a British colony lost much of its contact with the mainland (Morris & Sweeting 1991). Nevertheless, the majority of schools, not only primary but also secondary, taught in Chinese. In 1963 the government created the second university alongside the University of Hong Kong. The new institution was the Chinese University of Hong Kong, and provided a route for graduates of

Chinese-medium secondary schools to proceed to Chinese-medium tertiary education.

The 1970s and 1980s were characterised by economic boom, and the territory became known as one of the Four Little Dragons of East Asia. Mainland China reclaimed its seat in the United Nations, and gradually opened its doors. Motivated in part by the increasing trade and international relations, in 1974 the Hong Kong government enacted an Official Languages Ordinance which made Chinese an official language alongside English. However, the impact on the education system was restricted. Most primary schools had long taught through Chinese, but the secondary sector saw a gradual drift to English. Whereas in 1960 57.9 per cent of secondary schools claimed to be English-medium, by 1980 this had become 87.7 per cent (Lee 1998, p.166). The drift chiefly reflected the aspirations of parents who perceived English-medium education to confer stronger benefits in the labour market.

The Late Colonial Period

Major change in language policy came with the signing of the Sino-British Joint Declaration in 1984 and the subsequent process of localisation in the government. During the transitional period, several initiatives regarding language in education were launched. For instance, a 1989 report (Hong Kong, Education Department 1989, p.71) recommended that:

> attention should now be focussed on the consolidation and strengthening of current good practices in language teaching on the one hand, and on coherent longer-term planning for languages in education on the other.

The report recommended establishment of a Language Planning Unit and of an Institute of Language in Education. It also recommended development of a diagnostic instrument to determine the language competence of students, and that "once an appropriate diagnostic instrument is available, schools should be advised to restrict English-medium education to those students judged able to benefit from it" (p.74). Meanwhile, the report recommended (pp.73-74) that within the existing medium of instruction policy, the education system should aim to ensure that:

- each student is educated through the medium most likely to lead to maximum cognitive and academic development;
- English or Chinese can be equally effectively used as a medium of instruction up to A level for students studying in the one language or the other;
- English and Chinese are taught as subjects as effectively as possible, bearing in mind their roles as actual or future mediums of instruction for different groups of students; and
- students are enabled to make as quick, smooth and effective a switch from Chinese to English as possible at whatever point it is judged appropriate and/or necessary for them to do so.

The Basic Law, which provided Hong Kong's constitution for the post-1997 era, was finalised in 1990 and added further impetus to discussions on language. Article 9 (China 1990) stated that "in addition to the Chinese language, English may also be used as an official language by the executive authorities, legislature and judiciary". This gave Chinese higher status, but it nevertheless provided an ongoing official role for English for at least 50 years after the 1997 change of sovereignty.

The approval of the Basic Law also brought into focus various issues for the remaining years of the colonial era. The 1989 report (Hong Kong, Education Department 1989, p.74) had been critical of "mixed code", in which classes used both English and Chinese in a mixed way. The criticism was echoed the following year by Commission Report No.4 (Education Commission 1990, p.96), which asserted that the practice was detrimental to the learning of both languages. The government in due course endorsed the Education Commission report, declaring that Chinese needed to be strengthened and that many schools should be encouraged to teach in that language rather than in mixed code. However, these statements mostly remained at the level of exhortation (Poon 2000). Ironically, the colonial government advocated Chinese rather than English but the general populace remained more interested in English-medium education for their children because they still considered it to confer stronger prospects in the labour market. Market demand for English thus remained strong even though many pupils were not learning effectively through the language. Secondary schools did not wish to declare themselves Chinese-medium, for fear of losing attractiveness in the market. By 1990, 91.7 per cent of secondary schools claimed to teach in English, compared with 87.7 per cent in 1980 (Lee 1998, p.166).

When the above statements referred to Chinese, in the written form they meant Modern Standard Chinese which is used in all parts of Greater China (i.e. mainland China, Hong Kong, Macao and Taiwan). However, whereas the mainland had moved to a system of simplified characters, Hong Kong (along with Macao and Taiwan) retained the traditional complex characters. In the spoken form, the statements about Chinese in Hong Kong generally meant Cantonese, the dominant dialect of the majority in the population.

The prospect of reunification with mainland China brought to the fore Putonghua, the official spoken form of Chinese in the mainland. For example, the 1989 report (Hong Kong, Education Department 1989, p.83) recommended that trainee-teachers of Chinese in the Colleges of Education should be encouraged to study Putonghua, and that Putonghua "should continue to be offered to all those who have an interest in it and some background experience of it". Education Commission Report No.5 went further with the recommendation (Education Commission 1995, p.56) that Putonghua "should become part of the core curriculum for all primary and secondary students". It noted approvingly (p.27) that the government had committed an annual recurrent provision of HK$10 million starting from 1996/97 for improving and expanding the teaching and learning of Putonghua, and that new curricula were being devised for both primary and secondary levels. These measures fitted with developments in the broader society. As explained by Adamson and Auyeung Lai (1997, pp.87-88):

> Hong Kong's language patterns prior to the 1997 hand-over were predominantly those of *biglossia,* whereby the Hong Kong Cantonese variety of Chinese and English were used side by side…. As the return of Hong Kong to Chinese sovereignty approached, language patterns underwent major shifts towards *triglossia* to incorporate Putonghua at both the formal and informal levels. These took the form of, *inter alia*, the increase in job advertisements specifying competence in Putonghua, the introduction of television programmes teaching Putonghua, the increase in programmes and advertisements in Putonghua and Hong Kong pop stars producing albums in Putonghua as a supplement to their Cantonese productions.

The chapters in this book by Yung and by Ma comment on dimensions of higher education which also have relevance. Until the early 1990s, local supply of higher education in Hong Kong was very restricted and many students went abroad. Taiwan was a destination for Chinese-medium studies, but much larger cohorts of students proceeded to English-medium countries and especially Australia, Canada, UK and USA. With the domestic higher education expansion in the 1990s, the number of students going abroad dropped but nevertheless remained significant.

The Postcolonial Period

The medium of instruction in secondary schools was among the first major themes to be tackled by the postcolonial government. The colonial government had felt unable to force schools to switch from English to Chinese, but the postcolonial government had less hesitation.

The first Policy Address by the Secretary for Education & Manpower following the resumption of sovereignty (J.W.P. Wong 1997, p.17) indicated that Chinese and English Extensive Reading Schemes would be extended to all primary and secondary schools, and that, in line with earlier decisions, Putonghua would become a core subject in the curriculum starting from Primary 1 in 1998/99. It added (p.25) that a new Putonghua curriculum would be introduced at Secondary 1 and Secondary 4 in 1998/99, but at the same time that intensive English-language programmes would be introduced for sixth form students in both Chinese- and English-medium schools to prepare them better for tertiary studies. The official goal was that Hong Kong citizens should be biliterate (in English and Chinese) and trilingual (in English, Cantonese and Putonghua).

This measure was followed by a statement by the government's Education Department that the majority of public secondary schools would be required to use Chinese as the medium of instruction for all academic subjects (except English and English Literature) from their 1998/99 Secondary 1 intake, progressing each year to a higher level of secondary education (Hong Kong, Education Department 1997). Following stringent screening, only 114 public secondary schools – about one quarter – were permitted to use English as the medium of instruction for their 1998/99 and future Secondary 1 intakes. The government claimed that the language policy was introduced for educational reasons, but it was widely perceived as being primarily driven by political motives (Lai & Byram 2003, p.315).

Further intervention took the form of benchmark requirements on language standards. This measure arose from Education Commission Report No.6 (Education Commission 1995, pp.48-51), which had recognised the need to enhance the proficiency of both Chinese (including Putonghua) and English in order to maintain and further Hong Kong's position as "Asia's world city". The government required that from 2004 all new English and Putonghua teachers should pass the main components of a Language Proficiency Assessment for Teachers (LPAT) prior to assuming teaching duties. Serving English and Putonghua teachers in primary and secondary schools were required to fulfil the language proficiency requirement before the end of the 2005/06 (Hong Kong, Education Department 2000).

This initiative had far-reaching consequences. Many language teachers opposed the test, considering it a violation of their professional autonomy and personal integrity; and non-language teachers feared that the government might impose similar tests on their subjects. The Professional Teachers Union (PTU) initiated protests and boycotts.

Although the government finally allowed alternative assessments in lieu of the benchmark test, teachers felt that the requirements consumed unreasonable time and effort (Koo et al. 2003). Tensions were heightened when many candidates failed the test; and in 2003 only 5,000 of the 15,000 serving English teachers and 1,900 of the 5,600 serving Putonghua teachers had attained or partially attained the Language Proficiency Requirement (Hong Kong, Education & Manpower Bureau 2003d).

A second initiative which arose from Education Commission Report No.6 was the Native English-speaking Teacher (NET) scheme, which was launched in 1998/99. This initiative echoed an Expatriate English Teachers Scheme (EETS) which had been launched in 1987 and administered by the British Council. That scheme had not worked well, and had been widely viewed as rather colonial in orientation (Boyle 1997). Given this criticism, the introduction of a similar scheme in the postcolonial period showed more continuity in policies than might have been expected.

NET teachers were required to contribute to professional development and curriculum innovations in English language by working in collaboration with local counterparts (Walker 2001). The scheme commenced at the secondary level, and in 2001 was extended to primary schools. Under the primary scheme, each NET served two schools and in each school worked in collaboration with an experienced local School English Teacher (SET). The SETs were expected to act as bridges between the NETs and the school management teams, and to facilitate institutionalisation of innovative and effective teaching methods and curriculum resources. However, while the scheme contributed much to the professional development of English teachers and English standards, it was criticised as short-sighted and extravagant when compared with options that would have directly improved the standards of local English teachers and students (Sweeting 2002).

A further result of this ongoing concern was an "action plan to raise language standards" proposed by the Standing Committee on Language Education and Research (SCOLAR), which had been created in 1996 (SCOLAR 2003). The document supported efforts to benchmark language-teachers' competence, and recommended (p.80) that all language teachers joining the profession from 2004/05 should hold at least a Bachelor of Education degree majoring in the relevant language, or both a first degree and a Postgraduate Diploma in Education majoring in the relevant language. The document noted (p.36) that under current policy schools could use either Putonghua or Cantonese to teach Chinese language, but endorsed the view of the Curriculum Development Council that the long-term goal should be to use Putonghua for this purpose. Already by 2003/04, 45 primary schools and 40 secondary schools were using Putonghua to teach Chinese language (Tse 2003).

To support this goal, the government had provided training for 2,800 Putonghua teachers between 1997 and 2000, and 400 teachers completed summer immersion programmes in mainland China between 2000 and 2002 with support from the government's Language Fund. In 2003 the government extended the programme for five more years, giving priority to Chinese-language teachers who did not teach in Putonghua. This support was given to local Hong Kong teachers, even though many thousands of fully-qualified teachers could have been available from mainland China who, had they been allowed to come, would have accepted considerably lower salaries. Protection of the Hong Kong teaching force was another mechanism for retaining

identity within the postcolonial framework. Nevertheless, the protection was not absolute. The SCOLAR report indicated (2003, p.37) that:

> Before there are enough local Chinese Language teachers with sufficient proficiency in Putonghua, some schools have expressed the desire to engage teachers of Chinese Language from the mainland … to help them teach the subject in Putonghua. We fully support such initiative during the transitional period, provided that the teachers to be engaged hold qualifications equivalent to a local degree and recognised teacher training both in Chinese Language.

Market forces and the new political climate also brought further change in the balance between Cantonese and Putonghua as media of instruction across the curriculum. Cantonese remained the dominant dialect, which may be interpreted as a form of insistence on Hong Kong's identity within the framework of 'one country, two systems'. In part for similar reasons, Hong Kong retained the traditional Chinese characters even though the simplified versions could be written more rapidly. However, in 2003 six primary schools in the government and aided sectors were using Putonghua as the medium for teaching across all subjects (except English) compared with just one in 1997, plus four private primary schools compared with one in 1997. At the secondary level, the first school to teach fully in Putonghua was opened in 2002/03; and a further four schools used Putonghua for some subjects in addition to Chinese Language, Chinese Literature and Chinese History. This was a very small proportion of the total, but was a significant shift.

Nevertheless, the government insistence on the majority of secondary schools using Chinese as the medium was softened by other developments. First, schools were permitted to switch to English as the medium of instruction in Secondary 4 or above on condition that the schools could recruit teachers with sufficient language competence, that students were prepared to study in English, and there were adequate school-based resources to assist the transition. Many schools did indeed make the switch at this point (Hong Kong Association Secondary School Principals 2001), and some actively publicised the switch in order to improve student intakes in the lower forms. Second, a growing number of schools gained exemption by joining the Direct Subsidy Scheme, which enabled them to move out of the aided sector and thus beyond the reach of the requirement that they teach in Chinese. By 2003/04, 43 secondary and 10 primary schools were in the scheme (Hong Kong, Education & Manpower Bureau 2003b), though not all had joined the scheme through the same route and with the same motivation.

In higher education, shifts were generally away from Chinese as the medium of instruction rather than towards it. As noted by Yung in this book, universities were encouraged to aspire to international status, and to do this through English. This occurred even in the Chinese University of Hong Kong. As described by Yeung (2003, p.14):

> The University's values have somehow changed. It now talks about internationalization, and selects students with a different set of criteria. In the past CU [Chinese University] students were proud of their mastery of the Chinese language, now with globalization being the catch word of the day, English prevails in importance.

At the Hong Kong Institute of Education, most courses were still taught in Cantonese but some were in English and a few were in Putonghua. To enhance language competence, in 2002/03 all students in the four-year BEd programmes were required to complete at least 25 per cent of their courses through English.

Language and Education in Macao

The Main Colonial Period

In Macao, Portuguese was for centuries used as the sole official language for all administrative, legislative and judicial purposes, and was also the main language for European-style education. For the initial centuries, such education was provided by missionaries under an agreement between church and state known as the *Padroado* (Simões 2003, p.258). The first European-style institution in Macao was the *Escola de Lêr e Escrever* [School of Reading and Writing], which was established in 1572 by the Jesuits and in 1594 became St. Paul's University College. The college was largely monastic, and courses were taught in Portuguese and Latin. Hui and Poon in this book note that the Jesuits were expelled from Macao in 1762 and that the closure of St. Paul's University College soon followed. However, responsibility for the formal education of both Portuguese Catholics and Asian converts was kept exclusively in religious hands. Simões (2003, p.260) explains that this could partly be explained by the *Padroado* missionary project, but also by the fact that even in Portugal education was mostly a matter for the Church. Within the Chinese community, education was provided by private schools following the dominant models of the rest of China. The government only began to play a direct role in education at the end of the 19th century.

Although Portuguese and Chinese were the main media of instruction for the respective communities, the second half of the 19th century also brought a demand for English. This chiefly resulted from the existence of employment opportunities in Hong Kong. Simões (2003, p.265) highlighted the particular importance of these opportunities to Macanese families, i.e. people of mixed Portuguese and Chinese race. He stated that by the end of the century:

> not only had emigration [to Hong Kong] led to a marked decrease in the population of Macao, but Macao's financial activity was for all intents and purposes regulated by the British colony – especially by the dependence of many Macanese families upon the remittances sent by family members who had emigrated.

The Commercial Institute established in Macao in 1899 was particularly notable as a school which taught not only Portuguese language, Portuguese history, mathematics, geography, and natural sciences but also Chinese and English, together with other subjects deemed useful to the working environments of both Hong Kong and Shanghai (Teixeira 1982, pp.89-91). However, during the next few decades Macao found itself in competition with locally-educated Chinese in these two cities, and migration from Macao diminished.

At the beginning of the 20th century, due to the influx of migrants to Macao from the mainland and the increasing demand for education, the government established the Luso-Chinese school system to educate Chinese students through both Portuguese and

Chinese. However, enrolments in Luso-Chinese schools were modest even though no fees were demanded (Pires 1991, p.18). Due to language difficulties and cultural differences, most parents preferred to send their children to private Chinese schools. In 1919/20, for example, 125 schools existed among which 17 were operated by the government and municipal authorities, eight were run by missionaries, and 100 were private (Cónim & Teixeira 1999, p.161). Among the government and municipal schools, four operated in Portuguese, three operated in Chinese, and nine operated in both Portuguese and Chinese. By this time the Commercial Institute had been taken over by the government. It operated in Portuguese and English, though had only 38 pupils. Among the missionary schools, three operated in Portuguese, one operated in Chinese, and four operated in both Portuguese and Chinese. By enrolment, 18.6 per cent of pupils studied in Portuguese, 63.6 per cent in Chinese, 17.1 per cent in Portuguese and Chinese, and 0.7 per cent in Portuguese and English.

To extend its influence, the government initiated various schemes during the coming decades to promote the status of Portuguese (S.P. Lau 1995; Feng & Lai 1999). These included subsidies to missionary schools for the teaching of Portuguese; and applicants who could speak Portuguese were given priority when seeking government jobs. These measures were not always successful and sustained, and as total enrolments grew the proportion of pupils studying in Portuguese declined. Thus by 1938/39, for example, 5.7 per cent of pupils were studying in Portuguese, 82.5 per cent in Chinese, 9.1 per cent in Portuguese and Chinese, and 2.7 per cent in Chinese and English (Cónim & Teixeira 1999, p.166). Nevertheless, renewed pushes were made periodically. For example, a 1960 decree required all newly-recruited civil servants to be able to read and speak Portuguese, while those who had proficiency in Portuguese below Primary 3 level were barred from promotion. In the same vein, a 1972 decree mandated that candidates seeking representation in the City Council had to be able to read and write Portuguese. In essence, Portuguese was a tool to maintain the social stratification in colonial Macao. The majority of schools were operated privately and used Chinese as their media of instruction, but their graduates were then excluded from government posts.

The Late Colonial Period
The 1987 Sino-Portuguese Joint Declaration set the timetable for the resumption of Chinese administration in 1999, and was the stimulus for many reforms. Chinese was made an official language in 1987, i.e. 13 years after the parallel move in Hong Kong.

In some aspects, the balance of languages in Macao schools at that period resembled that in earlier decades, though the proportion studying in English had increased further. In 1988/89, 84.1 per cent of Macao primary school pupils studied in Chinese, 9.2 per cent studied in English, 4.8 per cent studied in Portuguese, and 1.9 per cent studied in both Chinese and Portuguese (Macau, Direcção dos Serviços de Estatística e Censos 1990, p.89). The proportion studying in English was even higher than in Hong Kong, where 7.1 per cent of pupils in 1988/89 were studying in English in local-system primary schools and 0.8 per cent were studying in English Schools Foundation (ESF) institutions (Hong Kong, Education Department 1990, p.39). A further 0.9 per cent of pupils were studying in international schools, but even if it is assumed that most of these were studying in English, at the primary school level the total proportion in Hong Kong was below that of Macao. However, patterns were very different at the secondary level where, as noted, the vast majority of Hong Kong

secondary schools taught in English.

In Macao, the tertiary sector was at that time also dominated by English. As noted by Hui and Poon in this book, the sector consisted of only one institution, the University of East Asia (UEA) which had been founded in 1981 as a private English-medium institution. The UEA did teach some courses in Chinese, but at the time of the 1987 Sino-Portuguese Joint Declaration it did not teach any courses in Portuguese.

Because the local tertiary sector was limited, many students went outside the territory for further studies. As noted in Ma's chapter in this book, during the 1980s Taiwan was the strongest destination but during the 1990s was overshadowed by mainland China. Other students went to Portugal and to English-speaking countries such as Australia, Canada and the UK. The destination for external students was strongly shaped by the medium of instruction through which they had studied in secondary education.

Although the Joint Declaration provided an impetus for reform of the education system to prepare the territory for the handover, ironically it also provided an impetus for increased emphasis on Portuguese. Portugal by that time had no other colonies and so was able to give stronger attention to Macao. It also realised that Macao was in a part of the world which was economically vigorous, and the authorities realised that the remaining years of Portuguese administration were their last strong chance to gain a firm grounding for their culture and language. As recounted in the chapter by Hui and Poon, the 1988 government purchase of the main campus of the UEA provided the framework for reform of the university to fit the dominant models in Portugal and for greatly increased emphasis on Portuguese-medium courses. This shift gathered momentum after 1991, when the institution was renamed the University of Macau (UM).

Further Portuguese connections emerged during the 1990s from the establishment of other institutions of higher education:

- The Macau Polytechnic Institute (MPI) was founded in 1991 on the model for such institutions in Portugal. Some courses were taught in English or Chinese, but others were taught in Portuguese.
- The Asia International Open University (AIOU) was established in 1992 and formed a joint venture with the Universidade Aberta [Open University] of Portugal. Most AIOU courses were taught in English and Chinese, though some were taught in Portuguese.
- The Instituto de Formação Turística [Institute for Tourism Studies] (IFT) was established in 1995, and particularly focused on Portuguese culture in the hospitality sector.
- The Instituto Inter-Universitário de Macau [Inter-University Institute of Macau] (IIUM) was established in 1996 as a joint initiative of the Universidade Católica Portuguesa [Catholic University of Portugal] and the Diocese of Macau, and saw itself as a bridge for Chinese, Portuguese and Latin cultural interflow.

At an early stage, both the UM and the MPI joined the Associação das Universidades de Língua Portuguesa [Association of Portuguese-Language Universities] (AULP), which had been founded in 1986 and which provided links with counterpart institutions in Brazil and Portugal as well as in less powerful Portuguese-speaking countries. Subsequently, the IFT and IIUM also joined the AULP.

In addition, the government made efforts to increase the place of Portuguese in the school system. Lo's chapter in this book recounts the attempt in 1994 to make the teaching of Portuguese compulsory in all schools, and to make grants conditional on this requirement. The action angered both the Catholic Church and the left-wing Macau Chinese Education Association (MCEA) which, though divergent in their educational ideologies, worked together to oppose the move. Finally the government backed down, but official schools were still required to teach Portuguese.

This focus on Portuguese in some respects drew momentum from the Basic Law (China 1993), for which Hong Kong's Basic Law had been a model. When Hong Kong's Basic Law was drafted, the fact that English would remain an official language for at least 50 years after the resumption of Chinese sovereignty was uncontroversial because of the international nature of that language. When Macao's Basic Law was drafted, Hong Kong's clause about English became Macao's clause about Portuguese. This occurred even though Portuguese is more obviously a colonial language and less obviously an international language. Comparing Macao's political transition with that of other former colonies such as Angola, Cape Verde and Mozambique, it is ironic that the colony which was reintegrated with its motherland was the one in which the role of the Portuguese language was officially preserved for 50 years after the transition. It seems inconceivable that in the other territories postcolonial arrangements could only have been established with a clause requiring the colonial language to be preserved in the same way.

Alongside this set of developments, as in Hong Kong, was growing interest in Putonghua. Some institutions increased their focus on Putonghua of their own volition, and others responded to government encouragement to do so. Berlie (1999, p.74) remarked that the role of Putonghua was stronger in Macao than in Hong Kong since a larger proportion of the population, including many teachers, were recent migrants from mainland China. Longstanding Macao citizens also made efforts to learn Putonghua. In 1997/98, enrolment in Chinese language programmes at the Macau Polytechnic Institute numbered 2,600, while Putonghua enrolment in courses run by the Department of Education & Youth was approximately 500. In the continuing-education programmes operated by the Department of the Civil Service & Administration, enrolments in Putonghua courses in 1997/98 totalled 2,243 (Macau, Direcção dos Serviços de Educação e Juventude 1997b). Instructively, however, the enrolment in Portuguese courses, at 2,142, was not much lower. This reflected the continuing government attention to that language.

The Postcolonial Period

The government's language policy after reintegration paralleled that in Hong Kong, but with the added element of Portuguese. Thus, the policy was that citizens should be triliterate (i.e. written Chinese, Portuguese and English) and quadrilingual (i.e. spoken Cantonese, Putonghua, Portuguese and English). However, a significant number of Portuguese and Macanese families had left the territory in 1999, and in practice Portuguese declined in significance while English and Putonghua increased. This evolving emphasis was reflected in the school system. In 2002/03, 92.5 per cent of pupils were studying in Chinese, while 6.5 per cent were studying in English and just 1.0 per cent were studying in Portuguese. Government websites still had both Portuguese and Chinese sections, though an increasing number also had English sections (albeit

commonly with less information). The government also produced some publications in English as well as Portuguese and Chinese.

At the tertiary level, moreover, some further important shifts had occurred. The wave of Portuguese during the 1990s had to some extent been replaced by a wave of Putonghua. Among the significant new institutions was the Macao University of Science & Technology (MUST), which had been established in 2000. Many of its teachers and administrators were recruited from mainland China and operated entirely in Putonghua. However, English was emphasised in the Faculty of Information Technology and the Faculty of Management & Administration (Drago 2003, p.77).

Nevertheless, Portuguese had not been abandoned. The government continued to produce many publications in Portuguese, and in 2003 Macao hosted the 13th meeting of the Associação das Universidades de Língua Portuguesa (Lopes 2003). The territory had previously hosted the 8th meeting, but that had been in 1998, before the resumption of Chinese administration. The postcolonial event was therefore particularly significant. Moreover, leaders in Beijing also recognised the value of links to the Portuguese-speaking world that could be gained through Macao. Immediately after the AULP event, Macao hosted an inaugural Forum for Economic and Trade Co-operation between China and Portuguese-Speaking Countries, with representatives from Portugal, Brazil, Cape Verde, Guinea-Bissau, Angola, Mozambique and East Timor (Bruning 2003). China's Vice-Premier, Wu Yi, indicated at the event that trade between China and the Portuguese-speaking world was expected to double within five to seven years, and that Macao would host forums along the same lines every three years. A senior Macao official was reported to have remarked (Bruning 2003, p.1):

> Even though this forum is not a political event, the fact that it will be held here every three years will dramatically raise Macau's political importance in international relations. Our leaders in Beijing have shown great vision to take advantage of Macau's Portuguese colonial past to strengthen the nation's ties with the Portuguese-speaking world.

Of course such matters should not be over-emphasised, and China's trade with other parts of the world will remain considerably more important than that with the Portuguese-speaking world. However, the developments showed a further way in which Macao was different from Hong Kong, and in which even the Beijing leadership found ways to make use of the Portuguese colonial legacy.

International Schools in Hong Kong and Macao

Concerning Hong Kong, the above discussion mainly focuses on the mainstream education system for the Chinese majority. The institutions of the English Schools Foundation (ESF) were mentioned above, and deserve some further attention. Macao does not have counterpart schools of this type, but does have other international schools.

The ESF was created in 1967 to operate schools on the system of England and Wales for the children of colonial civil servants and other expatriates. The ESF schools received the same financial assistance as other aided schools, but were permitted to charge fees in order to pay for superior facilities and higher salaries (Bray & Ieong 1996; Yamato & Bray 2002). At the outset, the ESF had only two schools, but three more were

opened during the next few years and in 1979 the government handed over to the ESF six schools which it was itself operating on the curriculum of England and Wales. The ESF continued to grow, and in 2004 embraced nine primary schools, five secondary schools and one special-needs school.

The Hong Kong government was perhaps wise to create the ESF in 1967, and to transfer the government schools in 1979, since these moves allowed the authorities to concentrate on the needs of the Chinese majority. The Macao government did not make parallel moves, with the result that even up to 1999 it was still directly providing education on the Portuguese curriculum for the children of Portuguese civil servants and others. Only in 1999, at the time of the resumption of Chinese administration, did the Macao government transfer its official Portuguese school to a private foundation.

At the time of the creation of the ESF, a few other institutions also served non--local populations. For example a German-Swiss school had been established in 1963, a French school in 1964, a Japanese school in 1966, and the Hong Kong International School with a US curriculum in 1966 (Yamato 2003, pp.102-103). In the years that followed, other schools were opened to serve the Australian, Indonesian, Korean, Singaporean and other foreign communities. Some of these schools served local Hong Kong families in addition to the nationals of the foreign systems to which the institutions were oriented. The German-Swiss and the French school opened English-medium streams to facilitate this. Other institutions, such as the Delia School of Canada, Concordia International School, and the Chinese International School were opened specifically to serve local and non-local families together. By the 1990s, the ESF and other foreign-national schools were commonly grouped with other non-local institutions under the general category of international schools. At the time of Hong Kong's 1997 political transition, the international sector had 60 institutions, comprising about 4 per cent of the total number. The government welcomed the operation of these schools because they helped to make Hong Kong an international city. In 2003 the Permanent Secretary for Education & Manpower (Law 2003) stated that:

> In addition to a "mother tongue" stream, some international schools also operate a section that uses English as the medium of instruction. Where capacity permits, international schools are also open to local children. They have become a wel-come part of our local education rubric. The cynics have interpreted this as a lack of faith in the local system. I see this as an encouraging sign that parents recog-nize the increasing importance of international education, a vision shared by the government.

Alongside these institutions, even at the primary level some further Eng-lish-medium schools were operated in the government and aided sector. Sir Ellis Kadoorie School was founded in 1890 and has a long tradition of service to Indian, Pakistani, Filipino and other non-Chinese-speaking minority groups. A 2003 official publication entitled 'Education Facilities for Non-Chinese Speaking Children' called attention not only to that school but also to Li Cheng Uk Government Primary School which offered Hindi, Urdu and Chinese (Hong Kong, Education & Manpower Bureau 2003c, p.1). For the aided sector, the document indicated that in addition to the ESF four primary schools used English as the medium of instruction in some classes. These schools could be described as international in their student bodies, but primarily local in the orientations of their curricula.

Patterns in Macao have been rather different. As indicated, the Portuguese schools, both government and private, catered for families desiring a curriculum based on that in Portugal. The first school that could describe itself as international was the School of the Nations, established by the Baha'i community in 1988. It remained a small institution, with only 186 pupils in 2003/04. According to its website, approximately 70 per cent of its pupils were from Macau while the remainder were from over 30 nationalities. This school was joined in 2002 by the International School of Macao, which operated on a Canadian curriculum. In 2003/04, it had 180 students including kindergarten grades; and its website claimed that the student body included 24 nationalities.

These institutions are partly given attention in this chapter to show the diversity of provision, including that for minority groups. In Hong Kong, the international schools sector played a further important role in the context of the government's 1998 push to make Chinese the dominant medium of instruction in mainstream secondary schools. Some of the elite families who did not favour this policy transferred their children to fee-paying places in international schools. Along with the Direct Subsidy Scheme schools, the international schools therefore acted as a sort of safety valve for the local system, allowing the government to proceed with its plans for the majority of citizens. A parallel move had not been necessary in Macao because the government had not taken a comparably aggressive stance on medium of instruction.

Conclusions

This chapter commenced with the broad literature on colonialism and postcolonialism. The discussion shows some similarities and differences between the pair of territories in the domain of language and education, and also some paradoxes which will be highlighted in this concluding section.

During the main colonial era, albeit with different phases and shifting priorities, the British placed considerable emphasis on English in Hong Kong while the Portuguese placed parallel emphasis on their language in Macao. In both colonies, as in their counterparts elsewhere in the world, language was a major instrument for social stratification and control. However, British colonial policies in some respects differed from Portuguese ones. The British were more interventionist, whereas the Portuguese until the end of the 19th century left education to the churches and private sector and even for most of the 20th century played only a minimalist role. Both governments did assist Chinese-medium education as well as education in the colonial language, but the Hong Kong government did so much more actively.

One of the paradoxes is that during the late colonial period the Hong Kong government desired to increase the proportion of schooling in Chinese rather than English, particularly at the secondary level, but felt that it lacked the legitimacy and ability to force families to follow this route. The postcolonial government did force the change, but encountered strong opposition. The colonial government in Macao, by contrast, used its sunset years to expand the place of Portuguese in the education system. It did this despite centuries of neglect during the main colonial period, and despite the fact that Portuguese was of practically no use as a regional language and of limited use internationally. This contrast helps to show that the roles of government may differ

significantly, even in territories that otherwise have very similar cultural and economic circumstances. The different choices made by governments clearly have a major impact on the nature of colonial transitions.

Also part of the paradox in Macao is the fact that Portuguese as an official language was guaranteed for 50 years after the colonial transition despite the reunification of the territory with its Chinese-speaking motherland. This pattern resulted from the fact that although Macao had been colonised earlier than Hong Kong, it was decolonised slightly later and in the process followed the model set by Hong Kong. This model raised the status of Portuguese to a higher level than it would otherwise have had.

A further part of the paradox is that in Macao market forces encouraged a significant volume of education in Hong Kong's colonial language (English) than Macao's colonial language (Portuguese). This began in the 19th century, when Macanese families desired English in order to improve employment prospects in Hong Kong. Thus, even in that period of history Macao was heavily influenced by developments in Hong Kong; and although the influence of Hong Kong on Macao's education system diminished at the beginning of the 20th century, it subsequently increased again.

However, economic growth since the early 1990s has on the one hand allowed Macao to assert its identity and on the other hand integrated it with the global economy. Thus in more recent times the strong demand for English in Macao does not so much reflect the role of English as the colonial language in Hong Kong but as an international language of wide general use. Thus, Macao students learned English not so much the gain access to Hong Kong as to access information from many countries around the world via the printed word, the internet, films and other media. A similar remark had also become applicable to Hong Kong, where links with the UK had diminished but links with other parts of the world had expanded. These links were not only with English-speaking countries such as Australia, Canada and the USA, but also with businessmen and others who used English as a second language. Also, many students from both Hong Kong and Macao proceeded abroad for further studies. Students who wanted Chinese-medium education went particularly to Taiwan until the 1990s and then increasing numbers to mainland China. Their counterparts who desired English-medium education went particularly to Australia, the UK and the USA.

Such remarks do, however, raise the question whether English as an international language is part of a neocolonial force, as suggested by Phillipson (1992) and Pennycook (1998). Insofar as new forms of stratification and control arise, it may be argued that one form of colonialism has merely been replaced by another. As noted by Tikly (1999, pp.616-617), the conceptual literature on postcolonialism needs to be dovetailed with that on globalisation for full understanding of the action of multiple forces in the shaping of educational processes. In Hong Kong, the pressures on universities to use English were to a large extent linked to the wider pressures of internationalisation and globalisation. These pressures were also evident in Macao, though interestingly they were more strongly mixed with forces within the national framework. Thus the Macao University of Science & Technology (MUST), for example, conducted much of its business in Putonghua since a large number of its administrators, teachers and even students were recruited from mainland China. MUST had found for itself a special niche at a confluence of local, national and international forces. Hong Kong universities also attracted students and some teachers (but very few administrators) from mainland China, but operated at a higher end of the market and did

so in English more than Putonghua.

At another level, the advent of Putonghua was seen by some people as a neocolonial force which also created forms of stratification. Enthusiasts for mother-tongue education had to face the fact that Cantonese had increasingly to compete with Putonghua; and the Hong Kong government set the official goal of society being biliterate and trilingual. This was widely considered a major challenge; and Lai and Byram, for example (2003, p.326), observed that the "inclusion of a Putonghua component into the controversial mother tongue education has made the local social situations of language difficult and complex".

Yet if situations in Hong Kong were difficult and complex, they were even more difficult and complex in Macao. That territory had all the ingredients of Hong Kong, plus the additional ingredients of Portuguese. The maintenance of that language imposed a high cost on the government, but it was considered essential to fulfil the requirements of the Basic Law. The language did also have some usefulness in forming part of Macao's distinctive identity and in promoting connections with Portuguese-speaking countries. Thus, despite the remarks above about the limited usefulness of Portuguese in the international arena, Macao's links with the Portuguese-speaking world were being actively maintained and were even seen in Beijing as having usefulness. This was part of the broader framework within which Macao found itself operating, and again shows the multiple dimensions in which policy makers endeavoured to secure an advantage from historical legacies.

Another paradox is that although Hong Kong's postcolonial government strongly emphasised Chinese, it also strongly emphasised English. Further, among the measures taken by the postcolonial government was the Native-speaking English Teacher (NET) scheme, which resembled the Expatriate English Teachers Scheme (EETS) that had been launched by the predecessor government in 1987 and that had been widely considered very colonial in tone. The fact that the postcolonial government favoured such a scheme provides perhaps unexpected evidence of continuities across eras.

Possibly also unexpected was the extent to which the Hong Kong government supported the enrolment of Hong Kong students in English-medium international schools, even during an era in which the authorities were stressing Chinese-medium education for the majority of Hong Kong citizens. This action can perhaps be interpreted in terms of pragmatic achievement of policies. The international schools provided a safety valve for the elite, and reduced opposition to the measures designed for the mainstream education system. Critics might feel that the arrangement also operated as a behind-the-scenes mechanism for maintenance of social stratification despite appearances to the contrary.

In summary, analysis of patterns of language use in education shows complex forces and various paradoxical outcomes. The policies of the colonial governments differed in significant ways in Hong Kong and Macau, and actions at the lower levels of education systems did not always match those at higher levels. Both territories in some respects emphasised Chinese, and particularly Putonghua, in the postcolonial era, but this was not such an active rejection of colonial patterns as had been the case in such countries as Tanzania, Pakistan, Indonesia and Malaysia. Nor was the colonial language needed as a unifying factor as in Kyrgyzstan and Papua New Guinea. Rather, both Hong Kong and Macao had distinctive patterns arising from their particular circumstances. Both territories had to grapple with the respective roles of Cantonese and Putonghua;

and both had to find appropriate places for English, with Macao having the added complexity of Portuguese.

Note: Parts of this chapter draw on the article by Mark Bray & Ramsey Koo (2004): 'Post-colonial Patterns and Paradoxes: Language and Education in Hong Kong and Macao'. *Comparative Education*, Vol.40, No.2, pp.215-239.

Curriculum Policies and Processes

10

Curriculum Reform

Lo Yiu Chun, Jennifer

As shown by other chapters in this book, Hong Kong and Macao are fascinating in their similarities and differences. These are evident in the domain of curriculum as much as in other spheres of education. This chapter explores the nature of the similarities and differences, identifying both causes and outcomes. It does so within the framework of broader literature on curriculum reform, and shows ways in which analysis of Hong Kong and Macao contributes to conceptual understanding. Its focus is on the primary and secondary levels of education.

To provide a framework, the chapter begins with an outline of the concept of curriculum reform. It then describes and analyses the contexts of curriculum changes in Hong Kong and Macao, before turning to the processes and products of change with particular attention to the school curriculum, assessment modes and textbooks.

The Concept of Curriculum Reform

The term 'reform' refers here to changes in education initiated from above, usually by the central government or in the political system (Fullan 1994; Bourke 1994). Curriculum reform is defined as a type of educational reform which focuses on changes to the content and organisation of what is taught. Reform may take place at the system level and/or at the school level (Ginsburg et al. 1990; Marsh & Morris 1991). The former commonly stresses a national curriculum which strengthens national identity and contributes to modernisation of the education system. The latter commonly results from the initiatives by schools and teachers to develop teaching materials for their student needs.

Hargreaves (1995) noted the interrelationship between curriculum reform and the context of change. He indicated that patterns of educational reform are greatly influenced by social forces. Similarly, Rulcker (1991) pointed out that curriculum reform movements commonly arise from demand for school curriculum to meet changes in social conditions. Reform has a pragmatic task of translating social standards into the teaching and learning content for the purpose of preparing young people for integration into society. This chapter mainly analyses the curriculum reforms in Hong Kong and Macao towards and after the turn of the 21st century, when the two territories were undergoing rapid social changes as a result of the transfer of sovereignty to the People's Republic of China (PRC).

Havelock (1973) distinguished between the stimulus-response model and the rational model of curriculum reform. In the stimulus-response model, changes occur from instinctive actions in response to challenges which have not been anticipated and perhaps even not fully understood. The model is reflexive, unplanned and trial-and-error in nature. The rational model emphasises an identification of objectives and related strategies in the face of challenges. Different steps are commonly taken, including a decision to do something, an attempt to define the problems, a search for solutions, and an application of possible solutions. The strategy is deliberate, and emphasises logical problem-solving.

Four areas of curriculum reform are especially pertinent for analysing the impact of political change on curriculum development in Hong Kong and Macao:

- *Personnel for curriculum development* are commonly in short supply in small states. In extreme cases, small states have only one or two specialists, or even none at all (Bray 1992c). In other states, curriculum development is well supported. These states may have curriculum units or centres, and specialists to define curriculum policy and manage curriculum development activities at different levels and in various subjects.

- *School-based curriculum development* has been promoted as an alternative to the centre-periphery approach that appeared to achieve limited results at the school level (Hughes 1991; Marsh 1997). In many education systems, priority was initially given to developing centralised curriculum which was believed to be able to strengthen national unity. In the 1980s, schools began to realise the need to supplement the centralised curriculum as well as to substitute some of its elements.

- *Assessment* is part of the school curriculum. It is the means to provide information about students' achievement and to improve their learning (Weeden et al. 2002). After colonial transition, many education authorities followed the assessment systems established by their previous regimes or took the examinations developed and run by these colonial powers so as to acquire internationally recognised credentials (Noah 1996; Bray 1997a). However, to prepare students for changing societies, assessment systems were later reformed to enhance the quality of education.

- *Textbooks* contain basic school knowledge, and convey cultural and national identity to young people. Teachers, especially those who are unqualified, rely heavily on textbooks in their teaching. In some small states, no textbooks are produced (Bray 1992c). Their textbooks are imported from overseas either from metropolitan cities or from neighbouring countries from which the small states copied their school systems. Heavy reliance on imported textbooks can result in irrelevant teaching content for local contexts (Altbach & Kelly 1988).

In this chapter, curriculum reforms in Hong Kong and Macao are described and analysed with reference to criteria including the ones listed above. The discussion focuses separately on the processes and the products. The processes of curriculum development include decision-making for the development of school curricula. The products include innovative curricula, assessment modes and textbooks. Before addressing these matters, however, the chapter presents more information on contexts in Hong Kong and Macao.

The Contexts: Patterns of Educational Provision

Dominant education patterns in Hong Kong are distinctly different from those of Macao. As pointed out by Adamson & Li in this book, Hong Kong has a fairly unified school system, albeit with various international schools outside that system. Formal schooling begins at the primary level, and lasts for six years. Secondary schools provide five years of education with an additional two years of advanced courses leading to tertiary education. In the education reform launched shortly after the change of sovereignty (Education Commission 1999), school education was categorised into two distinct levels, namely nine years of universal basic education (Primary 1 to Secondary 3) and four years of senior secondary education (Secondary 4 to 7). Subsequent proposals envisaged moving Secondary 7 to the tertiary level to create a 6+3+3 school system. Most primary and secondary schools in Hong Kong are aided, meaning that they are funded by the government but managed by voluntary associations such as religious or charitable bodies. The other primary and secondary schools are operated by the government or private organisations. Until 1998, only a minority of secondary schools overtly used Chinese as the medium of instruction, and the majority claimed to use English. English-medium schools are generally perceived to have a higher status and to provide better prospects for their students.

Macao, as also pointed out by Adamson & Li, has not had a unified school system. Instead, schools have followed four diverse models borrowed from Portugal, the PRC, Taiwan and Hong Kong. Up to the late 1990s, the principal schools which adopted the Portuguese model were funded and administered by the government. These schools were subdivided into Portuguese and Luso-Chinese types. Lessons in the former were taught solely in Portuguese, and those in the latter were taught in both Portuguese and Chinese. Other schools were operated by religious bodies, social service organisations and other private bodies. Most of these schools taught in Chinese, but some taught in English. The presence of English-medium schools under the Portuguese administration reflected market demand. Two bodies coordinated most of the private schools: the Macau Catholic Schools' Association and the Macau Chinese Education Association.

The existence of the diversified and uncoordinated school systems in Macao resulted from two main factors. First, Macao was a Portuguese colony in which official schools either directly followed or, in the case of the Luso-Chinese schools, were strongly influenced by the Portuguese education system. Second, because during the modern era Macao had no local tertiary education before 1981, students who wanted to have higher education had to go abroad, most commonly to Hong Kong, Taiwan, the PRC, and the United Kingdom. In order to guarantee the educational prospects of their students, the private schools followed the education systems of those societies. The fact that the school systems were diversified and uncoordinated meant that students could not easily change from one school to another. In the mid-1990s the Macao government endeavoured to unify the school system. The first level comprised free and compulsory basic education embracing the final year of pre-primary education, six years of primary schooling, and three years of lower-secondary education. The second level comprised three years of upper secondary education or technical/ vocational education.

The Processes of Curriculum Change

Different strategies for curriculum decision-making have been adopted in Hong Kong and Macao. In Hong Kong, important parts of the education system are highly centralised, and decision-making mostly follows a top-down, centre-periphery approach. The Education Commission is the highest advisory body in the formulation of education policies.

Curriculum development is undertaken by the Curriculum Development Institute (CDI), which is the executive arm of the Curriculum Development Council (CDC). The architects of the CDI expected it to be an independent professional body staffed by subject specialists committed to curriculum development (Education Commission 1990). However, the CDI was actually made a branch of the government's Education Department. Within the CDC, various Coordinating Committees were set up to oversee the curricula for kindergartens, primary education, secondary education, sixth forms, special education and prevocational education. In order to meet the needs of curriculum reform launched in 2001, these committees were replaced by Standing Committees responsible for early childhood education and basic education (kindergarten to Secondary 3) and for post-basic education (Secondary Forms 4 to 7). Each Standing Committee brought together various specific committees which developed the curriculum of eight key learning areas (i.e. Chinese language; English language; mathematics; science; technology; personal, social and humanities education; arts; and physical education). Various mechanisms were used by the government to control the processes of curriculum development to ensure that decision-making was compatible with central policies. These included control of working agendas, selection of members for the relevant committees, and ignoring recommendations which were incompatible with those of the government (Morris 1998, p.100).

The highly centralised approach to curriculum decision making was initially legitimised by a set of regulations produced by the Education Department. These regulations (Hong Kong, Education Department 1971) included:

- No instruction may be given by any school except in accordance with a syllabus approved by the Director of Education (para. 92.1);
- No person shall use any document for instruction in a class in any school unless particulars of the title, author and publisher of the document and such other particulars of the document as the Director may require have been furnished to the Director not less than 14 days previously (para. 92.6); and
- No instruction, education, entertainment, recreation or propaganda or activity of any kind which, in the opinion of the Director, is in any way of a political or partly political nature and prejudicial to the public interest or the welfare of the pupils or of education generally or contrary to the approved syllabus, shall be permitted upon any school premises or upon the occasion of any school activity (para. 98.1).

Especially during the 1970s, the Education Department used these regulations to exercise control over the school curriculum.

The 1980s brought growing dissatisfaction with the centralised curriculum, which was regarded as not meeting the needs of pupils and schools. The influential Llewellyn Report (1982, p.56) stated that:

To encourage curriculum development efforts, especially in the post S3 [Secondary 3] area, we believe there is merit in drawing the teaching service, as a professional force, into curriculum development and assessment practices. Strategies should be implemented to improve the coordination and communication between the agencies responsible for curriculum development and examinations. A genuine drive towards school-based curriculum selection and adaptation, together with school-based programme and pupil evaluation, would open up new horizons for teacher participation. This involvement would be from periphery-to-centre rather than the centre-to-periphery tradition which now permeates educational planning, policy making and innovation, limiting the number of teachers who can become involved in these activities. Every effort must be made to encourage innovation at the school level which, after all, is where the real work is being done.

Such statements were followed by a demand for more democracy in the wider society as a result of the announcement of the 1984 Sino-British Joint Declaration and the suppression of the pro-democracy movement in the PRC. Subsequently, measures were introduced to reduce the degree of centralisation in curriculum decision making. These included the School-based Curriculum Project Scheme in 1988, the School Management Initiative in 1991, the Target Oriented Curriculum in 1995, and curriculum adaptation in 1999. All of these initiatives appeared to emphasise the value of school control and teachers' participation in curriculum decision-making. However, as these innovations were launched and administered by the Education Department, at least some analysts regarded them as a means for the government to extend its control over the curriculum and the related activities in schools (Y.C. Lo 1999, 2001; McClelland 1991; Morris 1998, 2002).

Just before the reversion of Hong Kong's sovereignty to China, the government, endorsing Education Commission No.7 (1997), declared its determination to improve the overall quality of school education. This was followed by the launch of a long-term education reform which emphasised lifelong learning. The three key principles of the reform were "breaking down barriers and creating room for all, creating opportunities and assuring quality". The reform required a holistic review of school curriculum, language education, the assessment system, and teachers' professional development. The reform policy was supported by a re-organisation of the Education Department, which in January 2003 became part of the government's Education & Manpower Bureau (EMB).

During the early 1990s, while the Hong Kong government was bringing a more decentralised strategy into curriculum decision-making, Macao's government was moving in an opposite direction (Bray 1992b; Tang & Bray 2000). Until the late 1980s, the Macao government had adopted a laissez faire policy in education. The government was mainly concerned with the administration of the official schools, which comprised a small proportion in the territory, while the private schools were left to their own devices including in the curriculum domain. After the 1987 Sino-Portuguese Joint Declaration, the Portuguese and Macao governments began to recognise the need for education reform to place the territory on a firmer basis in the post-1999 era. The coordinator of the Education Reform Committee (Rosa 1991, p.35) stated that:

We have realised and already emphasised that only with the resolution of education problems can we identify policy that addresses the interest of both

Portugal and China, and ensure the steady transference of Macau's sovereignty. Ignoring this fact is not beneficial to the future of Macau. If the Macau government did nothing, it would be regarded as short-sighted and violating the benefits and needs of Macau people as well as those of Portugal and China.

The first public conference on educational reform in Macao was organised in 1989. The major issues identified were the need for compulsory education and the establishment of a unified educational system (H.K. Wong 1991).

To address these issues, the Macao government passed a set of laws (Macau, Governo de 1991) on dimensions of educational reform. An advisory Educational Council comparable to Hong Kong's Education Commission was established, and new policies including a provision of financial assistance for the private schools were considered. This was followed in 1993 by a reorganisation of the Education Department, which included redefinition of various Divisions within the Department. In this aspect, the Macao government was arguably ahead of the Hong Kong government. The work of curriculum development was first undertaken by the Education Reform Committee and then assigned to the Division of Education Research & Reform within the Department. One of the functions of the Division was to coordinate and organise the work of curriculum plans and programmes, as well as to pay attention to their experimentation.

Under the Educational Council, an ad hoc Curriculum Development Committee was set up to plan the pre-primary, primary and junior secondary curricula for achieving the goal of compulsory education. Unlike Hong Kong's CDI, which was composed of various subject and curriculum development experts, this committee was made up from government personnel, principals and senior teachers from official and private schools, and a lecturer from the University of Macau. Curriculum Reform Working Groups for various subjects were formed for the formulation of subject syllabuses. These groups comprised relevant subject teachers with university lecturers as advisors.

The Products of Curriculum Change

This section focuses on three major products of curriculum change: the school curriculum, assessment modes, and textbooks. These three products are powerful determinants of student learning.

The School Curriculum
The Hong Kong school curriculum in the 1960s and early 1970s was highly academic, and focused on inculcating the knowledge and skills derived from disciplines such as chemistry and history. Its purpose was to prepare a select group of students with high academic abilities to compete for entrance into university. With the implementation of nine years compulsory education in the late 1970s, students with a wider span of abilities and different career aspirations were brought into the school system, and the academic-oriented curriculum became less appropriate. Efforts were therefore made to reduce the academic elements and to add practical or vocational subjects such as woodwork and home economics. The period after the 1984 Sino-British Joint Declaration brought public concern to prepare students to become good citizens of the PRC. As noted by Tse's chapter in this book, the school curriculum was modified to include civic education.

The late 1980s brought further change. An initial move was a scheme of Targets and Target Related Assessment (TTRA), which evolved in 1995 into the Target Oriented Curriculum (TOC). In the new system, students were expected to master five fundamental ways of learning namely problem-solving, reasoning, inquiry, conceptualising, and communication. The TOC moved the curriculum framework from a subject focus with teacher-centred approaches to generic skills with student-centred approaches. The TOC was initially implemented through English, Chinese and mathematics in the primary school curriculum. However, the TOC disappeared after three years of formal practice in lower primary schools. According to Morris (2002), the main reason for its disappearance was the change of political context after 1997.

One element in the post-1997 era was a curriculum launched by the Curriculum Development Council in 1999. The framework contained three major interrelated components, i.e. key learning areas (KLAs), generic skills, and values and attitudes. The KLAs were mainly inter-disciplinary structures which had been developed from the existing school subjects. To help students to learn more efficiently, generic skills such as collaboration, communication, creativity, critical thinking, and problem-solving were to be infused into the KLAs. The framework placed a high premium on student-centred approaches and school-based curriculum development for meeting diverse learning needs.

In Macao, by contrast, comprehensive curriculum development only started in earnest in 1989. In order to meet the public demand for compulsory education and a unified education system, the Macao government decided to develop a centralised curriculum with standardised quality. In 1994, the Curriculum Development Committee produced a framework which indicated the standards to be achieved and the subject areas to be learned in pre-primary, primary and junior secondary schools. Within this framework, a new subject called Civic & Moral Education was developed to help students adapt to the forthcoming change of sovereignty. The aims of this subject area, as noted by Tse's chapter in this book, included to foster students' positive attitudes towards their country and the Macao community, and to develop traditional Chinese moral concepts and values.

In the course of preparing the curriculum framework, the Macao government attempted to make Portuguese compulsory in all schools. This proposal was contained in the draft version of the curriculum framework submitted for approval by the Educational Council in 1994. Private schools which did not teach Portuguese as a core subject, it indicated, would not receive grants from the government (Yue 1994). This action roused the anger of the two major private umbrella educational bodies which, though divergent in their educational ideologies, worked together to oppose the move. They argued that the government could encourage private schools to teach Portuguese, but that it should not impose the language. The disputes were exacerbated by articles in the local Portuguese-language newspapers which supported the government policy, and by articles in the local Chinese-language newspapers which supported the private schools (Ieong 1994). Eventually the government backed down. The final version of the curriculum framework did not insist that Portuguese be a compulsory subject, though schools were given the option to teach Portuguese as a second language (Macau, Direcção dos Serviços de Educação e Juventude 1994a).

By 1998, provisional teaching syllabuses for the subject areas listed in the curriculum framework had been produced by the Curriculum Reform Working Groups. These syllabuses were then trialled in the official schools, and consultation with teachers

on the syllabuses was also arranged (Macao, Department of Education & Youth 2000). Additionally, scholars from mainland China, Hong Kong and Macao were commissioned by the government to evaluate the syllabuses. The evaluation indicated that, unlike the existing curriculum being taught in schools, the new curriculum had been contextualised with reference to the social phenomena of Macao. However, the primary curriculum and secondary curriculum were not well coordinated, the standards set in the curriculum were too high, and too many subjects were included (Macao, Department of Education & Youth 2000).

Assessment Modes

Tests and examinations have long dominated student learning in both Hong Kong and Macao, but the emphases in the two territories have differed. In Hong Kong, most internal and external examinations have been norm-referenced and competitive. In the past, before students could get a place in Secondary 1 they had to pass through the Secondary School Places Allocation system which scaled their marks in the internal school assessments together with those of an Academic Aptitude Test administered by the Education Department. The Academic Aptitude Test was abolished in 2003, and Basic Competency Assessments designed to take its place. These assessments focused on competence in Chinese, English and mathematics at Primary 3, Primary 6 and Secondary 3 levels. The initiative also promoted self-evaluation by primary students to assess their own learning.

Major reforms have also been signalled in the senior secondary examination system, but meanwhile the system has been dominated by the Hong Kong Certificate of Education Examination (HKCEE) taken at the end of Secondary 5 and the Hong Kong Advanced Level Examination (HKALE) taken two years later. Both examinations are organised by the Hong Kong Examinations & Assessment Authority (HKEAA), which was set up in 1977 and until 2002 was called the Hong Kong Examinations Authority (HKEA).

The TOC brought into the education system an alternative assessment mode, and attempted to shift the whole system away from the traditional assessment approaches with norm-referenced and summative orientations. The term Target Oriented Assessment (TOA) was used to describe the assessment part of the TOC. It emphasised the use of explicit criteria and formative assessment to help students to improve their learning. Thus, teachers were required to use a range of well-planned assessment activities with clear procedures for recording and reporting student learning. These assessment activities included practical tasks, projects, portfolios of student work, observation of students' performance, and oral interviews or interactions. The assessment part of the TOC met particularly severe problems during the implementation process (Morris et al. 1999; Morris 2002), but it built up the groundwork for curriculum reform in 2001 which promoted formative assessment for improving student learning and underlined the importance of integrating teaching, learning and assessment (Curriculum Development Council 2002a).

Macao, by contrast, had no territory-wide public examinations until 1990, and depended on external provision for school leaving examinations. In 1990, the University of East Asia (later called the University of Macau) launched an entrance examination open to all students in the territory. However, this was a university-entrance examination rather than a school-leaving examination, and a decade later Macao still had no examinations and assessment authority comparable to the HKEAA. Students in the

Portuguese-medium schools sat Portuguese examinations in the local examination centre and took the examinations simultaneously with their counterparts in Portugal. Many students in the other schools took examinations organised by other overseas examination boards. As the private schools under the supervision of the Macau Chinese Education Association had close connections with the PRC, their students normally took the entrance examinations organised in the local examination centres for the universities in mainland China. Most students of the Catholic or Protestant schools took either the General Certificate of Education (London) examinations or entrance examinations for Taiwan universities. Some students travelled to Hong Kong and sat the examinations there; and some students took no public examinations at all. The latter was not necessarily problematic, for Macao is a small community. Employers could easily get references for candidates who applied for jobs, and did not have to depend on the results of public examinations for selection purposes.

The entrance examination organised by the University of Macau has had an increasing influence on the schools. Bray et al. (2002) observed a growing number of secondary school graduates going into the University of Macau and other local institutions rather than to overseas institutions. In 1991, the authorities had expressed intention to establish a local assessment system like the one in Hong Kong (Macau, Governo de 1991), but this intention was not implemented. In 2003 the HKEAA went through a strategic review (IBM Business Consulting Services 2003), following which it was empowered to market its services outside Hong Kong and explicitly targeted Macao as one place to do this. This initiative may change the balance of forms of assessment in Macao, and may promote convergence of practices with those in Hong Kong. However, a 2003 seminar explicitly encouraged Macao schools to use a variety of assessment methods to substitute a single use of tests and examinations (*Macao Daily News*, 8 July 2003).

Textbooks
Especially during the 1950s and 1960s, the Hong Kong colonial authorities endeavoured to make school curricula politically neutral (Morris & Sweeting 1991). In particular, political issues related to contemporary China were excluded from the syllabuses. The aim was to avoid the intrusion of influences by the Nationalist Party in Taiwan and the Communists in mainland China, so as to maintain social stability. To assist the tasks of de-politicising the school curriculum, a Textbook Coordinating Committee was set up to scrutinise the textbooks provided by commercial publishers. A list of approved textbooks was then sent to individual schools for reference. With regard to those perceived as not educationally and politically acceptable, the decisions and suggestions made by the Committee were conveyed directly to the publishers (Morris & Sweeting 1991, p.263). In order to avoid financial losses, the publishers usually made changes. In contrast, the Macao government did not have to adopt the same measure to promote apoliticisation. This was partly because many textbooks used by Macao schools came from Hong Kong and were already apolitical.

With the impending change of sovereignty and the need to help students to increase their political awareness and become PRC citizens, the Hong Kong government introduced new subjects including Government & Public Affairs, Liberal Studies, and Civic Education. Government & Public Affairs stressed the study of concepts related to Western democracy and political issues of China. Liberal Studies provided contextualised and politicised studies of China and Hong Kong. In Civic Education,

substantial emphasis was put on developing students' identification with Chinese culture and good citizenship. The government also added topics to the existing subjects, including History, Chinese History, Economic & Public Affairs, and Social Studies. For example, in Social Studies, the development and structure of the Chinese Communist Party and the biography of Mao Zedong were covered. Most of these curriculum contents were once regarded as contrary to paragraph 78 of the Education Regulations (Hong Kong, Education Department 1971) and could have resulted in the closure of the school, dismissal of the teacher or withdrawal of government financial support (Morris & Sweeting 1991).

In order not to confront the Chinese authorities, the publishers also practised self-censorship. Terms used in the textbooks were changed, e.g. 'Hong Kong' became 'Hong Kong Special Administrative Region', 'mainland China' became 'Inland China', and 'Taiwan' became 'Taiwan Province'. Also, special teaching materials introducing mainland China were produced. For example, 'Knowing Your Own Country', developed by the Hong Kong Educationists' Association and the Hong Kong Resource Centre (1996), focused on the political, social, economic and military aspects of the PRC. 'Enhancing Learning, Knowing China', produced by the Education Department in 1999, included teaching resources such as teaching packages, CD-ROMs and computer software related to Chinese culture and history as well as the political and geographical features of mainland China. School-based teaching materials like 'HKSAR under the principles of one country, two systems' in an Integrated Humanities seed project were supported by the CDI (Curriculum Development Council 2002b).

At the school level, classroom teaching is no longer confined to the use of textbooks produced by the publishers. In order to foster students' abilities to be lifelong learners, teachers are encouraged to adapt textbooks and other learning materials to suit the students' learning needs. With the establishment of curriculum leadership positions in schools, particularly the primary schools, teachers started to work collaboratively to produce school-based teaching and learning materials which emphasised integration between different subject areas, infused generic skills such as critical thinking and creativity into the existing subject content, and used project learning. Additionally, some of these school-based learning materials stressed the importance of students' understanding in relation to the cultural aspects of the mainland China.

Macao has suffered a shortage of locally-produced teaching materials, and schools have to depend on imported textbooks. The main source of these textbooks has been Hong Kong (especially in the religious private schools), but other books have been imported from Portugal (especially in the Portuguese schools), and the PRC (especially in the schools of the Macau Chinese Education Association). Until the 1990s, the main reasons why hardly any textbooks had been specifically produced for Macao schools were that the Macao government had neglected the majority of schools, and the market in Macao was so small and fragmented that commercial publishers had been unwilling to invest in it (Bray & Tang 1994a). The result was that some students knew more about certain features of Hong Kong than parallel features of Macao, and were influenced by the thoughts and ideology prevalent in Hong Kong. From this perspective it was argued that Macao was perhaps a de facto colony of Hong Kong rather than Portugal in aspects of its culture.

However, one textbook in Social Studies (namely *Social Studies of Macao*, published by the Modern Educational Research Society) and another in Chinese Language (published by Yen Chin Publications) were produced specifically for use in

Macao primary schools in 1990 and 1991 respectively. These textbooks were written with close reference to the syllabuses produced by the Hong Kong Curriculum Development Council. Also, some teachers have prepared quasi-textbooks by compiling their own teaching materials for use in schools, and the early 1990s brought initiatives for books in other subjects (Kong 1992; Bray & Tang 1994a, 1994b). In the early 1990s, the Macao government produced textbooks on Civics and Health Science. In 1993, the government also promised to build up conditions for the production of textbooks and other educational equipment and resources. According to Fong (2000b), the Macao government had started to coordinate some textbook editing work with a number of publishers. It was anticipated that such collaboration would result in a production of more relevant local textbooks for use in schools in the future.

Conclusions

In both Hong Kong and Macao, the change from colony to Special Administrative Region brought major changes in curriculum. However, the changes in the two territories did not always operate in parallel. With respect to curriculum process, Hong Kong had a highly centralised education system which then moved towards some decentralisation. Macao, by contrast, had an uncoordinated set of education systems and moved towards centralised curriculum decision-making in order to improve coherence. Concerning the curriculum products, during the 1990s the Macao and Hong Kong governments reviewed their school curricula and prepared their frameworks for reforms. Moreover, both governments encouraged addition of Chinese political and cultural concepts through new subjects and new topics in existing subjects.

Hong Kong and Macao followed different approaches to curriculum reform. At the government level, Hong Kong mostly adopted the stimulus-response model before 1997 and the rational model subsequently. The Macao government mostly employed the rational model, and stimulus response in the face of ad hoc events. In the main colonial period, the principal goal of the Hong Kong government was to preserve its authority and power. When faced by challenges, the authorities took action to maintain their status. The use of the stimulus-response model fitted the decentralised strategy during the 1980s when the government faced increasing demands for democracy and dissatisfaction with the centralised curriculum. One typical example was TTRA, which encountered strong resistance from teachers and schools. In order to solve this problem, the Hong Kong government set up an advisory committee which recommended the implementation of the curriculum innovation with a change of the name from TTRA to TOC, a simplification of the relevant documents, and increased provision of resources. The use of the rational model was evident in the setting up of the Education Commission in 1984, the establishment of the Curriculum Development Institute in 1992, the re-organisation of the Education Department as part of the EMB in 2003, and the strategic review of HKEAA in 2003.

The Macao government faced pressures which were in some respects similar but in other respects different. The government continued to administer the official schools, but gave more support than before to the private schools. However, the private schools were not all willing to sacrifice their autonomy when invited to fit government plans. To achieve effective educational reform, the Macao government persisted with a centralised approach and a rational model to improve coordination among schools. This was rather

different from Hong Kong, where the government used dual models in organising different curriculum reform activities. A number of stages were evident in the Macao process, including decision on the need for educational reform; organising public conferences/seminars on the direction of the reform; passing educational laws and setting up working committees; planning school curricula, experimenting with syllabuses, collecting feedback from teachers; and evaluating the reform. Nevertheless, the government also employed a stimulus-response model to cope with issues arising in policy making. This can be discerned in the dispute related to the inclusion of Portuguese as a compulsory subject. In face of fierce opposition, the government changed its mind and made Portuguese one of the options for second language teaching.

At the school level, changes on a stimulus-response model were evident in both territories. Out of their own professionalism, together with their response to the urgent need to help pupils to develop identity with the PRC and Chinese culture, teachers in both Hong Kong and Macao produced teaching materials and organised extra-curricular activities in their schools.

Returning to the observation at the beginning of the chapter about the similarities and differences between Hong Kong and Macao in terms of their curriculum development, and those between the two territories as a pair and other parts of the world which have experienced curriculum reform, four major points may be highlighted.

- *Personnel for curriculum development.* Hong Kong and Macao have very different situations in personnel. Whereas Hong Kong is relatively well-endowed, Macao is short of curriculum development specialists. Curriculum development in Macao was initially taken up by the Education Reform Committee which was headed by a government official, and then by an ad hoc curriculum development committee of teachers and university lecturers who were not experienced in curriculum development. This situation resembled some small states such as Montserrat where the curriculum development unit had only one post and Grenada which had five (Bray 1992c, p.67). However, Hong Kong's Curriculum Development Institute is a well-organised body with subject specialists who have strong experience. This has been made possible by Hong Kong's larger population and longer record of tertiary education and high-level training.

- *School-based curriculum development.* Like their counterparts elsewhere (Lewy 1991; Wu 2002), many teachers in both Hong Kong and Macao recognise the need of school based curriculum development, and supplement non-local textbooks with materials related to local issues. Hong Kong teachers select or adapt the teaching materials from the centralised curriculum so as to meet the learning levels of their students. In Macao, because there is a lack of localised teaching materials, some teachers have taken initiatives to develop their own materials.

- *Assessment.* Hong Kong had already established its local examination system operated by the Hong Kong Examinations Authority during the colonial era. In Macao, the first local public examination organised by the University of East Asia appeared in 1990. This was consistent with patterns elsewhere in Asia and in Africa, the Caribbean and the South Pacific, where governments established national or regional examination boards during the period of colonial transition (Kellaghan & Greaney 1992; Bray 1998b). After the

transfer of sovereignty, both governments attempted to promote alternative assessment modes.

- *Textbooks.* Teachers in both Hong Kong and Macao depend heavily on textbooks. Hong Kong has various types of publishers including lo-cally-organised overseas publishers (e.g. Oxford University Press, Longman) to produce local textbooks which are based on EMB requirements. Moreover Hong Kong has subject specialists who help in writing the textbooks. In contrast, Macao textbooks have been mainly imported from such places as Hong Kong, the PRC and Portugal. Recent attempts have been made to produce local textbooks. The situation is similar to Solomon Islands, which heavily depended on imported textbooks in the past but started to produce local textbooks for schools in the early 1990s (Bray 1992c, pp.77-79).

Important insights may also be gained for an understanding of the impact of political change on curriculum development in Hong Kong and Macao. Some of these insights can be generalised to other societies at different periods of time. The first important insight is related to the nature of curriculum. Although the two territories are similar in their cultural and political backgrounds, the characteristics of their school curricula are very different. This is due to the fact that different strategies were adopted by the two colonial governments in curriculum development. However, because of the political change with the common goal of reunification with the PRC, school curricula in these two territories have begun to show signs of convergence.

As a pair, Hong Kong and Macao may be contrasted with other colonies which have undergone political transition. As discussed above, both Hong Kong and Macao governments placed a premium on curriculum development after the handover of their sovereignty had been agreed in the 1980s. This approach had similarities with patterns elsewhere, but also had differences. Since most other former colonies became inde-pendent states after their political change, the major purpose of their curriculum de-velopment was to build up new national identities. This was not the case in Hong Kong and Macao. Certainly the authorities wanted their students to identify with the territo-ries in which they lived; but they also wanted them to identify with the PRC. Assess-ment policies also differed from those in the majority of colonies which became in-dependent. Many of these colonies took the examinations run by their colonial powers, because it was seen as a means to obtain internationally recognised credentials. Sin-gapore and Sri Lanka are examples of this pattern (Kariyewasam 1996; Lim & Tan 2000). In Macao, the departing colonial authority declared intent to establish a local unified assessment system but did not accomplish the objective; and in Hong Kong, the departing colonial regime introduced formative assessment through the TOC but it was unsuccessful. However, both territories encouraged schools to use diversified assess-ment methods in their curriculum reforms for the new century. This trend is similar to the recent assessment reform in mainland China – the motherland of these two territo-ries – in which there is an intention to change the examination oriented education system into the one with quality standards in assessment which involves both parents and students in the process.

Change of sovereignty certainly did not end curriculum reform in either Hong Kong or Macao. Further changes in the processes and products of curriculum devel-opment were evident in both territories in their promotion of quality education for students in the new century. Moreover, these changes were as radical as those in the

period prior to the change of sovereignty. Thus Hong Kong and Macao will certainly continue to be fertile grounds for instructive comparison of curriculum development.

11

Civic and Political Education

Tse Kwan Choi, Thomas

Political forces shape school education, and school education serves political purposes. Recent socio-political changes have significantly influenced the shape of citizenship education worldwide. Hong Kong and Macao are anomalous and interesting cases in the development of citizenship education over the years of political transition. As colonies and then Special Administrative Regions (SARs), each place is neither a nation state nor a democratic polity. Citizenship education in these quasi city-states therefore displays certain features that distinguish it from conventional unitary models of national citizenship.

In congruence with the socio-political circumstances at large, citizenship education (commonly called 'civic education') in the colonial era was marginalised. For many years it was conformist and depoliticised. It alienated the students from their indigenous nationality and local politics, and portrayed the students as 'residents' or 'subjects' in a colonial setting rather than as 'citizens' in a sovereign nation state. During the 1980s and 1990s, decolonisation and national reintegration triggered new changes for school civic education, and resulted in the active involvement of the state and civil society in promoting civic education. However, unlike other former colonies heading towards independence by building new nation states, the experiences of Hong Kong and Macao were distinctive in being focused on reintegration with an existing nation state while maintaining a high degree of autonomy. Following the resumption of Chinese sovereignty, civic education has mainly aimed to build nationalism and patriotism, to strengthen the teaching of the Basic Law, and to promote the concept of 'one country, two systems'.

The accelerated pace of globalisation has also brought an emphasis on global citizenship. Informed by theoretical discussion of the role of education in political socialisation and political development, this chapter analyses the civic and political education programmes in the two territories. It illustrates how education in transition mirrors a society in transition, and in turn affects the society. The chapter first gives an account of the continuity and change of political education in the period following World War II. It then contrasts and compares Hong Kong with Macao in terms of curriculum and path of development. The chapter also reviews practices and implementation of political education in the schools in the light of previous studies of civic education. Finally, it discusses the implications of these findings for theoretical reflection and for future civic education programmes in the two places.

Some Definitions of Citizenship and Political Education

The terms civic and political education carry denotative, descriptive and normative meanings. They are often used interchangeably with other terms including moral education, citizenship education, civics, political literacy, political indoctrination, and nationalistic education.

Conceptually, political education refers to "institutionalized forms of political knowledge acquisition which take place within formal and informal educational frameworks" (Ichilov 1994, p.4568). The content and orientation of political education varies from country to country, and from time to time, depending on the definitions of particular political systems. Political education could be about an obedient passive subject in a despotic monarchy, or an active participating citizen in a democracy. In nation states, which are the dominant political communities in the world, political education is commonly tied closely with citizenship. That is why political education is also commonly called civic education or citizenship education, particularly in the US.

'Citizenship' basically refers to the legal status of a full membership of a modern nation state and to the rights and obligations endowed (Marshall 1950, p.2). As entitlements, citizenship further consists of a set of institutions within which these rights and obligations are guaranteed and practised. The trajectory of citizenship development is not a natural, peaceful and universal evolutionary process, nor it is a one-way and irreversible trend of development. Citizenship developments are the outcomes of interplay among socio-political, cultural, ethnic and geopolitical forces. Grounded on the principles of equality and universality, citizenship movements reflect not only changes in political relationships between individuals and states but also a gradual transformation of both the state and civil society. Since the 16th century, citizenship has expanded over time and space, both in membership (including populations such as working class, women, minorities and immigrants) and in scope of entitlements (including civil, political, social and economic rights). In recent decades, it has been further expounded to include economic citizenship (or industrial rights), cultural citizenship, environmental citizenship, global citizenship, and corporate citizenship (Oliver & Heater 1994; Steenbergen 1994). In addition to a legal status and institutional contexts, citizenship provides the political member (citizen) with an identity, attachment and social bonding, which in turn requires loyalty to the community and civic consciousness or virtues on the part of the individual.

As citizenship is not a fixed or static concept, the concrete content of citizenship is constantly changing. The same is true of the content of citizenship education, which is multidimensional. As Heater (1990, p.314) points out, citizenship education is like a cube with three dimensions: elements (identity & loyalty, virtues, legal or civil status, and political entitlement & social rights); geography (local, nation state, region or world); and outcomes of education (knowledge, attitudes and skills). Since citizenship education embodies elements such as membership, entitlements, obligations, identity and virtues, this multidimensionality and complexity gives rise to a wide range of issues. The content of citizenship education generally includes knowledge, values, attitudes and group identifications necessary for a political community and its members. It therefore usually includes knowledge of the history and structure of political institutions at both national and local levels (sometimes even at global level), loyalty to the nation, positive attitudes toward political authority, fundamental socio-political beliefs and values, obedience to laws and social norms, sense of political efficacy, and interest and skills

concerning political participation.

An expansion of the content of citizenship is also reflected in citizenship education. Salient trends in the development of citizenship education worldwide include the introduction of civics as a part of the school curriculum and a gradual expansion of citizenship education to the issues of environment protection, gender and racial equality, multiculturalism, global affairs, and regional and world citizenship. Divergent conceptions of citizenship push toward a more diffused and ever-expanding scope of citizenship education, thus making the civics curriculum multifaceted.

Since citizenship (education) is an elusive and contested concept intertwined with different ideologies and normative expectations, controversies and debates continue on their meanings, directions and ideal forms. Similarly, 'political education' is often used interchangeably with other terms that represent different notions and traditions concerning the goals, expectations, nature and practices of political education. Accordingly, scholars classify different modes of political education as conservative, liberal and radical (Giroux 1983; Ichilov 1994).

The above discussion of political education, particularly citizenship education, points to its variety, complexity and multidimensionality, as well as its underlying philosophical, ideological and political bearings. Schools in all societies are political as well as educational establishments; and the socialisation function of schools has been recognised by many academics and educators, both in their discussion of the role of education in political development and in their studies of school curricula.

Formal Education, Political Socialisation and Ideological Manipulation

The school plays a key role in citizenship development and socialisation, particularly in modern times when political learning is an integral part of the schooling process. Compulsory basic education is generally considered a social right for children, and schools are responsible for cultivating citizenship and producing national members. New members of political communities must learn the roles, norms and identifications appropriate to membership. Among the most basic orientations acquired are the recognition of themselves as members of wider political communities and the derived supportive feelings. Such socialisation across the generations is significant to each new member, as well as to the persistence of the political system. Many educators and government officials also recognise the significance of cultivating a national identity, and use the school curriculum to indoctrinate and perpetuate national political and economic ideas in the minds of young citizens. Hence political socialisation in the form of citizenship education could serve a variety of purposes such as independence and nation building, political mobilisation, social control, and political propaganda.

Indeed, modern states around the world have focused attention on using the school curriculum as a medium for transmitting political culture to the young generation, and citizenship education has become an increasingly significant part of the school curriculum. Citizenship is thus taught in formal lessons with social subjects like History, Civics and Social Studies to acquaint students with nationalistic values and particular political ideologies (Whitty 1985; S.Y. Wong 1991). Also, national rituals and symbols are displayed in the schools and classrooms, and national anthems are sung in school assemblies and sports events with the aims of nurturing patriotism and loyalty to the country.

Formal curricula in schools receive public attention because they are major media of cultural transmission and political socialisation. The curriculum is a manifestation of official political ideologies. The citizenship curriculum, in the form of syllabuses, guidelines and textbooks, covers and defines the objectives, goals and topics for teaching and learning, and underscores the basic orientation of political culture. The syllabuses and textbooks not only provide political knowledge but also define the normative expectations, appropriate attitudes, values and behaviours of ideal citizens. As such, the treatment of topics and contents in the syllabuses and textbooks can be viewed as the expression of these political and cultural norms. Therefore, an inquiry of the citizenship curriculum could shed light on understanding of the ideal or desirable nationhood and citizenship, as well as on the relations between the individual and political community as defined by the concerned authorities. Further, change in citizenship curriculum and policy can be viewed as an indicator for tracking socio-political transition. The introduction of new curricula and textbooks and changes in citizenship education often imply a succession of political and social ideologies, a re-evaluation or rejection of the past, and a re-representation of national identity. This makes citizenship education a fascinating field for studying the relations between education and politics, as well as the change of political ideologies.

In academic circles, both advocates of the so-called New Sociology of Education (Young 1971; Whitty & Young 1976; Whitty 1985) and Neo-Marxism (Giroux 1983; Apple 1990) contend that cultural transmission in schools is not a neutral process and reflects both the distribution of power and the principles of social control. Likewise, as school knowledge is strongly tied to the ideology of the dominant groups and under the control of the powerful, formal curriculum is often penetrated by ideologies or values in favour of the dominant groups and the established political order.

Similarly, critical studies of colonial education commonly view the school as an institution of colonialism and imperialism which exercises political control and consolidates the legitimacy and authority of the colonial rulers. Colonial education, characterised by 'alienation' and 'depoliticisation', is often accused of disseminating cultural imperialism and sustaining colonial rule over indigenous people (Carnoy 1974; Altbach & Kelly 1991). According to this view, control over colonies is exercised through various measures including selection of the content of education.

While education performs a function of social control in colonial states, the corollary is that in the process of decolonisation, education performs the important functions of nation-building and national integration for the new-born nation states. This was particularly evident under the wave of decolonisation after World War II (Bray, Clarke & Stephens 1986; Fägerlind & Saha 1989; Harber 1989; Bray 1997a). For these new nation states, national unity and a new political order were pressing needs. Political education was utilised to cultivate national identity and loyalty. Formal educational institutions like schools were expected to supplement and perhaps replace families to socialise the new generation in a new role of national citizenry rather than in the traditional local political authority.

In the light of these theoretical bearings, it is interesting to study the cases of Hong Kong and Macao. The following sections examine the development of civic education in the two territories in three distinctive stages.

Stage 1: Development of Civic Education before the Mid-1980s

While Hong Kong and Macao were under the governance of western powers, they were regarded more as Far East entrepots for trade and business than as typical colonies for settlement and natural resources. Therefore, the ways of governance were different from those of other colonies. In addition, given the geographical proximity of the Pearl River Delta and the ethno-cultural affinity with the mainland Chinese, the China factor always constituted a significant force in their paths of development. These matters, together with significant socio-political changes, had important bearings on the features of educational systems and civic education in the two societies.

Hong Kong
For much of Hong Kong's colonial era, political power was concentrated in the hands of the governor, career civil servants, and a small group of co-opted elites (S.K. Lau 1982). The socio-political situation changed rapidly after the late 1960s. Following the serious challenges of the riots in 1966 and 1967 the colonial state began to open its political structure and play a more active role in regulating economic and social affairs and in providing public services.

As a British colony, citizenship rights in Hong Kong never became fully developed. To a large extent, the citizenship developed in Hong Kong was under the patronage of the colonial government and directly initiated from above (Tsang 1998). However, civil rights were well developed, a fact which dated back to the early colonial days when the British transplanted their legal system. People in Hong Kong enjoyed tremendous civil liberties, most notably in the aspects of right to life, right to property, legal protection, freedom of movement, freedom of thought and religion, and freedom of speech and expression. Nevertheless, the social welfare system was not built by the government but primarily by charitable agencies with religious backgrounds. The institutionalisation of social citizenship began only after the World War II and particularly developed under the administration of Governor Murray MacLehose during the 1970s. This was largely an outcome of the reaction of the colonial regime to deteriorating social conditions, particularly after the riots in 1966 and 1967. Some progress has been made in social welfare policy since then, even though Hong Kong is still not a welfare state. Finally, political citizenship is very underdeveloped, with the doors of assemblies closed to the general public. Democratisation did not begin seriously until 1981.

During the 1950s and most of the 1960s, the secluded and autocratic bureaucratic polity coexisted with a loosely-organised Chinese immigrant society and substantial economic growth, The 'parochial' and 'subject' political culture was characterised by acceptance of the status quo and the colonial government, a sense of political powerlessness, and a low level of political participation (King 1981a, 1981b; Scott 1989; Miners 1996).

In congruence with the socio-political circumstances from the 1950s to the mid-1980s was an officially apolitical education system in which formal political education was marginalised (P.M. Wong 1981; Tsang 1984, 1994; Morris & Sweeting 1991). The colonial government exercised tight control of the education system through legislation which prohibited political activities in schools, control of school subjects and curriculum materials via model syllabuses, officially-approved textbooks, and provision of official guidelines (Morris 1992a). Political education was never stated as an explicit

educational objective in any official educational document, and the orientation of political education in this period was a kind of conformity-oriented civic education, alien and subject-oriented in nature (Morris 1992b; Tsang 1994, 1998).

Although nationalistic education is the core of political and citizenship education in many countries (Schleicher 1993), nationalistic education was marginalised or even eliminated in Hong Kong for a long time. Hong Kong schools generally discouraged their students from identification with their ethnicity, indigenous culture and local society, or any Chinese government across the Taiwan Straits. Both Chinese culture and social subjects in the secondary school curriculum were also apolitical and 'a-national' in nature (Tsang 1998). Although the colonial government in Hong Kong did not deliberately foster an identity with the British authority, it did not promote an identity with the Chinese government either. By contrast, an identity with the Chinese cultural heritage and tradition, instead of a political identity, was tolerated to counterbalance the influence of contemporary Chinese nationalism (Luk 1991; Fan 1995). Till the 1980s, the objectives of teaching Chinese Language were confined to cultivation of language abilities, rather than teaching about Chinese culture (Lin 1993). The part of Chinese history between 1911 to 1949 was even deleted from the syllabus of Chinese History between 1958 and 1972 (Pong 1987). As far as other secondary school subjects were concerned, there was little discussion of Chinese society and the People's Republic of China (PRC) in the syllabuses of Economic & Public Affairs (EPA), Economics, History, or Geography till the early 1970s (H.K. Cheung 1987; Fung & Lee 1987; Tsang 1998). Also, these syllabuses avoided sensitive political topics such as Hong Kong's colonial status, Hong Kong's relationships with mainland China, or issues concerning contemporary Chinese history. A sense of remoteness and an absence of identity was created in the curriculum, as Hong Kong history was not included in the History syllabus. In addition, owing to legal constraints over political activities in schools, nationalistic education was rare outside a small number of partisan schools (K.K. Lam 1994).

Almond and Verba (1963) have classified political culture into three models – parochial, subject and participant – in the light of its orientation toward political objects. Accordingly, political education in Hong Kong between the 1950s and the mid-1980s may be characterised as subject-oriented in the sense that the concept of citizenship transmitted was distorted and one-sided. The curriculum reflected a kind of subject political culture concerned more with administrative output and the political system than with political inputs and rights and obligations. The formal curriculum displayed a transmission approach to political education, carrying supporting beliefs of the pre-existing political institution and a passive image of citizenship. For example, the EPA syllabus chiefly transmitted factual political knowledge and cultivated politically-apathetic citizens. Students' exposures to political topics were mainly restricted to the description of the structure and functions of the government, and to the government's contributions to solving various social and economic problems. Citizens were implicitly defined as passive, obedient, and complacent, and as cooperative recipients of government services. Only in 1984 did the EPA syllabus at certificate level see a marked increase in attention to systems of government, especially those issues relevant to representation and consultation (Tsang 1998).

Macao

Although Portugal established its rule over Macao in 1557, as a result of the decline of the Portugal on the world stage, together with increased dependency of Macao on mainland China, the Portuguese government in Macao could not maintain its governance without the cooperation and support of the Chinese government (Yuen & Yuen 1988). Nominally Macao was a Portuguese colony, but Portugal never exercised the *de jure* sovereignty over Macao and on many occasions suffered perpetual crisis of governance in this enclave. Furthermore, economically and culturally Macao was heavily dependent on mainland China (particularly the Pearl River Delta) and Hong Kong. The spill-over of the Cultural Revolution and a conflict around the construction of a pro-PRC school in Taipa island resulted in riots in December 1966. The PRC's supporters successfully demanded an apology from the Portuguese administration and a ban on all pro-Taiwan organisations (Gunn 1996). After that event, the Macao government further suffered a loss of autonomy and authority.

Portugal and China had inter-related roles in Macao. While the Portuguese formally and nominally controlled the top political leadership, China's representatives in Macao (some leaders of neighbourhood associations, labour unions and PRC officials responsible for Macao affairs) informally and substantially governed the ordinary citizens at the grassroots level (S.H.S. Lo 1995). The neighbourhood associations served an auxiliary function for the government by helping to solve problems about housing, rent, pollution, hawkers and recreation, and by explaining and implementing government policies. With the dominance of pro-PRC representatives in the legislature, as well as the neighbourhood associations as intermediary organisations between the government and ordinary citizens, the PRC shared the power of the Portuguese government and established a strong political influence in Macao. Also, the Macao government was traditionally destabilised by Portuguese politics as the governor's tenure of office was often affected by Portugal's party politics. In addition, the Macao government was plagued by bureaucratic corruption and administrative incompetence. The Macao civil service was notorious for its low educational levels, insufficient training, stifling bureaucracy, frequent reorganisation, and intense parochialism. These factors weakened the state capacity of the Macao government.

In short, from the end of World War II to the mid-1970s, Macao was an enclave under Portuguese administration and Chinese patronage, together with an insulated bureaucracy and a parochial and subject political culture (Yee et al. 1993a; S.H.S. Lo 1995; Yee 2001). After the 1970s, Macao experienced rapid industrialisation and urbanisation, as well as a sharp increase in population due to migration. The society accommodated a large number of immigrants from mainland China, and the masses of Macao exhibited a passive political culture. The majority of Macao Chinese were uninterested in political participation, and were imbued with a top-down rather than a bottom-up concept of democracy.

Unlike Hong Kong, the role of the Macao government in social affairs and education was very limited, particularly prior to 1987 (Bray 1992a). Under the policy of classical colonialism, the Macao government was only concerned with the education of Portuguese children, and neglected the education of the Chinese inhabitants. The government spent little on education, and most of the funding went to the Portuguese-language public schools. Macao's educational provision was characterised by diversity and the government's non-interventionist policy. There was no compulsory free education. Macao had no aided sector; and the majority of schools were privately

managed, operating with a high degree of autonomy. Like other aspects of the education system, curriculum development was free from state regulation. Schools adopted syllabuses and textbooks from other places, particularly Portugal, the PRC, Taiwan and Hong Kong (Bray & Hui 1991a). Even in the late 1990s, Macao did not have system-wide examinations comparable to those in Hong Kong.

Under the somewhat laissez faire education policy, a distinguishing feature of education in Macao was its reliance on the civil society and the co-existence of multiple systems. Macao's education was characterised by the dominance of private schools run by religious bodies, social service organisations and other bodies. Among them, the Catholic Church and the pro-PRC Macau Chinese Education Association (MCEA) played a leading role. In the absence of a compulsory unified curriculum, individual schools could operate according to their particular preferences and backgrounds. Because of the lack of unified curriculum, as well as the small size of student population, commercial publishers were unwilling to publish textbooks specially for Macao students (Bray & Tang 1994a). Consequently, many schools adopted textbooks from Hong Kong, mainland China or Taiwan, which were also of limited relevance to Macao. As a result, Macao students tended to know more about places other than Macao, their own society.

Although the Macao government did not install a formal civic education programme in schools, civic education had a history in Macao dating back to the beginning of the era of Republican China in 1911 because many vernacular schools followed the education system in mainland China. Until 1966, Macao was in a precarious balance between the pro-Nationalist and pro-Communist organisations. Their rivalry was manifest in the realm of education in which each camp ran its partisan schools and introduced political indoctrination (Fung 1960; Liu 1973).

In 1966, the surrender of the Portuguese government in Macao to the supporters of the pro-Communist organisations resulted in the retreat of pro-Nationalist organisations and, in turn, the decline of pro-Nationalist schools (Tan 1994). The MCEA then became a dominant educational body in Macao, parallel to the Catholic Church. No formal programme of civic and political education was introduced by the Macao government during this period until the 1990s, and civic education in Macao was basically invisible. In general, the implementation of civic education in the majority of private schools was characterised by a permeated approach or solely undertaken by the form teachers (H.K. Wong 1992). Formal education was geared to academic subjects, and most schools used the assemblies together with the homeroom periods by individual teachers as the times for civic education. Except for the pro-China schools, which closely followed the official line of political education in mainland China, only a few schools offered independent civic education lessons whereas most schools taught civics in the form of religious education or social subjects. Since each school varied in background and approaches to civic education, among these schools a major difference in orientation of civic education lay in the teaching of religious beliefs and political doctrines.

Stage 2: Civic Education during the Transitional Period

Unlike many other former colonies heading towards building new nation states, Hong Kong and Macao are distinctive in their reintegration with an existing nation state (People's Rublic of China) and, at the same time, maintaining strong autonomy under the formula of 'one country, two systems'. As the transfer of sovereignty was handled in

a peaceful way through negotiation, there was a relatively long period of transition. Under the impact of decolonisation and change of sovereignty starting from the mid-1980s, there was a dramatic change in civic education in the two societies.

Hong Kong

Since the early 1980s, the greatest political changes have been initiated by the process of decolonisation and the accompanying steps of democratisation. With the introduction of representative government, and the political reform package brought by Governor Christopher Patten in 1993, the scope of democratisation was extended. However, the pace of democratisation progressed slowly and tortuously. Party politics have had an extremely short history in Hong Kong as direct elections were not introduced to the Legislative Council until 1991.

The socio-economic development from the 1970s onwards produced changes in the Hong Kong Chinese ethos, particularly in the moving away from a subject political culture to an immature form of participatory political culture (Lau & Kuan 1988). While there has been a growing normative orientation towards political participation and an attentive attitude towards the mass media among Hong Kong Chinese, people's aloofness and apathy remain strong, and many people stay at the spectator level. Further, the people's sense of political powerlessness became stronger as a result of the turbulent political environment and the rows between Britain and China. Meanwhile, the increasing intervention of the government in social and public affairs gave Hong Kong residents a benevolent, favourable and positive image of the colonial government and increased their expectations of the government. However, the authority of the Hong Kong government declined during the 1990s. The people became less trustful of and less deferential to public authorities, and showed a less favourable evaluation of governmental performance. Political cynicism and a sense of political inefficacy also prevailed, with strong feelings of political frustration and alienation.

The long separation between Hong Kong and mainland China and the different rules of governance led to Hong Kong's distinctive socio-economic development and the development of an indigenous culture, and in turn a sense of Hong Kong-centredness and 'Hongkongese' identity (Lau & Kuan 1988; P.K. Choi 1990, 1995). With the advent of 1997 and the designated return of Hong Kong to China, change in political membership became a pressing issue as the change of sovereignty meant that Hong Kong people would acquire new national identities as PRC citizens.

Political reform in Hong Kong after the signing of the 1984 Joint Declaration triggered a demand for civic education in the Hong Kong community (H.W. Wong 1988; Sweeting 1992; Bray & Lee 1993). With the introduction of political reform toward a representative government and the stipulation of China's policy of 'one country, two systems', civic education was considered a major means to provide Hong Kong's future citizens with the necessary political orientation and competence to prepare for the political change. However, adolescents lacked detailed knowledge and understanding of institutions, principles and processes of government, law, and politics (Wan 1990; Cheung & Leung 1994; Curriculum Development Committee 1995). Also, adolescents showed only moderate concern toward politics and social issues. They tended to have favourable attitudes toward the values of democracy and towards the Hong Kong government, but without much understanding.

Hong Kong students also lacked an understanding of China affairs, and were particularly ignorant of Chinese politics. A significant proportion of pupils also showed

negative perceptions of the Communist Party and the Chinese government, and felt resistant to the return of Hong Kong to China. Students commonly held a pessimistic view on the future of Hong Kong. Moreover, there was a wide discrepancy in the students' civic awareness and involvement. A majority of students identified with the importance of voting, but they lacked confidence and enthusiasm to vote. Most of them were unfamiliar with political organisations in Hong Kong and tended to keep aloof from politics. The students also lacked the intellectual and communicative skills for taking political actions, and they participated little in community activities. So it was not surprising that Hong Kong students were often criticised for their lack of civic consciousness and low awareness of their nation and state. The situation invoked worries over the political future of Hong Kong, and elicited public concern for civic education in schools to promote civic consciousness.

Accordingly, the Hong Kong government adjusted its education policy from a stance of 'depoliticisation' to a more active role, as evident in the publication of *The Guidelines on Civic Education in Schools* (henceforth *Guidelines*) in 1985. This comprehensive document covered the passage of pupils from the kindergarten to primary school and then secondary school. For each stage it outlined details about knowledge, attitudes and skills to be transmitted, and gave advice to educators and teachers on the ways to achieve them. Nevertheless, the contents and objectives of the 1985 *Guidelines* were criticised for their 'all-inclusiveness', 'conservatism', and being 'a-political' and 'a-nationalistic' (S.M. Lee 1987; S.W. Leung 1997). Civic education, it was argued, should be an instrument for promoting political education, but political education itself was depoliticised and moralised in the *Guidelines*.

Civic education was also enhanced in the 1980s by revision of the curriculum in some major social subjects and, the introduction of the new subjects Government & Public Affairs (GPA) and Liberal Studies at senior secondary levels (Bray & Lee 1993; Morris 1997; Morris & Chan 1997). A salient aspect of the impact of 1997 handover on the secondary school curriculum was an increase in the topics allocated to the study of China, the relationships between Hong Kong and China, Hong Kong's political transition, and a specific references to the Joint Declaration and the Basic Law.   The Education Department also promoted civic education by organising seminars for school heads and civic education coordinators, and hundreds of in-service training courses, seminars or workshops for teachers. Furthermore, a Government & Public Affairs/Civic Education Section was set up in the Advisory Inspectorate to coordinate the implementation of civic education in schools. Teaching resources centres were set up, and teaching materials and manuals, bulletins and newsletters concerning civic education were published. The Education Department also undertook evaluations of the implementation of the *Guidelines*.

Following the increased politicisation of the local community, the Education Regulations concerning political control were amended in 1990. The reception of the significance of civic education was consolidated in the booklet *School Education in Hong Kong: A Statement of Aims* (Hong Kong, Education Department 1993), which stated that one of the central aims of school education was the promotion of social, political and civic awareness. Under pressure from some pro-China supporters, a working group was set up in 1995 to draft the new guidelines. In 1996 the government published new guidelines on civic education which presented an enriched and more complete conception of citizenship than the earlier one (Curriculum Development Council 1996). The new framework was based on the learner's perspective and needs.

The new guidelines aimed to meet the challenges of political transition after 1997 and to prepare the students to become contributing citizens to society, the country and the world. The aims included development of a sense of belonging to Hong Kong and China, understanding the characteristics of Hong Kong society, and the importance of democracy, liberty, equality, human rights and rule of law. Also, an emphasis was put on the teaching of controversial issues as well as developing students' critical thinking. Meanwhile, a major revision of syllabi of social subjects, along with a new curriculum of civic education, was issued (Curriculum Development Council 1998).

Besides the government, bodies such as the District Boards, agents of mass media and community organisations became increasingly involved in promoting civic education after the mid-1980s, as evident in the proliferation of programmes for civic education and propaganda activities. Educational organisations, such as the Professional Teachers' Union (PTU) and the Hong Kong Federation of Educational Workers (HKFEW), aired their views on civic education and designed their own civic education programmes. For some educational organisations, civic education was conceived of as a form of moral and even religious education. As explained by Beatrice Leung's chapter in this book, to prepare for the political transition in advance and to prevent imposition of political education from outside after 1997, the Catholic Church in Hong Kong, through the Catholic Board of Education (CBE), introduced its civic education programme in Catholic schools in 1995 (J.K. Tan 1997; Ng 1997). The programme emphasised three identities of Hong Kong Catholics: Hong Kong citizen, Chinese and Christian. Also, it assimilated a pro-Chinese government attitude and a kind of patriotic education. On the other hand, for the Chinese government's supporters, more emphasis was put on strengthening nationalistic and patriotic education in schools for inculcating the younger generation with national identity, pride and loyalty, an understanding of the Basic Law, and China's policy of 'one country, two systems'.

However, many educators in Hong Kong were worried that the advocacy of nationalism in civic education would result in political indoctrination (P.K. Choi 1995; Man 1995; W.O. Lee 1999; Lee & Sweeting 2001). Thus, in contrast to the pro-Communist China organisations, some organisations put more emphasis on the role of civic education as democratic education and accorded priority to the notions of democracy and human rights. To facilitate the transformation of a participatory political culture, and thus the pacing of democratisation, some advocates introduced the action-oriented model of 'political literacy' (Leung & Lau 1997). Differences of ideas concerning the proper role of civic education also resulted in different ways through which the civic education programme was to be received, adopted and implemented.

Macao

The path of citizenship development was even more peculiar in Macao. The territory's political system was executive-dominated, and most middle- or high-ranking civil servants were either Portuguese expatriates or locally-born Eurasians called Macanese. There was a strong tradition of consensus politics among the political players in Macao. The pro-China forces were concerned about political stability and harmony, and ordinary people were apathetic towards political participation. Portugal's 1974 military revolution overthrew the Salazar-Caetano dictatorship and established a multi-party democracy (Manuel 1996). The new government commenced decolonisation of all remaining Portuguese territories and acknowledged Macao as Chinese territory. In addition, the new Portuguese government allowed Macao to have a higher degree of

autonomy and provided limited democratic reform such as the promulgation of the 'Organic Statute for Macao' and the setting up of a Legislative Assembly in 1976 (Wu 1998). Limited direct elections were introduced to the legislature in 1976 and in the municipal councils in 1989. However, the power game was favourable to the pro-China groups and the status quo.

During the transitional period from 1987 to 1999, the Macao government gradually opened and reformed its political structure, and played a more active role in socio-economic affairs (S.H.S. Lo 1995). Major issues such as localisation of the civil service, legalisation of the Chinese language, and translation of Portuguese laws into Chinese were put on the reform agenda. However, administrative and political reforms in Macao were implemented much more slowly and narrowly than in Hong Kong. The slow progress also aroused worries of the public and criticisms from PRC officials. In the final years of the Portuguese administration, the sunset government appeared to be more interested in getting the best out of their economic interests, and did little to improve the economy or curb the deteriorating public order. But unlike Hong Kong, the colonial authorities and the Chinese government cooperated during the transitional period. In contrast to Hong Kong's diversified and pluralist civil society and the presence of a strong pro-democracy force, the local community organisations in Macao were either directly controlled or co-opted by the China's government, or too weak to challenge the status quo. The small pro-democratic force was marginalised by the traditional and conservative groups and organisations at large (Yee 2001).

As mentioned above, educational development in Macao had been rather stagnant under the Portuguese administration for centuries. Only in the late 1970s did the government increase its part in education by subsidising the private schools (H.K. Wong 1992; Y.Y. Chan 1993, 1995). After the signing of the Sino-Portuguese Agreement in 1987, the Macao government embarked on a series of major education reforms: a marked increase in government expenditure on education; a heavy involvement in higher education by purchasing the private University of East Asia and promulgating the Higher Education Law; proposing seven years of free and compulsory education; attempting to make Portuguese a compulsory subject in all private schools and public higher institutions; reconstructing the Education & Youth Affairs Department; and promoting civic education (A.H. Yee 1990; H.K. Wong 1991; Koo & Ma 1994). The change of curriculum in preparation for the 1999 handover was also put on the public agenda. The 1994 laws on curriculum organisation for kindergarten, pre-primary and primary school schools were followed by trialling of new syllabuses in some Luso-Chinese schools. However, the official control over education provoked resistance, and many reform measures were shelved.

Like their Hong Kong counterparts, Macao adolescents are often accused of lacking civic consciousness and awareness of their nation and state (Yee et al. 1993b; Yee 2001). They show moderate civic awareness but are passive in political involvement. They also show little confidence in the Macao government, and feel dissatisfied with the working performance and efficiency of official polices. Furthermore, Macao adolescents have a weak sense of belonging to Macao and lack understanding of the Basic Law.

The prospect of reunification with China in 1999 brought advocacy for helping students to search for their roots of Chinese identity and strengthening patriotic education. Schools in Macao were encouraged to teach civic education, and the Basic Law constituted an essential part of the civic education curriculum. To many advocates

(e.g. Ngai 1994), civic education was urgently needed as a considerable part of the population were new immigrants from China elsewhere, with almost no roots in the territory and little sense of belonging. That is why civic education, which was completely neglected in the past, became a top priority in the remaining years of the transition. It aimed to equip the residents, especially the younger generation, with a better understanding of civic rights and obligations, Macao government and society, their own identity, and pride in being a Macao citizen. In the meantime, juvenile delinquency and teenage problems in general have became important social problems, and numerous accounts of delinquent behaviour such as substance abuse, self-inflicted injury and school dropouts were published in the local press. Many people attributed the situation to diversifying social values and the weakening of ethical and civic education. Schools were thus called to remedy this situation.

In addition to government initiatives, different education bodies launched their own civic education programmes during and after the late 1980s (Ng 1997). As early as 1987, the Macau Catholic Schools Association began to prepare a civic education textbook for secondary schools. A programme was then launched by the Association in Catholic secondary schools in 1991. The programme aimed to cultivate a sense of belonging to Macao and China, strengthen civic competence, develop open-mindeness, and promote skills and knowledge in handling social conflict.

In parallel, the MCEA adopted a more patriotic approach to civic education and published a textbook on the Basic Law for secondary schools in 1995. Pro-Communist schools also implemented their own civic education programmes with an emphasis on love for country, Macao and school, with concern about the relationships with family, community, society and the state (Ng 1997). Education for patriotism stood out as the main objective. Also, civic education aimed to facilitate political transition and national unity. There was strong emphasis on topics about China, and, in line with Marxist ideology, dialectics and materialism.

A salient feature of Macao education is its cultural and educational dependence. Macao, in common with other small states (Bray & Packer 1993), had relied on experts and resources from outside (particularly Hong Kong) for consultancy advice, for producing textbooks and teaching materials, and to some extent for training teachers. Macao's dependence on Hong Kong was reflected in the primary school social studies textbooks published in 1994. Although it was the first series of textbooks tailor-made for Macao school pupils, it was published and edited in Hong Kong. Also, at Primary 4 quite a large proportion of topics were devoted to Hong Kong, including its geography, commerce and industries, tourism, transportation, postal services, social welfare, medical services, education, and the organisation of government (Modern Educational Research Society 1994). It revealed the close connection between Hong Kong and Macao, but also the cultural and educational dependence of Macao on Hong Kong.

With the promulgation of laws in 1994 and 1997 which stated the regulations on curriculum planning and reform for both primary and secondary schools, the development of moral and civic education became an official goal of education. In 1994, the laws on curriculum organisation for kindergartens, pre-primary and primary school schools were made, followed by the trial of the provisional syllabuses in some Luso-Chinese schools. Then the government published the Moral and Civic Education Syllabuses at both primary and junior secondary levels (Curriculum Reform Group 1995a, 1995b). In 1997 the 'Individual and Social Development Law' further regulated the training and qualifications of the teachers in moral and civic education in primary

and secondary schools.

According to the 1995 Moral and Civic Education Syllabuses, civic education was taught as a specific academic subject under the scope of personal and social education. It aimed to prepare students to become 'good' citizens with reference to certain moral and legal principles. The general aims included cultivating students' positive civic awareness and skills, and exploring skills both in the acquisition of civic knowledge and in nurturing of a moral sense of mind so as to facilitate students to adapt, learn and grow up when entering the society. At each level, the syllabuses specified the knowledge, skills and attitudes expected of civic education, as well as the 10 major themes: personal growth, human relationships, value systems, ways of thinking and inquiry, the individual and the group, relationships among China, Portugal and Macao, United Nations, law, and mass media. Finally, assessment was recommended in the form of observing students' performance, instead of examination. However, although the official syllabuses issued in 1995 were compulsory for the official Luso-Chinese schools, they were optional for the private schools.

Stage 3: Civic Education after the Handover

The handover of sovereignty of Hong Kong and Macao was smooth and peaceful, and the subsequent pace of national reintegration was rapid. With the deepening of economic integration between China and Hong Kong/Macao, it became a common wisdom that the territories' fate was tied inextricably with that of the mainland, in particular the Pearl River Delta region. The economic integration was expected to evolve more rapidly after China's entry into the World Trade Organisation (WTO) in 2001, which had significant implications on the China-Hong Kong/Macao relations, as well as for the path of development of the SARs. More important, real transition is not merely about sovereignty: it is also about identity.

Hong Kong

As mentioned above, the pace and scope of democratisation is inhibited by the conservative political framework stipulated by the Basic Law and by the wishes of the Beijing government. In addition, civil citizenship and social citizenship were threatened after the handover, as evident in several instances such as the re-amendment of the Public Order and Societies Ordinances in 1997 by the Provisional Legislative Council; the abolition of the two municipal councils in 1999; and the drafting of Article 23 of the Basic Law on national security. Even judicial independence, in the past repeatedly emphasised by the British colonial government and repeatedly guaranteed by the Beijing government, had to follow the decision of the National People's Congress concerning the case of right of abode in 1999. All implied democratic regression and deterioration of rule of law and human rights, and a curtailment of citizenship of Hong Kong people. They also raised doubts about the level of autonomy that the SAR would have in practice, and the viability of 'two systems' under 'one country'.

From its early days, the first SAR government suffered from legitimacy-deficit, and the first Chief Executive, Tung Chee Hwa, was keen on showing his performance and building up his reputation. To engineer a cultural hegemony state project for the task of national reunification and nation building, Tung highlighted education as one of the three top priorities of his administration. In addition, and placed above all other

concerns, he called for the creation of a society proud of its national identity and cultural heritage. In his inaugural address and many public speeches (e.g. Tung 1997a, 1997b, 1998, 2000a, 2000b), Tung pledged to draw up a comprehensive plan to improve the quality of education in the new era with strong emphasis on civic education and patriotism. Tung repeatedly stated that Confucian culture must be strengthened and that civic education was urgent for national identity. Hong Kong was said to have a colonial history which resulted in a poor understanding of Chinese civilisation and history; and young students had to learn about the history of their own country and great cultural heritage in order to cultivate their national identity. Civic education, he said, served to foster in youth a sense of attachment to the nation, so that they would have national pride as Chinese and be willing at all times to contribute to the well-being not just of Hong Kong but also the entire Chinese nation.

With the deepening of economic recession after 1997, the initial years after the transition brought unprecedented adversity. Economically, Hong Kong was caught in a painful process of restructuring; and socially, ideological differences and income disparities created rifts. Building an adaptive and harmonious community became a pressing issue on the official agenda. From the official perspective, to save a society from further division and disintegration, fostering a spirit of solidarity was required to coalesce isolated individuals into a community and encourage each individual to think from self to society to service.

The themes stressed above by Tung were most obviously incorporated into the education system through the reintroduction of civics as a school subject (Curriculum Development Council 1998); revisions of school syllabuses and curriculum guidelines (Curriculum Development Council 2002a, 2002b); strengthening of Chinese history as a school subject; changes in textbooks to reflect the new political reality; wider use of Putonghua as the medium of instruction; more schools displaying the national flag and singing the national anthem; more programmes for participation in community services; and exchange activities with mainland to boost nationalism and sense of social responsibility. Also, financial incentives were provided to schools and NGOs offering civic education activities. Outside schools, various civic education programmes and cultural events were launched, and promotional activities and publicity materials were organised by the Committee on the Promotion of Civic Education (CPCE) and the Home Affairs Bureau to boost nationalism among teenagers.

With the promulgation of new aims of education (Education Commission 2000; Curriculum Development Council 2001a), official civic education explicitly aims to enhance students' sense of belonging to the HKSAR, identifying with their home country or motherland, and making contributions to the community. It is also salient that nationalistic education and education on the Basic Law have been given higher priority than educational concerns for democracy, human rights, rule of law, global education and critical thinking.

Macao
Since the establishment of the SAR, to win confidence of the community and achieve social solidarity so as to consolidate the legitimacy of the new system, much effort has been devoted to public order and social stability. Other priorities have been economic recovery, employment, administrative efficiency, and the quality of public service. The new SAR government under the first Chief Executive, Edmund Ho, also emphasised regional cooperation and improved competitiveness through science and education. In

tertiary education, efforts were made to raise the standards of teaching and research. The government also adopted a series of measures to promote the complete realisation of compulsory education and improve quality. Measures included reduction of class size in primary schools, setting up criteria to enhance teacher professionalism and teaching quality, heavy investment in information technology, and tackling truancy. Other efforts focused on vocational education, special education and private institutions. In 2003 the Macao government undertook a thorough review of the education system with a large-scale consultation exercise (Macau, Direcção dos Serviços de Educação e Juventude 2003b).

Following the reunification with China, there has been official advocacy of helping students to search for their roots of Chinese identity and strengthening patriotic education (Ho 2000, 2001, 2002, 2003). Since Macao has returned to the motherland, it was argued, there should be a greater focus on patriotism and civic awareness throughout the education system. The 'patriotic tradition' of Macao's people was called for, with emphasis on team spirit and cooperation. Accordingly, schools in Macao were encouraged to teach civic education, and the Basic Law constituted an essential part of the curriculum. In the consultation document reviewing the Macao education system, one of the key education objectives at primary and junior secondary levels was a promotion of moral and civic education, with five loves to be cultivated: oneself, family, Macao, China and the world.

From 1999 onwards, the school curricula were revised in order to cope with the changing social, economic and political situations. With the assistance of both local curriculum experts and external consultants from Hong Kong and mainland China, the Curriculum Reform Work Group under the Education & Youth Affairs Department revised syllabuses for subjects at all levels to ensure effective implementation in both private and public schools. However, curriculum implementation was limited by the weak government administration and the strong autonomy of the private schools. The official syllabuses were only fully adopted in the official Luso-Chinese schools. Since the syllabuses only served as a guide for the private schools, most such schools could still implement their own moral and citizenship education programmes, and actual practices still rested on the initiatives of individual school administrators and teachers.

Official Curriculum: Hong Kong and Macao in Contrast and Comparison

Having depicted the development of civic education in Hong Kong and Macao over the years, this section focuses on the orientation as reflected in the official curricula with the case of civics at junior secondary level taken as an illustration. The governments of both Hong Kong and Macao defined civic education in the broadest sense, and treated civic education as a mixture of moral, political and life-skills education (Table 11.1). In Hong Kong, the composition of the civic education committee in 1996 required accommodation of different opinions while preserving differences to win wide recognition and acceptance in the community, leaving some incompatible political ideologies aside. In Macao, civic education was also treated as a branch of moral education, based on moral and legal norms to cultivate good citizens. As for other commonalities, both syllabuses combined conservative and critical modes of orientation. They juxtaposed both nationalistic and democratic education, so that patriotic education went hand in hand with an affirmation of the values of human rights and democracy, with

both pro-establishment and participatory elements contained. Also, civic education in both places stressed international contexts by including certain elements of multiculturalism and/or cosmopolitanism.

Table 11.1: The Formal Curriculum in Hong Kong and Macao

Distinctiveness	*Hong Kong Civic Education Syllabuses (Junior Secondary) (1998)*	*Macao Moral & Civic Education Syllabuses (Junior Secondary) (1999)*
Socio-political change	Decolonisation and reintegration with China; partial democratisation and representative government	Decolonisation and reintegration with China; partial democratisation
Agent of reform	Curriculum Development Council	Curriculum Reform Group, Education & Youth Affairs Department
Reference documents	1996 Guidelines on Civic Education as blueprint	1991 Law on educational system, Laws 38/94/M and 39/94/M, and Laws on Secondary Curriculum Organisation (1994)
Highlights of citizenship education	• Preparation for 1997 handover, salience of topics about China and political ideas, politicisation of the curriculum; • Seven domains of knowledge, values, attitudes, beliefs, competence, reflection, and action (participation); • Learner's perspective and learning process of students; • Autonomous, rational individual, and socially concerned and responsible; • Regular and systematic school-based evaluations of pupil learning outcomes and school programmes; • Special focus on handling controversial issues, developing critical thinking, wise decision-making, creative thinking, independent judgement, self-reflective abilities, upholding principles	• Preparation for 1999 handover; multicultural education; • Skills-learning, especially ways of thinking and research methods, critical understanding of mass media; • Self-examination; • Personal and social education; • Ascertain freedom, democracy, and rule of law; • Balancing individuals and community
Time allocation	Three years, approximately 120 hours for the whole syllabus	Three years, approximately 81 hours for the whole syllabus
Distinctiveness	*Hong Kong Civic Education Syllabuses (Junior Secondary) (1998)*	*Macao Moral & Civic Education Syllabuses (Junior Secondary) (1999)*
Coverage of curriculum: topics and key competence or skills	Six areas: family, neighbourhood, community, nation state, global society, citizenship and civil society	Ten major themes: personal growth, human relationship, value systems, ways of thinking and inquiry, individual and group, relationships among China, Portugal and Macao, United Nations, law and mass media

Table 11.1 (Continued)

Distinctiveness	Hong Kong Civic Education Syllabuses (Junior Secondary) (1998)	Macao Moral & Civic Education Syllabuses (Junior Secondary) (1999)
Pedagogy	Emphasis on participatory learning activities, reflection, building up an open and mutual-respect classroom climate, adopting affirmative neutral strategies in teaching controversial issues, provision of suitable ex-tra-curricula activities for students' participation in social services and affairs	No concrete suggestions except for an emphasis on internalisation with regard to moral education, recommending multiple and lively methods of teaching, including visits to government de-partments
Assessment and evaluation	Evaluation encompasses knowledge, attitudes, values and competence in civic learning, as well as their applica-tion. Apart from standard test formats, assessment is conducted through pro-filing students' performances in the process of reflection and action. Evaluation as a continuing and interac-tive process and reflect the learning progress of students.	Assessment is recommended in the form of observing students' performance, instead of examination. Conduct assessment

On the other hand, Hong Kong and Macao differed in the orientation of civic education. First, the Macao syllabuses were more conservative, with an emphasis on preparing the students to 'adapt' to their social life and the society at large instead of initiating change. Civic and moral education was designed to prepare students to be-come good citizens with reference to certain moral and legal principles, and to ensure a solid foundation for adapting a more complex socio-political environment. Students were expected to be conformist and law-abiding. Allied with a stronger orientation to moral and life-skills education, the influence of the Confucian tradition on Macao's curriculum was salient and significant, as evident by the presence of some elements of Confucianism such as self-cultivation and traditional virtues.

Third, Macao's syllabus was characterised by a shallow and confused presenta-tion of multicultural education, and important topics such as the gap between the rich and the poor and anti-discrimination were merely touched. Fourth, while the Hong Kong authorities downplayed the British influence and colonial legacy, the Macao government took pride in Portuguese culture and still inserted the Portuguese in-fluence into the curriculum. Hence special topics were devoted to Portugal and Por-tuguese culture in the syllabus.

Fifth, the Macao syllabus was more fragmented as it lacked a clear notion of citi-zenship linking the individual topics together. With a bulk of topics about personal growth, human relationships, value systems, and ethical development, the syllabuses were more like a package of personal, social and moral education. Among the political topics in the syllabuses, far more items were about political system and political output, rather than political input and self as a political actor. Students' exposure to political topics was cir-cumscribed to a formalistic description of the structure and functions of the government and the government's roles in providing social services to the community, whereas little space was devoted to informal politics and socio-political skills. Except for human rights, democracy, and rule of law, many essential political concepts or ideas like justice and legitimacy were either superficially covered or excluded completely.

Sixth, in terms of implementation, while the Macao authorities focused only on the

formal curriculum, their counterparts in Hong Kong were concerned with formal, informal and hidden curricula. Also, in contrast to Hong Kong which allowed both permeated, specific subject and integrated-subject approaches, civic education in Macao was solely taught as a specific subject with certain number of periods, specific teaching topics, and suggested learning activities.

Comparing and Contrasting Paths of Civic Education Development

Viewed in a conflict perspective, citizenship movement in Hong Kong could be interpreted as a series of political empowerment struggles on the part of Hong Kong citizens vis-à-vis the political containment of their governing authorities, either the Hong Kong (British) or Chinese governments (Tsang 1998). Full of struggles and conflicts, the citizenship movement has been thus simultaneously a complicated interplay of patronage by the colonial government, domestication by the Chinese government, and the quest for empowerment by the local civil society. The citizenship movement and hence its related civic education in Hong Kong was trapped in a triangle of tensions between the colonial government, the Chinese government and the Hong Kong citizens. And the contest on citizenship distinctly concentrated on the issue of democracy – the essence of political citizenship. The path of democratisation had many hurdles and setbacks.

In terms of political citizenship, the Hong Kong colonial government tried to maintain the *status quo* and its patron status, and was cautious about the scope and pace of democratisation. Political rights were handed down from the British coloniser only in the waning years of rule, just before the transfer of sovereignty. More important, the transfer of sovereignty was negotiated with the PRC government but not Hong Kong people. Sometimes the British coloniser even conspired with the Chinese government to deny the rights of Hong Kong citizens. Meanwhile, the Chinese government and its supporters restricted the political rights of local people and contained their quest for further democratisation, e.g. curbing or erasing certain democratic electoral reforms and human rights legislation put in place by the British. Some Hong Kong citizens and groups made some gains in the quest for democracy and human rights, but they faced enormous setbacks and resistance from the Chinese and the colonial governments.

The Hong Kong political system is in essence not a genuine democracy, as revealed by the trajectory of an executive-led polity, a weak legislature, and the limited electoral participation. As for the part of civil society, political party, as well as social organisations like unions or neighbourhood associations are politically inactive and underdeveloped. Hong Kong's civil society organisations are pluralistic and appear to be cooperative towards the government. Given that, Hong Kong citizens are seldom structurally activated to political participation. Indeed, on a number of occasions such as the demand for direct elections in the 1988 Legislative Council, the debate on the construction of the Daya Bay nuclear plant, and the drafting of the Basic Law for the future SAR government, the efforts to determine the well-being of their community and fight for their political rights waged by Hong Kong citizens was met with negative response from both the colonial and Chinese governments.

The situation of citizenship development in Hong Kong has more or less repeated itself in the realm of civic education. The colonial government tried to maintain the *status quo* and the subject political culture, and was unenthusiastic about a participatory

civic education programme. Meanwhile, in congruence with the domesticating stance taken by the Chinese government, its supporters have emphasised nationalism and patriotism in civic education, with the intention to dilute anti-Communist sentiments and to tame the defiance of the PRC government on the one hand, as well as to control the quest for growing democratisation or potential separatism in Hong Kong on the other. At the same time, some individuals and groups, small in number, weak in strength and fragmented in organisation, were persistent proponents of civic education for democracy, human rights, rule of law, or global citizen, but marginalised in the dominant civic education discourse and practice. It was ironic that the destiny of Hong Kong's decolonisation was leading to 'nationalisation' without full democratisation. As the process of decolonisation moved on, democratisation was forced to retreat and some human rights gained in the later years of colonial rule were taken away, subordinated to the imperatives of national sovereignty and nationalism.

In contrast, the citizenship movement in Macao was less contentious and rapid. In a tiny place with over 1,500 community organisations, because of lack of parties, community organisations had significant influence on the local government (Yee 1999a). With the patronage of Chinese government and widespread social and economic penetration of pro-China forces in Macao's civil society, citizenship development was more like a top-down clientelism in which the government gave out favours in return for the citizens' loyalty and political support. The masses in Macao were tamed and silent under the leadership of pro-China forces. Citizenship education, adopted by the sunset government in its final years, was made a figurehead by the Chinese community domesticated by China's government.

Against these backgrounds can be seen the different roles of state intervention in civic education in the two places. First and foremost, the colonial government in Hong Kong exercised tight control of the education system and played a dominant role in regulating political education of the vernacular schools. In contrast, Macao was characterised by a fragmentation of educational provision, government's non-interventionist policy, and a lack of formal civic education until the 1990s. Also, even with a relatively long transition period of 12 years (1987-99), civic education was less developed in Macao than in Hong Kong. While the Hong Kong government published official guidelines on civic education in 1985 and 1996, the Macao government did not publish its official document until 1995, just after the commencement of the first wave of state intervention and education reform. Indeed, while the Hong Kong government took an initiative in promoting civic education in the early 1980s, the Macao government only initiated its civic education programme after the running of civic education programmes by other educational bodies. In Macao, the state's sluggish orientation resulted in slow progress of development in education in general and civic education in particular. In contrast, with over 10 years of preparation, in the mid-1990s Hong Kong was better equipped with support, resources, and organisations than Macao. Once again, this shows differences in state capacity, autonomy and initiative in delivering civic education. Since the Macao government was fully preoccupied with administrative and social reforms in addition to education ones, civic education was not a top priority, of much less importance than measures such as the adoption of free and compulsory education. For a centuries-long decentralised education system which only started centralisation recently, a distinctive Macao education system was still in its early stage of formation, hence relying much on outside assistance for development and modelling (Tang & Bray 2000).

Although the critics of colonial education generally highlight the relationship between colonial domination and education, in reality colonial education may not be a direct imposition of the coloniser's education system, as the case of colonial Macao aptly illustrates. Moreover, history has shown divergence among different colonisers in their educational policies and practices; and colonial educational practices have been shaped by indigenous societies and cultures (Watson 1982c; Altbach & Kelly 1991). This observation underscores the complex interaction between the coloniser and the socio-political organisation of the colonised. In the cases of Hong Kong and Macao, relationships between politics and education have been complicated and dynamic. Apart from macro socio-political change as catalyst, the process of educational change is mediated by the state-society relations embedded in a particular historical context, as well as by the specific configuration and autonomy of the education system. In the past, observers often took for granted the role of the state in shaping political education. This might be valid in highly centralised states, but it is not necessarily applicable to all colonial or dependent states. Nor should analysts accept political education as merely a result of state imposition and followed unproblematically by the schools at lower level. This point is particularly pertinent in the cases of Hong Kong and Macao, where the aided and private sectors provide a large part of basic education and government policies reside much in their collaboration and cooperation. This chapter has shown that the role of the state in constructing civic education programmes is not only influenced by the external factors of decolonisation and national reintegration, but is also conditioned and constrained by the capacity, autonomy and initiative of the state vis-à-vis the indigenous civil society (education system). The cases of Hong Kong (a strong state) and Macao (a weak state) demonstrate the difference in state strength in constructing and executing civic education programmes.

Also, the state's relation to society is essentially a contested one, varying from time to time, and from place to place. For example, regarding the role of Catholic church, a major school-sponsoring body in both places, Leung's chapter in this book shows that the relationship between church and state in Hong Kong and Macao have been different. Although in both places the churches have tried to distance themselves from socio-political affairs by emphasising traditional prayer groups and Bible studies, the Hong Kong Roman Catholic church leans toward the Universal Church and its Vatican leadership, while the Macao church stresses nationalism. In addition, while the Catholic community in Hong Kong was becoming more outspoken about human rights, church officials in Macao were avoiding controversy and developed smoother relations with Beijing.

Advocates of both New Sociology of Education and Neo-Marxism (Young 1971; Whitty & Young 1976; Giroux 1983; Apple 1990) convincingly argue that cultural transmission in schools is an ideological product of deliberate organisation and selection which reflects both the distribution of power and the principles of social control. However, without an adequate state theory and guidelines for concrete analysis of education systems at work, they fail to explicate the working of structural forces on education and the mechanism of social control at work. Instead, the present study of Hong Kong and Macao helps to fill in this vacuum by reinstating the impact of exogenous forces, an analysis of state-society relations and a focus on the characteristics of an autonomous education system in shaping civic education in these places.

Limits and Possibilities of Change

Four issues related to real and desirable changes deserve particular attention. The first issue concerns the effects of civic education. The second is about organisational inertia at the school level. The third concerns the possibility of convergence of the SARs with their mother country; and the last concerns the possibility of transformation.

Real Changes? Effects in Question
With the changes in socio-political milieu since the mid-1980s and the change in government policy toward civic education, the status of civic education in Hong Kong and Macao schools showed both change and continuity. The salient change was that with the transfer of sovereignty and the active promotion by the SAR governments, nationalistic/patriotic education was established as a state hegemony project.

Whether this change would have an effect, however, was uncertain. Despite the changes, political education showed striking continuity with the past. Many studies from the 1980s onwards had questioned whether civic education had actually altered patterns of behaviour (e.g. Wan 1990; Yu 1990; Cheung & Leung 1994), and there was little reason to suggest that these findings had ceased to be valid in the post-transitional era. Even if there had been modest success in transmitting knowledge, the effects on attitudes and values were even more limited. The Hong Kong report of a multi-country study of citizenship education conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA) revealed that Hong Kong students were politically knowledgeable but showed little inclination for confrontational behaviour at school or in politics (Torney-Purta et al. 2001; Steiner-Khamsi et al. 2002); and there is little reason to suppose that Macao students are very different. In addition, student unions' participation in school affairs was usually limited to organising activities, and provocative discussions on politics were discouraged (Fok 2001). As such, the schools reinforced political apathy and failed to provide future citizens with strong political orientation and competence in democracy (Tse 1997a).

Real Changes? Practices in Question
To a certain extent, the limited effects of civic education on students' values and beliefs result from problematic practices in schools (Tse 1997b; Lee & Leung 1999; Chung 2000; Morris & Morris 2001). As noted, official advocacy in a decentralised education system did not bring radical, fundamental or swift changes in implementation at the school level since its implementation lay in the hands of individual sponsoring bodies and teachers. In neither Hong Kong nor Macao was civic education made a compulsory subject for all schools. The concrete policies, organisation and measures of implementation among different schools were diversified and even fragmented. The situation was particularly obvious in Macao, given the weak government and the strong autonomy of the private schools.

In Hong Kong, the government proposed a whole-school approach which utilised both formal and informal curricula but which did not make civic education an independent and compulsory subject. Under the so-called cross-curricula policy, only a minority of schools made civic education an independent subject (Hong Kong, Education Department 1986; S.W. Leung 1995; Fok 2002). The differences in curriculum among and within schools deprived many students from learning civic education, particularly those in senior years and in science streams. Further, the

syllabuses and textbooks in social subjects discarded both nationalism and state identity (M.F. Choi 1997; Tse 1997b). Democratic education was also constrained by the incomplete conception of curricular objectives and topics in the formal curriculum, and the distorted, formalistic, and non-critical presentation in textbooks.

Political education suffered further problems of 'depoliticisation' and 'moralisation' (Tse 1997a; Chung 2000; Fok 2002). Depoliticisation included reduction or removal of the political components of civic education, and moralisation the dominance of moral education over other components of civic education. Although a few schools had clear and explicit focuses on political education, most schools adopted a moralised conception of civic education with little concern for political education. The overlap of moral, social and political education led to the subordination and even displacement of political education. The assimilation of civic education with moral education further marginalised civic education. Even when political education was mentioned, emphasis was put on cognitive aspects rather than on cultivation of attitudes and skills, an understanding of democracy, party politics, political theories, and an identification with China. As a result, civic education programmes in many schools not only failed to cultivate political literacy, but also fell behind most of the objectives of the *Guidelines* concerning political education.

In Macao, official civic education programmes commenced later and their effectiveness could not be judged immediately. As in Hong Kong, however, since the implementation of civic education lay in the hands of individual sponsoring bodies, the official civic education programme was not expected to bring significant changes to the majority of schools. For example, many Catholic primary schools did not adopt the official curriculum. There was a considerable gap between the aspirations of the reformers and the schooling practices (K.L. Lau 2002).

Another salient trend of curriculum reform in citizenship education concerns pedagogy and assessment. The switch of emphasis from knowledge-based to value-oriented and skills-based curricula brought a promotion of student-centred pedagogies (Fong 2000a). The main objectives of school civic education were not just to inculcate knowledge but also to encourage students to think in a reflective and critical way, and to encourage participation in public life. Accordingly, a more progressive vision of citizenship education was witnessed in the introduction of an 'issue-based approach' or discussion of controversial issues for developing critical thinking, reflection and action. In addition, to reduce the widespread practices of textbook-centred instruction, 'participation' was highlighted as an important element in civic education. Assessment was recommended in the form of regular and systematic school-based evaluations of students' performance in schools, instead of examination of knowledge.

However, it remained questionable whether these measures could produce any significant effect. The over-crowded curriculum, and the competing priorities of many subjects, obstructed the perceived value of learning civics. In both Hong Kong and Macao, teachers' involvement in civic education promotion was very low even though most teachers agreed with the ideal of promoting civic education in schools (H.W. Wong 1988; Lin 1993; Ng 2000). Being brought up in the colonial era, few teachers had received much education or training to deal with the content related to citizenship. Most teachers lacked interested in politics and put little emphasis on political education.

Desirable Changes? Images of Citizenry in Question
Following the resumption of Chinese sovereignty, civic education in Hong Kong and

Macao mainly aimed at building nationalism and patriotism, and at strengthening the teaching of the Basic Law and the concept of 'one country, two systems'. There were signs of the precedence of 'great China' over the 'small SARs', and some people expressed worries whether Hong Kong and Macao would follow what was being carried out in mainland China (Y.W. Leung 1998; Leung & Cheng 1998).

Obviously civic education in these former colonies still differed markedly from that in their socialist motherland. In mainland China, citizenship is embedded within an authoritarian socialist mode of governance and a collectivist understanding of individuals and rights, in sharp contrast with the western democratic tradition that emphasises people's sovereignty and human rights. The state-centred concept of citizenship implies that the nation takes precedence over the citizen (Lo & Man 1996; Keane 2001; Goldman & Perry 2002). Citizens are defined as a group of nationals obliged to defend the national interest against other nations in the international arena, rather than as separate individuals endowed with the right to press particular claims upon the state. As education is an essential part of ideological and political work in China, citizenship education is bluntly called 'ideological-political education'. With a strong propagandist colour and carried out in a pervasive, holistic and comprehensive manner, the Chinese authorities explicitly state that the curriculum is designed to implant specific ideologies in the students, and to bring about conformity and loyalty to the nation and the Party leadership (Li 1990; Meyer 1990; Chen & Reid 2002).

In Hong Kong, with the assertion and reinforcement of ethno-cultural nationalism in the official civic education discourse (Morris & Morris 2000), the alternative discourse of civic or multicultural nationalism has been marginalised or excluded (Brown 2000). The grand narrative of 'Chinese identity' hides its internal heterogeneity, and overrides the diversity and complexity of regional and ethnic variations. Hong Kong history has been reinterpreted as 'local history' in relation to the greater and more inclusive 'national history' of China. With the tendency to override localism in favour of nationalistic education and national identity (Siu 1996; Kan & Vickers 2002; Vickers 2002), the cultural, historical and ethnic commonalities of Chineseness were often achieved at the expense of the subordination of minorities and ethnic groups, and the silence of dissenting voices. Obviously the major purpose of the official project was to create unquestioning political commitment and strong social order through the promotion of a unified Chinese identity and values at the exclusion of a distinctive Hong Kong cultural identity and individual rights. The 'good citizen' being officially advocated was one that emphasised the duties and obligations of the individual to society, had moral behaviour associated with traditional Chinese culture, and asserted a Chinese identity. More worrying was that Chinese identity was too easily reduced to an identification with the ruling authority behind the scene.

Interestingly, the quest for nationalism was accompanied by focus on globalisation. In response to the accelerated pace of globalisation and international competition, there was a strange blend of nationalism and transnationalism in the representation of citizenship. For example, Hong Kong was eager both to find its niche in the globalised economy and to re-position itself as an international Chinese city. Hong Kong's image was strategically tailored for different audiences based on very different economic and political considerations. On the one hand, Hong Kong was presented to its 'homeland' as an inalienable part of China. On the other hand, Hong Kong was presented to the world as an 'East meets West' city, as 'Asia's world city', and as a gateway to mainland China. In Macao, similar efforts were devoted to the promotion of

the territory's image as a tourist destination and the propagation of a historic city with multicultural heritage.

Increasing global interdependence and international exchange require school education to foster the essential abilities and skills necessary for living in a global village. This requires respect for the cultures and histories of other countries, an understanding of the international community, and concern for environmental and economic matters at a global level. However, the potential tensions and contradictions between national and international identities remained largely unnoticed. Further, with the glorification of the territories' modernised, capitalistic, cosmopolitan character and the celebration of the recovery of Chinese identity, the shallowness of both national and international flavour as well as apolitical local identity was preserved.

The official civic education programmes in the post-colonial era obviously carried very utilitarian and instrumental considerations such as disseminating national propaganda and developing human resources in a global competitive world. As such, they ran the risk of fulfilling the political and economic imperatives at the expense of humanistic and democratic concerns. Citizenship as a form of 'competence' continued to be neglected. The programmes could serve better to prepare the younger generations for national integration and global competition than to promote self-governance for the local people.

Prospects for Transformation

Paradoxically the state project of civic education deviated from the empowerment of the citizenry. Most official or mainstream civic education programmes were oriented towards breeding students as patriotic nationals, conformist subjects and competitive individuals in a global world rather than competent citizens for genuine democracy and social transformation. It is ironic that the official efforts to strengthen patriotic education and national consciousness of the younger generation ran counter to what the current education and curriculum reforms were intended to achieve – a learner-focused approach catering to the needs of individual students for an all-round and unique development. A question left unanswered is how the aims of building identity and patriotism could be reconciled with the aims of fostering critical thinking.

Transformation is definitely a tremendous and difficult project. In addition to exogenous forces, civic education is conditioned and shaped by a myriad of endogenous factors operating at micro, meso and macro levels. Difficulties in Macao were intensified by the lack of human and financial resources, particularly in teacher training and teaching materials. Other problems included lack of coordination and the continued influx of young migrants from mainland China (P.M. Wong 1992; Koo 1997, 1998a).

More importantly, although new curricula were prepared to reflect changes in sovereignty, the prospect of democratic education was limited by the possibility of political development in Hong Kong and Macao, and, in turn, political development in China. After all, Hong Kong and Macao were executive-led polities under Chinese patronage. As dependent territories of China, the prospects of citizenship (education) in these places were greatly dependent on the progress of China's liberalisation and democratisation. Further, the major institutional constraint lay in the conservative and non-democratic constitutional framework imposed on Hong Kong and Macao. A truly democratic citizenship education was not possible without a corresponding change in the social milieu.

Nevertheless, changes were possible. This was evident in 2003 with the huge

community mobilisation following the outbreak of the Severe Acute Respiratory Syndrome (SARS) epidemic which claimed the lives of nearly 300 people, including several frontline medical practitioners . Macao largely escaped the epidemic, but was also stimulated into high alert. The epidemic resulted in a community-wide care campaign on the part of the civil society and new civic education programmes emphasising social responsibility. Shortly after the epidemic, the row in Hong Kong over attempts by the Tung administration to legislate on Article 23 of the Basic Law, and general dissatisfaction with a host of other policy failures, led to the biggest demonstrations Hong Kong had seen since the Tiananmen Square crackdown in 1989. The turnout on the July 1 handover anniversary of over half a million people was followed by a peaceful rally of 50,000 people on July 9 and 20,000 people on July 13. Tung was forced to delay passage of the bill concerning national security and to reshuffle his cabinet. The demonstrations turned into calls for universal suffrage in elections for the Chief Executive and the legislature, and the usually apolitical and money-minded Hong Kong citizens put up a strong fight. The dramatic social movement marked a turning point that raised Hong Kong's civic consciousness and awareness of the importance of people power, and heralded a new era in social and political development. The demonstration of people power had deep implications for civic education not only in Hong Kong but also in Macao.

12

Secondary School History Curricula

TAN Kang, John

This chapter presents a study of the implemented history curriculum in eight secondary schools in Hong Kong and Macao during the 1980s and early 1990s. The Sino-British and Sino-Portuguese Joint Declarations on the future of Hong Kong and Macao were signed respectively in 1984 and 1987. These political changes, along with other features of decolonisation, were related to the development of the history curriculum in schools of different political backgrounds in each colony. Inter-territorial and intra-territorial comparisons show that the history curricula in these schools were quite different from those in other colonies, that curricular diversity was greater in Macao than in Hong Kong, and that the curricula of schools of similar political backgrounds located on opposing sides of the Pearl River were often very different.

The history subject was chosen for the study because the teaching of history is intrinsically political. Sweeting (1991a, p.30) observes that history, as part of the school curriculum, often demands a form of collaboration with the existing political regime. One example was the South African history curriculum which was taught to defend the ruling Afrikaner Nationalists who saw apartheid as divinely ordained and scripturally defensible (van der Berg & Buckland 1982, p.23). The period covered by the present study included the transition of the 1984 Sino-British Agreement and the 1987 Sino-Portuguese agreement.

There are several ways to politicise the history curriculum. The content of a favoured area (for example, imperial history) can be increased to unbalanced proportions. Alternatively, omission of unfavoured historical events can also present a biased picture. Judgements, especially selective commentaries, on historical events can transmit political messages. Judgements can be made on nationalist, racial, moral and religious grounds. A common form of partial judgement is the externalisation of responsibility for negatively-judged events (for example, putting total blame on colonial exploitation for economic backwardness in postcolonial countries) and the internalisation for positively-judged events (for example, putting Chinese nationalist unity as the most important reason for the defeat of the Japanese in World War II).

History Curricula in Former Colonies

History curricula in colonies of European powers tended to be Eurocentric. Memmi (1965, p.105) criticised the irrelevant nature of the French colonial history curriculum which, he said, was aimed at socialising the colonised into European language, values

and norms:

> The history which is taught him [the colonised] is not his own.... He knows who Colbert or Cromwell was, but he learns nothing about Khaznadar; he knows about Joan of Arc, but not about El Kahena. Everything seems to have taken place out of his country. He and his land are nonentities or exist only with reference to the Gauls, the Franks or the Marne.

Seven years before Uganda's independence, a British teacher in the colonial education service of Uganda (Musgrove 1955, p.300) noted that although Ugandan history was taught, there was no evidence that:

> the School Certificate syllabuses ... have been designed in the light of such studies of native peoples. One aspect only of the African's situation has been regarded as relevant – his membership of the British Empire.... The basic assumption underlying the selection of such a study I have found to be false: that because Uganda is part of the British Empire the people of Uganda will be interested in the Empire's growth. My pupils do not speak of it as 'their' Empire.... Membership of the Empire has not the significance for them which is often assumed.

The West African School Certificate history syllabus called 'The Development of Tropical Africa' was used in Nigeria when it was under decolonisation, until 1965, five years after Nigeria had become independent. Despite the name of the syllabus, it was criticised by Jones (1965, p.145) for "its Eurocentrism in content and approach, when even its African section was held to deal mainly with the activities of non-Africans in African situations". However, Jones also attributed part of the blame of this Eurocentrism to teachers who "concentrated on those parts of it which offered the best prospects of examination success: viz. accounts of European exploration and British constitutional history" (p.145). An examination-oriented teaching approach, which was common in Hong Kong, could accentuate the Eurocentric effects (or could reduce them if such topics were unpopular in examinations) in the history curriculum.

The existence and the orientation of local history in the curriculum was an indicator of how much and in what ways the formation of national identity among the colonised people was allowed. When local history was included in the colonial curriculum, it was often described from the colonisers' perspective. Harber (1985, p.171) noted typical derogatory descriptions of indigenous Africans found in Rhodesian history textbooks: they were a savage and blood-thirsty people; bushmen were "often ugly"; black labourers were "raw and ignorant", while white employers were "energetic, skilful and ambitious". According to Okoth (1993, p.141), Ugandan students were taught that "Africa had no history of its own; that African history started with the arrival of European explorers, that Africa was discovered by Europe". These students were also made to learn of the "great" European explorers who travelled in Africa which was referred to as the "Dark Continent". In Australia, the existence of precolonial Aboriginal history was dismissed by a 1923 textbook with a sweeping statement: "From the 26th January, 1788, Australian History begins" (quoted in Firth & Darlington 1993, p.87).

While local history depicted in the above British colonies and quasi-colony was Eurocentric, history learning in Portuguese colonies bore even less relevance to the local cultures and situations. The English-language literature has not contained much

discussion on history teaching in Portuguese colonies. Duffy (1959, p.312) noted that Portuguese history learned by Portuguese and Africans in Angola and Mozambique, which included "the glories of the maritime discoveries", was similar to what students in Portugal learnt. The history curriculum in Portuguese East Timor was also highly Lusocentric and contained no Timorese culture. Timorese history was not studied, and the children learned about Timor from their experience and their parents (Budiardjo & Liem 1984), in a way similar to how Estonian children learned about their country while under Soviet rule (Tulviste 1994). Similarly, in French Cambodia, metropolitan history was difficult to master since the pupils' own past was almost totally ignored. Thion (1993, p.80) noted that students of history courses had little idea about a chronology or how a country could be different from Cambodia.

The superiority and importance of the colonisers' cultures depicted in the above colonial curricula seem to support Carnoy's assertion (1974, pp.26-27) that "in true colonialism, the colonised must be transformed from individuals with belief in themselves as capable human beings to ones who believe only in the capability of others – the colonisers". According to Whitehead (1988, p.215), however, the colonial educational experience, at least in British colonies, was not generally a deliberate policy designed to perpetuate European economic and political control. He suggested that colonial rule, in particular British colonial rule, was not planned exploitation but a complex improvisation often characterised by confused goals arising out of benevolent intentions. He believed that most colonial schooling mirrored schooling in Britain, but asserted that ample evidence suggests that colonial schooling was more a reflection of local demand on the part of indigenous peoples themselves than an indication of any deliberate British policy to colonise the indigenous intellect.

Implications of Decolonisation for the Curriculum in Hong Kong and Macao

The above descriptions of the history curricula in former colonies might not apply to the history curricula in Hong Kong and Macao over the period studied in this chapter. Though some of the above observations were made about the history curriculum in the last years of colonial rule, classical decolonisation in these places was in several aspects different to the experiences of Hong Kong and Macao (Bray 1994). First, the time scale of decolonisation for Hong Kong and Macao was much less hurried. In particular, Portuguese decolonisation in Macao was very different from the hasty and chaotic colonial withdrawal from Portugal's African colonies. The longer time scale allowed the governments and schools to make planned changes in the curriculum before the change of sovereignty. However, the longer time span also allowed the colonial government more time to set up structures for postcolonial influence.

Second, Bray (1994) observed that most colonies remaining in the 1990s would not be decolonised to full sovereignty but to some form of associated statehood or to reintegration with an original mother country. Hong Kong and Macao belonged to the latter category as they were scheduled from the 1980s to become autonomous Special Administrative Regions of the Peoples' Republic of China (PRC). The cultivation of national and cultural values of China, rather than that of a new sovereign country as in classical examples of decolonising and newly independent territories, was a focus of the process of curriculum change.

Two other differences between other colonies and Hong Kong and Macao might encourage or justify the incorporation of curriculum content which may promote national identity and democratic ideals. First, the nationalist feelings among the British and Portuguese colonial subjects in Africa and other parts of Asia during decolonisation were stronger than those among ethnic Chinese in Hong Kong and Macao during most of the colonial period. Strong nationalism, usually accompanied by anti-European attitudes, might prompt colonial authorities to hesitate or refuse to incorporate content which might build national identity and arouse nationalist feelings in the history curriculum. Chinese in Hong Kong and Macao generally accepted their European colonial administrations and, except for a fraction of the populations during the 1966-67 riots, did not confront them to demand the return of the territories to Chinese rule. Second, especially for Portugal, most of the colonies gained independence amidst wars and military hostilities. But the decolonisation of Macao took place under a relatively cordial relationship between China and Portugal. Though Sino-British relations were strained at times, military confrontation was out of the question. The peaceful decolonisation process created fewer obstacles for the colonial government to promote a sense of national identity, democracy and other aspects of civic awareness in the history curriculum than would have a process characterised by boycotts and violence.

The Subject Curricula and Schools Studied

The 'History subject' referred to different things in Hong Kong and in Macao. In public-sector Hong Kong secondary schools, History was in effect World History, learned in Chinese or English. Chinese History as a separate subject taught in schools was not included in this study. In Macao, the history discipline was not systematically divided into different subject curricula by a recognised educational authority. Different secondary schools offered six kinds of history curricula: History (*História*), Chinese History (中國歷史), Chinese History (中史), World History (*História Universal*), World History (*História Mundial*), and Foreign History (*História Estrangeira*). The curriculum in each of the Macao schools studied here belonged to one of these categories.

The curriculum studied here was essentially the implemented curriculum, as opposed to the intended curriculum officially planned by any government or educational authorities. During visits to the schools, the researcher looked for the structure and the content of the history curriculum, textbooks and notes used by students (which may or may not be based on the planned syllabus), and the focus of teaching as reported by history teachers. One focus among the questions the teachers were asked was the ways in which politically sensitive topics were handled.

Four secondary schools in Hong Kong and four in Macao were selected. Since this study is about political forces on the curriculum, the criterion for selection was the background (especially the political background) of the school and not the proportional representation of its type among the total number of schools in each territory. One school from each of the following four loosely defined categories was selected in each colony: pro-establishment, pro-PRC, pro-Taiwan, and relatively political neutral. The four Hong Kong schools selected were:

1.   School HK1, an Anglican aided school, one of the oldest and most prominent in

Hong Kong. Many of its graduates had become important members of the civil service and the political and business communities. HK1 was not a government school, and it did not have an overt political background. However, it was regarded by many as a pro-establishment institution.

2. School HK2, a 'pro-China' school which had traditionally been viewed as leftist. In the 1960s and early 1970s when the Cultural Revolution spilled over to Hong Kong, it was an outright leftist school which rejected the formal curriculum of the Hong Kong Education Department. The leftist schools were closely watched by the government for anti-British activities during the 1967 riots. Later, they were more accepted by the government, as indicated by their participation in the Direct Subsidy Scheme, a government initiative which gave subsidies to the schools while allowing considerable administrative autonomy.

3. School HK3 was an old aided school sponsored by the Methodist Church with no obvious political background. The history panel chairman interviewed had been teaching in the school since the 1970s. School HK3 was one of the 15 schools which participated in the pilot Form 1 local history project in 1990. This project was launched by the government's Education Department to test the feasibility of incorporating Hong Kong history into the junior secondary curriculum.

4. School HK4 was a private school, the sponsoring body of which traditionally had strong links with the Chinese Nationalist (Guomindang) government in Taipei. School HK4 also had close relations with the Education Department of the Taipei government, especially during the 1950s and 1960s. In later years, however, such links became weaker. In the 1990s, very few graduates of HK4 went to Taiwan for further studies. During the period being studied, the history curriculum catered for students taking local public examinations, and no adjustment was made for students taking Taiwan universities' entrance examinations.

The four Macao schools selected were:

5. School M1, an official Portuguese school operated by the Macao government. Most of its students were Portuguese from Portugal, who would return to Portugal after graduation. The school administration was closely connected to the Direcção dos Serviços de Educação of the Macao government and to educational institutions in Portugal. All history teachers came from Portugal.

6. School M2 was a left-wing school of over 50 years' history. Its trained history teachers were all from China, and many graduates went to China for further studies. It was regarded as a pro-China school, and it had close links with educational bodies in the mainland.

7. School M3 was founded in Guangzhou as an affiliated branch middle school of an established university in the 1930s. It moved to Macao in 1938 because of the Japanese bombing of Guangzhou. The school had no obvious political background. Most graduates went to Hong Kong, the Chinese mainland or Taiwan, or remained in Macao for further studies or work.

8. School M4 was founded in 1961 by Fr. B. Videira Pires SJ, a prominent historian in Macao and the school's principal throughout the period studied. Fr. Pires was a Jesuit, and the school was officially sponsored by the Society of Jesus. The Jesuits in mainland China were among the most severely purged Catholic groups during the 1950s and the Cultural Revolution. For many years, all graduates from

School M4 took entrance examinations of Taiwanese universities. These examinations were conducted at the only 'Taiwan overseas' institution in Hong Kong, Chu Hai College. Since the late 1980s, the number of students entering the University of Macau had been growing, and in 1993 it recruited about 20 per cent of School M4's graduates. Among School M4's four trained history teachers in 1993, three had been trained in Taiwan.

This selection of schools not only provides a framework for cross-territory comparison between schools of similar background in Hong Kong and Macao, it also allows intra-territorial comparison between schools of different political backgrounds. The latter comparison is especially significant for Macao, which did not have a single system of education.

The History Curriculum in Hong Kong Schools

School HK1
The selection of topics and the time periods chosen in HK1's history curriculum were traditional and conservative. At Certificate level, nothing beyond 1919 was taught. Students were not taught about World War II and the post-War world. Teachers felt that there was not enough time for teaching the post-1919 topics since they maintained that the more contemporary the history was, the more complicated the world was. Broader analysis indicated that at Advanced level, almost all schools taught the syllabus selectively, and that the histories of Japan, China and India were always chosen. Southeast Asian history had never been taught in School HK1, and was regarded as "useless" because teachers considered it irrelevant to the needs of Hong Kong students. To prepare students for the examination of a new syllabus in 1994, the traditional selections (a chronological account of Europe 1815-1939, Chinese history until 1919, and Japanese history until the 1930s) remained. Teachers were not interested in and did not teach Hong Kong history, a new feature of the 1994 syllabus. The panel chairperson commented: "There is nothing significant or important in Hong Kong history to justify studying it for public examinations."

For textbooks on Certificate-level European history, Crisswell's *Modern Europe 1870-1960* (1974) and Stokes & Stokes' *Europe 1870-1960* (1975) were used from the 1970s to 1986, the first year of the implementation of the new syllabus (which remained in place until 1993). These books in general provided objective historical accounts, but had a slight anti-Soviet and anti-Communist bias. Concerning the 1948 Berlin Airlift, for example, Crisswell (pp.196-197) used 'Cold War language' which was commonly found in textbooks in the 1970s:

> The Western Allies agreed that they could not afford to give way in order to appease Russia. Instead they undertook the tremendous task of supplying all the needs of two million people by air. Fortunately there were airports in all three Western zones.... The airlift had proved that the Western Powers were willing to resist Russian threats.... The loss of skilled workers demonstrated the unpopularity of the governments in Eastern Europe....

Likewise, concerning Karl Marx, Stokes & Stokes (p.11) elaborated what they saw as the weaknesses of Marx's ideas on capitalism and class conflict:

> Capitalism in the 1970s is very different from the capitalism of 1848. Marx did
> not foresee that the proletariat might in time acquire property, even a lot of pro-
> perty.... Marx did not explain how the new Communist society was to be organ-
> ized. He promised that each would receive according to his needs. He forgot that
> there is no end to needs... [He] failed to realize the strength of man's desire for
> power. In fact countries that have tried to adopt Communism have more controls
> than most other states.

All these lines were underlined by the teacher in the HK1 teacher's text book. The
authors concluded:

> In fact his [Marx's] theory of class conflict greatly oversimplified history.

These statements probably affected HK1 students' perceptions of Communism and
the Communist countries then, while the Cold War was continuing.

   In Stokes & Stokes' book, which was about European history, Hong Kong was
mentioned and placed historically closer to Europe than to China. For example,

- Patrick Manson's work in tropical medicine in Hong Kong, his role in the esta-
  blishment of the Hong Kong College of Medicine for Chinese in 1887, and the
  opening of the University of Hong Kong which had a Faculty of Medicine,
  were listed along with many important medical breakthroughs in the West,
  such as Louis Pasteur's germ theory of disease, George Mendel's work in he-
  redity and Fleming's discovery of penicillin, under "Some Advances in Medi-
  cal Knowledge" (p.56).
- A Permanent Court of Arbitration established as a result of an 1899 conference
  at the Hague called by Tsar Nicholas II was linked to Hong Kong. "The judges
  of this court have come from many nations: among them, for instance, were
  two Hong Kong-educated Chinese, Wang Chung-hui and F.T. Cheng" (p.170).
  These two Chinese were born many years after Tsar Nicholas II had died. The
  authors pulled Hong Kong into their book wherever they considered appropri-
  ate, within the European context.
- Hong Kong's "industrial revolution" since the 1950s was regarded as a repeat
  of the Industrial Revolution of Western Europe in the nineteenth century (p.56).

   In their account of the First Anglo-Chinese War, Stokes & Stokes did not seem
to agree with dominant views on the three causes of the war – trade, culture and
opium – which were generally accepted by Hong Kong history teachers then, includ-
ing School HK1's history panel chairperson. The authors apparently tried to justify
British actions in the war:

> In 1839-42 Britain fought and defeated China.... The war was in fact little more
> than a show of British force along the coast; however, it frightened the emperor
> into accepting certain British demands.... To the Chinese these hostilities were
> the Opium War, fought to protect foreign merchants who continued importing
> opium into China, despite an imperial prohibition. In fact the hostilities were the
> direct result of British determination not to agree to a demand which according
> to British law was both unjust and illegal. But the real cause of the conflict was
> the British traders' belief in *laissez-faire* principles.... The Chinese, it is said,
> were forced by the West to accept unequal treaties. (p.121)

Thus the power of the British forces was mentioned, and the spirit of British law upheld; but the effect of opium on the Chinese was not mentioned.

Between 1986 and 1993, textbooks used by School HK1 had less ideologically-prejudiced wording than their earlier editions. Notes on the Anglo-Chinese wars (Opium Wars) prepared by the teacher showed no explicit political or ideological bias similar to those observed in Stokes & Stokes' book.

The history panel chairperson, who had been teaching in School HK1 since 1969, and some HK1 students, mostly of lower academic abilities, had held anti-British views. According to the teacher, these students blamed Britain for importing opium before the First Anglo-Chinese War, and some even rejected studying Chinese history in English. In teaching this topic, the teacher insisted that opium should not be regarded as the most important cause of the war. She maintained that students should not study Chinese history only from the Chinese perspective, but should also consider it from the Western angle to form a balanced view. The notes on the First Anglo-Chinese War that she had given to students since the late 1980s were essentially summaries of standard textbook accounts. No significant political bias was observed in these pages.

While the history curriculum in School HK1 cannot be described as pro-British, one can observe Eurocentric elements in its earlier textbooks. Most of the history teachers in HK1 had studied at the University of Hong Kong. Though the options taken in the curriculum seemed to be results of pedagogic concerns and educational inertia, the academic background of the teachers, largely shaped by the university history curriculum, influenced what was taught in School HK1. The school's history curriculum, even up to 1993, did little to prepare its graduates to enter the contemporary world and a decolonising Hong Kong by teaching a minimum of post-1939 world history, let alone Hong Kong history.

School HK2

Since the introduction of the new Certificate syllabus in 1986, students were always taught sections A and B (circa 1760-1919). Section C (1919-1970) was never taught. Though sensitive topics like Guomindang-Communist relations in China during 1921-1949 and the Cold War were excluded by this curricular decision, the history panel chairperson maintained that the choice was made for pedagogic reasons:

> Students cannot learn section B (1815-1919) without understanding events in section A (1760-1815). The French Revolution and Napoleon must be mentioned while teaching the Congress of Vienna (1815); British parliamentary reforms in the 19th century must be linked to the Industrial Revolution. History learning should not be compartmentalized. And there are plenty of extra-curricular opportunities for students to learn 20th century history.

The choice of European history (the alternative was Asian history) at AS level was also made for "the good of the students": the teachers did not want students, who had already been studying Chinese history as an A level subject, to learn only Asian history at sixth form. This narrow approach to learning was regarded by the panel chairperson as a poor preparation for students who would study history in university.

Three sets of Hong Kong textbooks were used in Forms 4 and 5 during the period under study. From 1980 to 1986, *World History* (Fung 1980) was used. The teachers switched to a Longman book by Kwok Shiu-tong in 1986, and again switched

to Cheung Hang-kin's The Turbulent Years (1990) in 1991. The changes were said to be made on pedagogic grounds. Both Kwok and Cheung had been members of the history subject committees of the Curriculum Development Committee and/or the Hong Kong Examinations Authority. The panel chairperson commented that the three sets of books were generally objectively written and definitely could not be labelled as leftist. Except for Kwok Shiu-tong's book, of which a copy was unavailable to the researcher, the books used for the Certificate examination were not leftist in outlook. *World History* may even be considered as slightly pro-Taiwan, for example, by the usage of the term 'Guo Min Zheng Fu', meaning 'the Nationalist Government', a term which is usually only used by pro-Guomindang (pro-Nationalist) authorities. The author of *World History* apparently disapproved of Zhang Xue-liang who initiated the '1936 Xian Incident' in which Guomindang's head Jiang Jieshi was kidnapped.

According to the history panel chairperson, when Higher level world history was first taught in 1984, a well known Taiwan produced book, *Chinese Modern History* (by Chang Yu-fa), was used because "it was well written". Although the author used terms like 'gong fei' (Communist thieves) to label the Communist forces during and after the civil war 1945-49, the school authorities approved the book because the teacher regarded it as a good book for teaching purposes. Mainland history books were never used as textbooks. They could only be used as reference books in the school library because, according to the history panel chairperson, they did not conform with the Hong Kong syllabuses, they were written too much from a materialistic conception of history, and they contained too many words like 'bourgeois', 'imperialist', etc. The researcher, reviewing the panel chairperson's notes on 'The Opening Up of China', observed nothing significantly biased.

The panel chairperson claimed that he taught the First Anglo-Chinese War from a world perspective. Both China and Britain were responsible for causing the war, he said, and one should not blame Britain unilaterally for aggression. The notes he gave to students began the topic with a consideration of the conflicts and differences between China and the West in culture, commerce and law. Students were reminded not to look at the issue purely from nationalistic sentiments. The teacher asked the students which term they would like to use to name the war: 'Opium War', 'First Anglo-Chinese War' or 'War of Trade'?

It is reasonable to believe that the implementation of the history curriculum at this 'pro-China school' was largely determined by requirements of the public examinations and the educational orientation of the history panel chairperson, who had studied history in English in a local secondary and a tertiary institution. The panel chairperson insisted that history teachers and students should be true to history and should look at history from different angles. He said that changes in the history curriculum had been made for the educational benefits of the students. The school gave much autonomy to the history teachers. There was no evidence that the school authorities had manipulated the history curriculum to influence the political attitudes of their students during the period under study.

School HK3
The most significant feature of the curriculum was the school's efforts to promote local history by joining the Form 1 local history project pilot scheme. In order to promote learning interest and make the curriculum relevant to the students' lives, the

teachers decided not just to stay in the Form 1 pilot scheme, but also to extend the teaching of local history into Forms 2 and 3. These moves were staunchly supported by the teachers, and the school was the champion in the 1992 Hong Kong secondary school local history project competition.

School HK3 changed its Certificate level textbooks three times during the 1980-1993 period. A change was made each time because of syllabus change, the new book's simpler content, easier English presentation, the author's comprehensive approach, or the author's inclusion of cartoons and charts. In other words, changes were made because of what the teachers considered to be the quality of the books and their suitability to the students and the curriculum. However, the contents of the books (and their political influences) might not have totally reflected the students' perceptions of history because the history panel chairperson in School HK3 normally taught without referring to passages in the books. He usually wrote the main points on the blackboard, and students copied. Though the students still used the books for examinations, their reliance on books was less than that of students taught by other teachers.

Though topics like the First Anglo-Chinese War and the Cold War could not be treated in detail at Certificate level, students were informed of different factors (cultural, commercial and opium) related to the First Anglo-Chinese War. At Advanced level, class debates allowed students to air their views. According to the panel chairperson, teaching was based on a rational discussion of the various causes of the conflict, and he claimed that moral judgement of the war was not a feature of his teaching.

School HK3's history panel was regarded by the Education Department as enthusiastic in curriculum development and willing to try new educationally desirable endeavours. There was no evidence of a deliberate intention of the school or the teachers to influence the students politically through the curriculum. However, there was a possible relationship between the predisposing factor of Hong Kong's decolonisation process and the direct factor of the teachers' enthusiasm leading to the promotion of Hong Kong history.

School HK4

School HK4 selected topics 4-14 (1815-1970) for teaching at Certificate level because this period included contemporary events which the history teachers regarded as "more relevant to the students' needs".

At Advanced level, the period chosen was circa 1800-1919, and areas included European, Japanese, Chinese and Indian histories. The panel chairperson said that the teachers were trained in these areas and had confidence in teaching them. Hong Kong history was not taught "mainly because of the teachers' lack of training in this area".

At Certificate level, School HK4 changed textbooks in 1986 because, according to the panel chairperson at that time, the new textbooks were more simple and the English was easier. With its multiple choice exercise books and teaching guides, and later its data-based questions workbook, the new set of books was regarded by the teachers as more suitable for their students to prepare for the Certificate Examination.

The history panel chairman claimed that all politically sensitive historical issues, especially those after World War II, were taught "neutrally and briskly" to students. He gave an example of the treatment of the word 'liberation' which was used in the textbook to describe the change of the Chinese government in 1949 and the unification of North and South Vietnam in 1975. 'Liberation', despite its seemingly positive

implication of the changes of government, was "explained" in School HK4 as '解放', which was not an explanation at all: it was just the Chinese translation of the word. The panel chairperson said that the word was not actually explained, but only translated, to "avoid any political bias". He reported that students had been asked not to attempt questions on sensitive issues like causes of the First Anglo-Chinese War in public examinations. This claim was debatable because students in Hong Kong are usually recommended to attempt questions based on their abilities and the difficulty of the questions, and not the political content. Though the panel chairperson reported that Chinese and Western views (Opium War, War of Commerce) on the wars in China were discussed in class, such discussion on moral judgement of historical issues was only conducted in Form 6 classes, because in Forms 4 and 5, only what was written in textbooks would be mentioned. The panel chairperson repeatedly emphasised that in his school, all politically sensitive issues were treated "neutrally and unbiasedly" in class, and that history in School HK4 was not taught from a nationalistic point of view.

Despite the traditionally pro-Taiwan nature of School HK4, its history curriculum in the period studied did not seem to have a pro-Taiwan bias. The history panel was given much autonomy from the school authority. All its history teachers during the period were locally trained. Most of School HK4's graduates continued their studies at local tertiary institutions. Therefore it was not surprising to find its curriculum following the requirements of the public examinations tightly. The history panel chairperson was keen on depoliticising the history curriculum, or at least he appeared to be keen on being 'objective' in history teaching. He was very sensitive to politically controversial events, and seemed to try to present history, at least at Certificate level, with as little political judgement as possible. This way of teaching history 'apolitically' may however be intrinsically political. This attitude could be out of fear: fear that either ideological expressions of pro-Taiwan nature or pro-Communist nature would make the members of the administration or the management body unhappy.

The History Curriculum in Macao Schools

School M1
At Grades 7 and 8, students learned Portuguese history, especially about the maritime discoveries in the 15th and 16th centuries. At Grade 9, they studied 20th century world history. They concentrated on Portuguese domestic history at Grades 10 and 11. According to a teacher, Grade 10 and 11 students were not very interested in Portuguese domestic history, not because it was Portuguese but because they were too young to fit the investigative learning approach in the curriculum. This approach required students to conduct research and look up documents. At Grade 12, students learned something their counterparts in private schools would not learn: the theory of history. They studied different ways to study history and different opinions about what kind of history should be studied. The Grade 12 curriculum in a way aimed to prepare students to become historians, rather than to give them more historical facts.

Textbooks used in School M1 were all imported from Portugal. The books were generally very Eurocentric and, according to a teacher, the very little bit about Asia was written from "the eyes of the Portuguese who came to Asia". A change of the education system in Portugal in 1992 called for more flexibility and open-mindedness

of the history curriculum, and the Macao government had to follow Lisbon to make similar changes in the official schools. Since teachers felt that students in School M1, who were living in Asia, should know more about Asian history, in the early 1990s they started to include more Asian history in the curriculum. To correspond with the study of 15th and 16th century Portugal at Grade 8, students now also studied 15th and 16th century Asia, from what the teachers described as a less Portuguese perspective. Grade 9 students studied world history which included the 1911 Chinese Revolution, the establishment of the PRC in 1949 and post-1949 events in China such as the Great Leap Forward and the Cultural Revolution, the last of which was usually untouched by Hong Kong teachers at Form 3, the corresponding level. These topics were included in their Portuguese textbook, even though it was written for pupils in Portugal. According to a teacher, these topics on China had already existed in the 1980 edition of the book and lasted throughout the 1980s, and the teachers had expanded their own teaching on such topics recently. In the 1990s, teachers also prepared their own notes and showed movies to supplement the inadequate coverage of Asian history in the books. Grade 9 students were asked to conduct research studies on Macao after studying socialist China. One group chose to study the influence of the Chinese Cultural Revolution on Macao in the late 1960s, a very political and controversial subject.

The textbook used at Grade 9 by Neves & Almeida (1990) contained generally neutral and objective accounts of the 20th century world. Post-war history was divided into three parts: capitalist countries (USA, Japan, Western Europe), socialist countries (USSR, China, Yugoslavia, Cuba) and the Third World. China was classified under the socialist bloc. The map of the Third World did not show China (p.165). This classification of post-War history suggests that the European authors still had a Cold War mentality. The 1974 revolution in Portugal overthrew dictatorship and brought independence to almost all remaining Portuguese colonies. The new Portuguese government was portrayed in the book as the saviour of the peoples in these former colonies and a friend of these new nations (p.197, translated from Portuguese):

> The proclamation of independence of Guinea-Bissau on 23rd August, 1974, of Mozambique on 26th June, 1975, of Cape Verde on 5th July, of São Tomé e Príncipe on 12th of the same month, and finally of Angola on 11th November, 1975, demarcated a straight identification with the fundamental objectives of the April 25 movement [the Portuguese Revolution]. Portugal was on its way to its own liberation, which was a measure to recognise the freedom of the oppressed colonial territories. A historical destination was reached.
>
> Now, in the long run, another destination of essential importance for Portugal, was the establishment and functioning of fruitful co-operative relationships with the new African states, ... and the consolidation of the irreversible reality as a result of the great historical step of decolonisation.

A teacher explained that the Portuguese people were proud of the revolution which brought decolonisation. However, nothing about Macao was mentioned in the paragraphs about decolonisation. This might be because of the lack of space, but it was more likely due to an avoidance of embarrassment. The authors might have found it difficult to explain why Macao was still under Portuguese administration while the other territories which remained colonies at the time of the Portuguese revolution were, with the exception of East Timor, all now independent. A teacher of School M1 who

was born and educated in Mozambique and later moved to Portugal ruled out the above two explanations. He explained that most Portuguese viewed Macao very differently from Portuguese colonies in Africa, probably because Macao was not annexed through warfare. Macao was generally regarded more as a Chinese territory under Portuguese administration than as a colony, and it was not discussed much by Portuguese in Portugal or in Mozambique. He suggested this might be the reason why Macao was missing in the list of decolonising colonies. This could be contrasted with the fact that the 'colonisation' of Macao was mentioned in Grade 8 textbooks in connection with Portuguese maritime expansion in the 15th and 16th centuries.

The history of Macao was not in the Portuguese curriculum, except for the section that Grade 8 students studied about the early Portuguese settlements in Macao in the 16th century. In 1992 the teachers added Macao history into School M1's curriculum because they believed the students should know the history of Macao, and were facilitated by the curriculum reforms in Portugal. Macao's history was made a common topic for group projects done by Grade 7 students. They looked up historical materials and considered its future. One issue under investigation was "How would Macao's population change after 1999?" This approach of studying history, using the knowledge of the past to anticipate the future, was rarely heard in history lessons in other schools in Macao or in Hong Kong.

At Grade 9, the teacher had developed a Macao history curriculum. He started with the early settlements in the 16th century, and then went on to the first half of the 17th century. The loyalty of Macao towards Portugal was emphasised when Macao was remembered as the only territory remaining Portuguese during the 60 years when Portugal and her colonies were ruled by Spain.

While Bray & Hui's (1991a) description of the history curriculum in School M1 was valid when it was written, subsequent changes made the curriculum less Eurocentric and more relevant to the students' current political environment. Some factors behind these changes might have been of Portuguese origin. While the textbooks were still imported from Portugal and the curriculum still largely followed the Portuguese one, reforms calling for flexibility and objectivity in history teaching in Portugal had influenced history teaching in School M1. The addition of Grade 9 local history was possible because of an additional hour per week allocated to history, a result of the Portuguese educational reforms. The investigatory approach, the learning of the theory of history, and projects on the future were definitely related to the current Western approach in history learning and the training the history teachers received. Local factors, however, also played a part in these changes. All the history teachers had lived in Macao for several years and this might have caused them to realise the significance of Macao's history and include it in the curriculum. The prospective return of Macao to China in 1999 initiated a small wave of interest in examining Macao's past. There had been increasing efforts from the government and scholars to promote interest in local history. History teachers living in Macao in years following the signing of the Sino-Portuguese Joint Declaration could not be unaware of this influence. Although School M1 was financed and under the supervision of the then Direcção dos Serviços de Educação, the initiative to promote Macao's history came from the history teachers themselves, based on a spirit of curriculum flexibility which originated from Lisbon.

School M2

In Junior Middle 1 and 2 where Chinese history from ancient times to late Qing was taught, Hong Kong textbooks were used. Junior Middle 3 students studied Chinese history of the recent and contemporary periods, including such events as the Opium Wars, the May Fourth Movement, Nationalist-Communist cooperation against the Japanese invasion, the civil war, the establishment of the PRC, land reforms, the Great Leap Forward and the Cultural Revolution up to the present. Events after 1949 were covered in less detail, but were still much more prominent than in the Hong Kong junior secondary and Certificate World History curricula. In the early 1990s, even the 1989 June 4th incident was touched upon.

At the Junior Middle 3 level, Hong Kong textbooks were not used because the history teachers felt that this period of Chinese history was treated too superficially by Hong Kong authors. Since the teachers regarded 20th century Chinese history as very important in the education of Chinese students and therefore deserving deeper treatment, they used textbooks from mainland China. A senior history teacher also rejected some of the interpretations made by Hong Kong authors, such as linking the causes of the Opium War to the Chinese traditional attitude of superiority over Westerners. He named British imperialism as an important cause of the war. The teachers, he said, were however aware of the pro-Communist nature of mainland textbooks, and, he claimed, made appropriate modifications when needed. For example, not only the Communists' efforts in the fighting against the Japanese invasion were acknowledged (as is done in the mainland textbooks), but also the Guomindang (Nationalist) efforts. The period 1919-49 was regarded as controversial in Chinese history, and teachers were said to be aware of historical judgements of the Communists and the Nationalists in this period from various points of view.

From Senior Middle 1 to 3, mainland textbooks were used mainly because students had to prepare for PRC examinations. These books stressed the importance of Marxist thought and the superiority of socialism, the importance of the 1917 Bolshevik Revolution, the negative image of the imperialist United States, and China's solidarity with the colonised Third World. In a discussion on the colonial expansion of the Western powers, the author of one of these textbooks wrote that "when capitalism was transformed into imperialism, Asia suffered from colonial oppression" (Anon. 1991, p.186). About the anti-colonial revolts in Egypt, Sudan and Ethiopia, the author had this account (p.190):

> During their aggression and enslavement of Africa, the colonialist and imperialist countries encountered the brave resistance of the African people ... the Ethiopians broke the chains of colonial rule against the oppressors...

The 1917 Bolshevik Revolution was described as the "Great Socialist October Revolution". The US Truman doctrine was criticised as "an interference into the domestic affairs of nations in the world". The American assistance received by Jiang Jieshi to fight the Chinese Communists in the civil war was described as "American invasion into Asia". The establishment of the PRC on October 1, 1949 was described as "the most important event in human history". On the Korean War, the author wrote (Anon. 1992, p.133):

> On June 25, 1950, the Korean War broke out. The United Nations commanded the US navy and air forces to invade North Korea, also aiming to prevent the Chinese people from liberating their own sacred territory of Taiwan. China was

protecting her homeland, ... while the Americans advanced north crazily...

School M2's teachers did not feel that North Korea should be blamed as an invader in the war, since the US, the main aggressor, should be also blamed for what the teacher called "its imperialistic ambitions in East Asia". They justified China's participation in the Korean War on the grounds of protection of ideological interests and national security.

Certain aspects of the history of Macao were taught throughout the period under study. Since no systematic local history curriculum or book was available, teaching was mainly based on the teachers' own experience and their notes, with data selectively taken from the Macao government publications. The history of Macao was presented as the evolution of a small village to a significant port and now a 'window' of China to the west. The colonial aspects were never emphasised, and whenever they were mentioned, according to the senior history teacher, they were used to demonstrate the then "cruel governorship by the Portuguese and their utilitarian rule".

The pro-PRC political inclination of School M2 had basically remained unchanged for the last two decades, with the following exceptions:

- Japan had been given a totally negative image in the classroom because of its atrocities in China during World War II. As Sino-Japanese relations improved during the 1970s and 1980s, when World War II was being taught, students were taught to differentiate between the Japanese militarists, who had to bear responsibility of the suffering they inflicted upon the Chinese, and the ordinary people, who were described as innocent.
- During the Cold War, much of the teaching about US imperialism was based on nationalistic sentiments. As the Cold War thawed, this attitude was toned down.
- The teachers noted a change of Portuguese attitude towards Chinese in Macao after the signing of the Sino-Portuguese Joint Declaration. This was briefly mentioned in the teaching of local history.

School M2's history curriculum was the most politicised one of all studied. Without a centralised curriculum in the territory, Macao's schools were free to devise their own curricula. This allowed School M2 to teach whatever topics and use whatever books it preferred. Most content of the modern period was presented with a bias towards the mainland government, though the teachers claimed that they respected history and they would correct any extreme attitudes in mainland textbooks. The political inclination of the history curriculum closely followed the Chinese position in foreign affairs: all three changes during the period reflected changes in China's relations with Japan, USA and Portugal. In the teachers' views, neither the school nor the students were harmed by the teaching of such a politicised curriculum. The students would not be penalised in the entrance examinations of Chinese universities if their answers in the history paper carried leftist thoughts. The history curriculum matched the school's status as a pro-PRC institution.

School M3
History was offered at all levels, from Junior Middle 1 to Senior Middle 3. Junior students (1-3) studied Chinese and world history. Senior students studied Chinese

history (ending at 1945) at Grades 1 and 2 and world history (ending at 1919) at Grade 3. The senior history teacher cited time as a factor limiting the teaching of world history at Senior Middle 3, the year when students had to prepare for university examinations. He said that he determined what should be taught, and that no consideration was given to the university requirements of the students' different destinations for further studies.

On the school's textbook lists of the last few years of the period studied, Hong Kong books were recommended as reference books. The 'real' textbooks however were a set of notes compiled by the senior history teacher (though they did not carry his name) and printed by the school. The senior teacher said his 'books' were based on several sources: Hong Kong textbooks, mainland textbooks and classical history texts. Hong Kong books were regarded as not good for senior students because the Hong Kong (Chinese history) syllabus "separated political history from cultural and economic history", the importance of the Chinese culture was "not emphasised enough", and the books were "written from a British perspective".

One of the senior teacher's 'books' contained many descriptions based on Chinese nationalistic and anti-imperialistic sentiments. For example:

- The British shamelessly smuggled large quantities of drugs – opium – into China. (p.167)
- Patriotic hero Lin Zexu ordered opium to be banned to show the world China's determination to resist aggression.... Britain had already planned to use force to open the doors of China. When the news of banning opium was heard, Britain decided to initiate a war of aggression. (p.169)
- On 1st June, the British forces fled in panic from Humen to their vessels. (p.171)
- Chang Xun [who temporarily restored the Manchu monarchy in 1917] was a stubborn remnant of feudalism. (p.215)

In his teaching and in his materials, the senior teacher, who had been trained in a mainland Chinese university, blamed the British imperialistic invasion as the prime cause of the First Anglo-Chinese War. He said that no student had ever challenged his position on this issue. Discussion with students in class was ruled out by this teacher because of the lack of time. Chinese history in the 19th and 20th century was taught from a nationalistic perspective. When the senior teacher was asked how sensitive issues concerning relations between the Communists and the Guomindang were handled in class, he replied:

Sensitive issues are not mentioned, em, ... not very emphasised.... Students are left to judge history themselves.

According to the opinions given by the teacher during the interview and his writings, the last statement seems very questionable. His change of tone and facial expressions when he accused the West of imperialist invasion, together with his admittedly didactic teaching method, implied that he probably conveyed a lot of nationalistic thoughts to his students.

The teacher explained that local history was not taught because there was not enough time, not enough systematic textbooks, and he did not know how to teach it. When asked whether he would consider teaching Macao history if textbooks became available in future, he replied that Macao did not have a long history.

In this school, which did not have an overtly political background, the greatest form of political influence on the history curriculum did not come from centralised bureaucracies or the school management, but from the teachers.

School M4

History, taught in Chinese, was compulsory for all students at all levels throughout the period, as there was no division into science and arts classes (even at upper levels). The curriculum remained largely unchanged for the two decades before 1993. Chinese history was given greater importance than world history because of the entrance requirements of Taiwan universities.

Students from Junior Middle one to Senior Middle 5 had used Hong Kong textbooks of the same publishers for the previous two decades. In 1993, history textbooks used by School M4, published in the early 1980s, were either not commonly used or obsolete in Hong Kong. Senior Middle 3 students did not have a textbook for world history. The teacher used a book written by a Jesuit in Taiwan as a source, and students copied notes adapted from this book from the blackboard.

At junior levels, history was taught up to 1970 (in Junior Middle 3), while at Senior Middle 3, the course ended in the year 1949. Post-1949 events were not required by Taiwan universities. The content focus at the senior level was the history of the Republic of China between 1911 and 1949.

Although the school's principal was a prominent author of the history of Macao, no local history was taught in School M4 during the period. The teachers suggested that this was because of a lack of resource materials in this topic, though such an explanation held less force in the early 1990s than it would have done in earlier years.

A teacher of School M4 said that her colleagues usually consulted several sources in Hong Kong books, mainland books and Taiwan books, before deciding how to teach politically sensitive issues. They generally considered Hong Kong books as pro-British because all such books must be approved by the government's Education Department. For example, they thought the account of the First Anglo-Chinese War in the books they used did not put enough blame on Britain as an aggressor. On the other hand, they thought the mainland authors blamed Britain too much. The teachers studied both sources and "aimed to present a balanced view to the students".

History in senior forms was taught by a very senior teacher. His specialised topic was Communist-Nationalist relations in China and the Chinese civil war, since he had personally experienced such events. In class he shared his experience during that period as a Guomindang (Nationalist) military official and even showed his certificates of honour awarded by Guomindang authorities.

Since the school had to prepare most students for further studies in Taiwan, Taiwan's political stance and vocabulary had to be considered and sometimes adopted during the teaching of history. Questions for the Taiwan universities entrance examination were set by lecturers of Chu Hai College, Hong Kong, the place where Hong Kong and Macao students took the examination. The questions generally covered topics found in the Hong Kong syllabus, and Taiwan's vocabulary was used (for example, Peiping [北平] instead of Beijing [北京]).

The content, emphasis, choice of resource materials, and to some extent the political orientation of the history curriculum were largely influenced by forces from Taiwan, namely the admission examination of Taiwan universities. The current curriculum reflected the traditionally strong links between Jesuit educational institutes

in Macao and Taiwan tertiary institutes. The fact that pro-Taiwan teachers and opinions were tolerated was not surprising in an institution sponsored by a religious order which had suffered bitterly under the Chinese Communists. What was surprising was the total absence of a desire among history teachers to promote Macao's history in a school headed by a scholar who had written much about Macao's history.

Analysis and Comparison

The History Curriculum in the Hong Kong Schools
In the four Hong Kong schools studied, there was no evidence of obvious political indoctrination, though a slight Eurocentric inclination in School HK1 in the early 1980s was identified. However, political socialisation (the encouragement of a pre-disposition towards a certain set of political values) and political education (promotion of a critical awareness of political phenomena) was unavoidable, despite the claims by the panel chairman in School HK4 that there had been no political judgement in the school's history lessons. Most of the reasons given to explain the selections made in the curriculum and choices of textbooks were related to the educational needs of the students and the suitability for public examinations, though the teachers' own pedagogic beliefs and academic backgrounds were often influential. Changes in the wider political climate before the beginning of the local history pilot project might be behind the teachers' enthusiasm for Hong Kong history in School HK3. There was no evidence that curricular decisions in history had been directed by the school authorities.

The degree of implementation of the official curriculum at Certificate and Advanced levels was quite high. Though there was a freedom in the choice of sections, textbooks and interpretations, the areas of study were confined and there was no room for political or ideological extremism. The pressure of topical and ideological conformity created by a centralised system of public examinations was powerful. Teachers and schools gave a high priority to the students' performance in public examinations, and any political bias in content and teaching approach which would affect their prospects in such examinations would not have been considered beneficial.

The History Curriculum in the Macao Schools
In Macao, as there was practically no government intervention over the use of textbooks, the schools were able to use whatever books they preferred according to their political and educational inclinations. Textbooks on history had not been published in Macao because of the small market and the different requirements of individual schools. The books used in Macao schools studied were published in Hong Kong, Portugal and the PRC. The situation resembled that described by Altbach (1987) in Third World countries where imported books reflected the orientations and values of the country of publication. The Portuguese book used by Grade 9 students in School M1 clearly approved of the post-1974 Portuguese government's decolonisation efforts. The PRC books used in School M2 showed socialist and anti-American stances which were in line with the official dogma and foreign policies of the PRC government.

Students in different types of schools prepared for different examinations. They had to study history to prepare for admission examinations into PRC, Portuguese and Taiwanese universities, but not the University of Macau (except for Portuguese studies). The need to prepare students for examinations to enter universities of a

particular territory justified the teacher of a particular school to choose textbooks which could meet the examination requirements of that location. The establishment of the University of Macau did not bring more unity in the history curricula used by different schools because general historical studies (in English or Chinese) were not offered by the university and therefore no history paper suitable for most Macao students had been set. (History was only offered by the university's Centre of Portuguese Studies, and the course's emphasis was on Portuguese imperial history.) Had a training programme for history teachers in the university's Faculty of Education been created, the usage and availability of history textbooks would have changed, because trained teachers are usually more willing to consider the educational needs of pupils and their pedagogic interests and may be more willing to write books than untrained teachers.

Many books in the schools studied had been used for a long time. In cases where new editions were used, such as the PRC books used in School M2, in general they did not differ much from earlier editions. The inertia in changing books might be due to the lack of need to change the curriculum because of the relatively stable examination requirements of overseas institutions, the fact that the place of publication of the books was the location where teachers of a school had received their history education, and the low level of training of the teachers. Altbach (1987) related the shortage of qualified teachers to the heavy dependence on textbooks. Only 15.8 per cent of secondary school teachers in Macao in 1992 had been trained (Cheong et al. 1992). Teachers in private schools often had to face large classes, and might tend to use books that they had been used to as this might save time and effort in lesson preparation. Another factor was the cheap price of old Hong Kong books and PRC books.

Wide diversity in the history curricula was found among the four schools. School M1 followed a curriculum largely based on that used in Portugal. This included not only the content but also the teaching method, which was more advanced and heuristic than the curricula in the other schools. This style of teaching was related to the fact that the teachers were all from Portugal. School M2 had a politicised curriculum, taught by China-educated teachers, following political values acceptable in mainland schools. The senior secondary curriculum of School M3 seemed to be dominated by the panel chairperson, using his own materials and following his own nationalist and anti-imperialist beliefs. School M4 adopted a curriculum adapted to the admission requirements of Taiwanese universities, though increasing numbers of students sat for the University of Macau admission examination. Most of School M4's teachers were trained in Taiwan or by Republican institutions in the mainland before 1949, and one teacher was reported to teach with explicit Guomindang emphasis. All schools perhaps with the exception of M3 were clearly influenced by political direct forces from territories outside Macao through institutions which had obvious political affiliations. The case of School M3 was more of individual political forces operating in the absence of strong institutional political forces. This diversity was possible largely because of the non-interventionist educational policy of the Macao government. This policy resulted in a lack of coordination in curriculum development and the absence of territory wide examinations, except for the recently introduced University of Macau entrance examinations. Resources to encourage coordination of the history curriculum like financial subsidy and teacher training were scarce, though the newly

established Education Commission had begun preliminary planning in curriculum matters. With the high degree of autonomy enjoyed by the schools and the need of many students to leave Macao for tertiary studies, strong external political forces influencing the curriculum in Macao were unlikely to be wiped out in the near future.

Despite the differences between the history curricula of the four schools, two similarities were observed. First, school-based curriculum innovations, though not comprehensive in nature, were noted. School M1's teachers gave more emphasis to Asian and Macao history, without any prompting from local educational authorities. School M2 had also begun to teach Macao history, from a perspective dissimilar to that of School M1, and was mentioning contemporary historical events not covered in the 'official textbook curriculum'. School M4's teachers, though using Hong Kong books, had studied mainland and Taiwan sources to prepare some lessons which touched political contents. A second similarity was the use of informal texts in the curriculum. This text was sometimes supplementary but at other times dominating. Teachers in Schools M1 and M2 prepared their own notes on Macao history. In the senior classes of School M3, the notes compiled by the teacher had been the 'real textbook' for many years. Notes from a book written by a Taiwan Jesuit had been copied by final year students of School M4. School based curriculum innovations and the use of informal texts provided the teachers with opportunities for politicisation or depoliticisation of the curriculum. The resulting curricular flexibility could be related to the laissez-faire attitude of the government, the different requirements of examinations conducted by universities of different places, and the lack of locally published classroom materials suitable for candidates sitting these examinations.

Difference from Curricula under Classical Colonialism
The history curricula in Hong Kong and Macao schools in general did not conform to Carnoy's view of the function of colonial schooling, namely "to train the colonised for roles that suit the coloniser" and "to control the colonised economically and politically" (Carnoy 1974, pp.3, 72). One possible exception to this generalisation was the focus on Portuguese domestic and imperial histories in the official Portuguese curriculum in Macao. Nevertheless, this Lusocentric curriculum was mainly offered to Portuguese children who were descendants of the colonisers rather than to the colonised people. The ethnic Chinese children in Hong Kong and Macao spent a significant amount of class time (which varied among the schools) on the history of China which, unlike the cultures of many indigenous peoples colonised by the Western powers, has a history longer than many of the colonising powers. Though textbooks used by School HK1 in the early 1980s showed signs of Eurocentrism, no textbooks used in this period contained straightforward praise of Western countries or degradation of the Chinese people. However, this was not the case for textbooks used in School M2.

Most of the history curricula in Hong Kong and Macao schools were different from those in former colonies (mostly during the 1950s and 1960s) mentioned earlier. The curricula in the latter were largely Eurocentric and of little indigenous relevance. With the partial exception of the official school in Macao, schools in Hong Kong and Macao did not show or had moved away from Eurocentrism, and local history was gaining emphasis. This difference could be related to the special features of decolonisation in Hong Kong Macao. The timescale of decolonisation in Hong Kong and Macao was longer than that in other colonies, and this allowed curriculum

planning by individual teachers and schools. In contrast, the abrupt decolonisation processes in many other colonies precluded a similar degree of planning and Eurocentricism stayed in the curricula (Bray 1997a). Another factor was the fact that the two territories were scheduled to reunite with China. This prospect encouraged teachers (in Macao), or teachers and the government (in Hong Kong) to promote the study of local history from a non-European perspective. Further, the absence of strong anti-colonial sentiments and violence in the Hong Kong society removed an excuse which the colonial government could have used to stop the trends of moving away from Eurocentrism and cultivating a local identity through history. Finally, in this study, history curricula near the end of the 20th century were examined. Britain's, Portugal's and their colonial administrators' and subjects' conceptions of colonialism were quite different from those in earlier decades. This difference influenced expectations from the government, teachers, students and the public on the function of history teaching.

British and Portuguese Colonial Rule: Centralisation vs Decentralisation
The different styles of British and Portuguese colonial rule resulted in significant contrasts in educational provision in the two territories. The resources devoted to education in Hong Kong led to a higher standard but also a more centralised history curriculum than in Macao. The latter's framework was perhaps better described as non-centralisation rather than decentralisation since it chiefly arose by default rather than because of deliberate policy. The fundamental differences of centralisation and non-centralisation were manifested in many aspects of the curricula in the two territories.

The use of the colonial language in the history curriculum was one domain which differed in each territory. English was widely used in Hong Kong, though the use of Chinese in studying World History was increasing. Among the four Macao schools studied, Portuguese was the medium of instruction only in the official school. Chinese was used in the study of history in the other three schools. The low popularity of the Portuguese language in Macao was due to the longstanding neglect of Portuguese language education by the government and the low value of the language in tertiary studies in Macao and elsewhere. The global influence of the Portuguese culture had greatly diminished much since its peak several centuries previously.

The difference in the extent of centralisation of the history curricula in Hong Kong and Macao was partly a result of the different attention given to education by the two colonial governments. Many of the contrasting patterns of centralised and decentralised curriculum development observed by Bray (1992b) were found in this specific study of the history curriculum. The centralised nature of Hong Kong's history curriculum, especially from Form 4 as students prepared for public examinations, limited the schools' freedom in curriculum content. The requirements of public examinations guided curricular decisions (selection of options, textbooks, ideological interpretations of history) made by individual panel chairpersons, and such decisions were usually not related to the political background (if any) of the schools. In contrast, the non-interventionist educational policy of the Macao government allowed different curricula and political forces in imported curricula to operate. The degree of curriculum control by the school authority and individual history teachers was much greater in Macao than in Hong Kong. The background of the school was in many cases

an important factor behind curricular decisions in the history subject. The absence of a territory-wide examination of history and the high degree of autonomy enjoyed by the schools made unification of the history curricula impossible in the near future.

The effects of centralisation were evident when political aspects of the implemented curricula of schools of similar backgrounds on both sides of the Pearl River Delta were compared. The pro-Communist and anti-imperialist nature of the curriculum of School M2 was hardly evident in School HK2. The pro-Taiwan elements in history teaching and the use of Taiwan's vocabulary found in School M4 were not reported and were probably non-existent in School HK4. The curriculum of the somewhat pro-establishment School HK1, though it had a slight Eurocentric emphasis in the early 1980s, was a far cry from the Lusocentric curriculum in School M1.

The effects of centralisation and non-centralisation were also seen in the control of textbooks and curriculum innovation. The control of political content of textbooks used in Hong Kong was largely exercised through a network of authors, publishers and curriculum experts in the Textbook Committee under the government's Education Department. In Macao, though the ideological beliefs of authors and publishers of the imported books were also important in determining the content, the control was largely exercised by schools and teachers, who could choose whatever books they preferred, or even produce their own materials. The promotion of local history in Hong Kong was initiated by centralised educational bodies and accepted by teachers, but in Macao it largely originated from the teachers themselves. The result of this difference was a local history curriculum which acknowledged the precolonial civilisation in Hong Kong, and in Macao, a Lusocentric local history curriculum in the official school, and a non-colonial one in the pro-PRC School M2.

Conclusion

This chapter began with an examination of the political nature of the history subject, followed by a review of the literature about history teaching in former colonies. The differences between the decolonisation process in Hong Kong and Macao and that in former colonies were identified. The implications of such differences on the curriculum were discussed and later related to the trends (of declining Eurocentrism and increasing interest in local history) found in the study. The study shows that because of the relatively centralised nature of the Hong Kong education system, wide variations in the political content were not found in the curriculum implemented in schools. In Macao, because of its unorganised education system, the curriculum varied much in content and political inclination according to the background of the school. Therefore, pro-PRC, pro-Taiwan, and Lusocentric curricula were found. The difference in the degree of curricular centralisation and coordination in Hong Kong and Macao was related to the difference in the allocation of resources for education from the respective colonial governments.

The information in this study supplements the works on the implemented history curriculum in Hong Kong and Macao by Morris (1990, p.109) and Bray & Hui (1991a). This study also contributes to the literature of inter-territorial and intra-territorial comparative education by comparing the history curricula in two nearby colonial territories and the curricula implemented in different types of schools in each

territory. Though Hong Kong and Macao had much in common, their patterns of curriculum development were very different. In the case of Macao, the unorganised nature of educational provision also allowed striking comparison of differences within the territory itself.

13

Secondary School Mathematics Curricula

TANG Kwok Chun

Mathematics has long been an internationally-accepted subject in school curricula. In most systems between 12 and 15 per cent of student time is devoted to mathematics. Kamens & Benavot (1992) focused on the official primary curricula of mathematics and science in a large number of countries between 1800 and 1986, and showed that by the turn of the 20th century both arithmetic and science were firmly established in most countries. They also showed that national differences in the curricular content of mathematics and science were small, and that key indicators of socio-economic development, economic dependence, or world system position did not correlate much with instructional time. Oldham (1989), after trying to find out whether there was an international secondary mathematics curriculum, stated (p.212) that:

> it can be said that there is indeed an international mathematics curriculum. However, the commonalty is moderated by distinct (and less distinct) patterns of diversity; so a better conclusion is that there are several international curricula, sharing many features but with roots in different mathematical and contextual traditions.

Further examples from the 21st century include international studies such as the Third International Mathematics & Science Study (TIMSS) and the OECD-sponsored Program for International Student Assessment (PISA), which have worked with an assumption of universal mathematics and an international mathematics curriculum (FitzSimons 2002, p.110).

In order to understand the stability and change of school mathematics curriculum, some researchers have adopted a world system perspective by emphasising the influence of Western culture, whereas others have focused on local shaping forces in Western developed countries. Kamens & Benavot (1992) suggested that their above-mentioned findings could be explained by the growing transnational forces and worldwide institutionalised cultural rules originating from Western culture.

In a study of stability and change in the School Mathematics Project (SMP) in the 1960s in the United Kingdom, Cooper (1985) used sociological analysis to investigate the nature of school mathematics as a subject, and the process, nature and control of its redefinition. He identified the sources of innovations and the higher institutional decision-making processes which determined which innovations would be filtered through to schools and other educational institutions.

Related work by Moon (1986) focused on the New Mathematics Movement in France, England & Wales, the Netherlands, West Germany and Denmark from 1960 to

1980. The general pattern identified was that while the universities had a major impact on the reform, the 'high status' of New Mathematics was used, or later abused, by material and ideational interest groups. Moon also argued that commercial publishers were influential in the New Mathematics debate. Similarly, Stanic (1987a, 1987b) studied mathematics education in the USA at the beginning of the 20th century. He noted the decline in the influence of 19th century mental discipline theory and the rapid societal changes brought by industrialisation, urbanisation and immigration. In response, various curriculum interest groups argued for their distinct ideas of selection and organisation of school knowledge. In the field of mathematics, the justification question was not the heart of the issue, but conflict, continuity, and compromise emerged in the struggles and controversies.

In the light of such literature, this chapter compares the stability and change of secondary mathematics curriculum in Hong Kong and Macao. Both worldwide and local shaping forces are examined. Adoption of textbooks before World War II is studied first in order to understand the common origin of the traditional approach to mathematics teaching and learning in Hong Kong and Macao. The Communist threat in the late 1940s and the different reaction of the two colonial governments marked the point of bifurcation – the advent of locally-published textbooks in Hong Kong in the early 1960s. Differences in response to the worldwide Modern Mathematics movement by the local mathematics educators brought further diversity in mathematics curricula. Finally, differences in curriculum development organisations are discussed in relation to the late-colonial and postcolonial challenges including universal free education and advance of information technology. The two territories have a common origin in secondary mathematics curriculum, but they moved into different paths in the early 1960s and remained on different tracks. It is unlikely that these two curriculum tracks will converge in the near future.

This chapter also suggests that in the study of stability and change of school knowledge in non-Western places like Hong Kong and Macao, Western influences on mathematics must be considered but local socio-historical background and efforts by local mathematics educators must also be taken into account. The sociology of educational systems proposed by Archer (1979, 1983, 1993, 2000) provides a useful framework to integrate the study of Western influences and local forces into a coherent and illuminating explanatory analysis.

The Common Origin of Traditional Mathematics

Before the 1960s, the mathematics curricula in Hong Kong and Macao secondary schools were mainly textbook-driven. Schools commonly had separate textbooks and even separate teachers for arithmetic, geometry, algebra, trigonometry, coordinate geometry and calculus. The theoretical root of this approach was established over 300 years ago. The traditional organisation of mathematical content was evident in the division of the subject into four main branches: arithmetic, algebra, geometry and analysis, with each considered as a closed and separate field of investigation (Fehr 1970, p.200).

The most popular traditional mathematics textbooks adopted by the Chinese-medium schools in both territories were Chinese translations of American textbooks of the 1910s (K.C. Tang 1999). The most popular algebra textbook was *College Algebra*

written by Fine (1905). The popular geometry textbooks were *Plane and Solid Geometry* written by Schultze et al. (1901). *Plane and Spherical Trigonometry* written by Granville (1909) and *New Analytical Geometry* written by Smith & Gale (1912) were also widely adopted (Hong Kong, Education Department 1955a). These textbooks were also very popular in China in the 1920s (Ngai et al. 1987).

Among the English-medium schools, UK textbooks were adopted. For instance, pre-war textbooks such as *Essentials of School Arithmetic* (Mayne 1938a), *Essentials of School Algebra* (Mayne 1938b), *Modern Geometry* (Durell 1920), and *Elementary Calculus* (Bowman 1936) were included in the approved textbook list for Hong Kong (Hong Kong, Education Department 1955b), and were widely adopted by English-medium schools in both territories from the 1930s. The few Portuguese-medium schools in Macao were in effect Portuguese schools operating in Asia. Portuguese traditional mathematics textbooks were used in these schools.

Finding UK textbooks in the English-medium schools and Portuguese textbooks in the Portuguese-medium schools is not surprising due to the influence of colonialism. However, the adoption of Chinese translations of the American textbooks by the Chinese-medium schools in both places deserves further examination.

In China, after the overthrow of the Qing Dynasty and the establishment of the Republic of China in 1911, a new education system adapted from the Japanese and German systems was introduced. In 1922, this system was replaced by a 6+3+3 system which was adapted from the USA. English versions of the above-mentioned American textbooks were adopted by some prestigious schools in Beijing, including the secondary school of Beijing Normal University. In the 1930s and 1940s, numerous translated versions were published and were popular in secondary schools in the Republic of China (Ngai et al. 1987).

In 1928, shortly after the establishment of the Nanjing government in China, the Overseas Chinese Education Committee was established under the Ministry of Education. Regulations were issued, and overseas Chinese schools were asked to register with the Overseas Chinese Education Bureau. Details of school curricula were required for the registration process (T.C. Cheng 1949; Chen 1992). The main purpose was to control the structures and curricula of overseas Chinese schools in order to exclude Communist influence. The strategic consideration behind such policy might best be explicated by Cheng's (1949) examination of the Hong Kong case (quoted in Wong Leung 1969, p.53):

> Since 1928, the Chinese Government had been trying to control the overseas Chinese schools through its consuls and Kuomintang agents abroad. As there were no Chinese Consuls in Hong Kong and Kuomintang activities were banned, the attempt of the Chinese Government to influence the Chinese colony must be by very subtle ways....
>
> One reason why most of the bigger schools had to register themselves with the Overseas Chinese Affairs Committee was that a growing number of Hong Kong students were going back to China for higher studies, and if these schools did not register themselves with the Chinese authorities, their students or graduates would not, as a rule, be recognized in China and therefore could not join any Chinese schools or universities. As registration with the Chinese authorities carried with it an obligation to observe, whether openly or secretly, certain regulations laid down, it was clear that the Chinese authorities had been

having an indirect control or influences over a number of the bigger schools.

The above strategy was quite successful. In 1928, some schools in Hong Kong started to borrow the American 6+3+3 system, like the Chinese-middle schools in China (Sweeting 1990, p.352). Furthermore, as observed by Luk (1991, p.661), in the early 1930s an increasing number of schools were able to operate with branches on both sides of the border and registered with both governments. Hong Kong never developed an autochthonous school system before World War II and remained very much a periphery to its dual centers.

In 1929, in order to counteract the Kuomintang influences, a committee was appointed in Hong Kong to draw up a syllabus for private schools. But the reaction of the Hong Kong government was not successful. In the early 1930s, the vernacular schools had always tried, "as far as the Education Department allowed, to follow the curriculum of the schools in China, using the same textbooks, and having the same subjects" (Wong Leung 1969, p.53).

In 1931, the Overseas Chinese Affairs Commission was established in Nanjing. It signified the need of the Nanjing-based government for a more comprehensive and effective policy towards the overseas Chinese because their support was found to be more necessary with the rise of the Japanese militarism. A survey conducted in 1935 by the Overseas Chinese Affairs Commission to estimate the number of overseas Chinese schools throughout the world found about 550 overseas Chinese schools in Hong Kong and Macao (Chen 1992, p.256). In 1938, when Guangzhou was taken by Japan, the number of schools in Hong Kong and Macao increased dramatically because many institutions moved from the north or from Guangzhou for refuge. The teachers and students of these schools carried with them their curricula and textbooks which had already been adopted by some of the schools in Hong Kong and Macao in the early 1930s. These patterns explain the social origin of the common adoption of USA textbooks by the Chinese-medium schools in both places before the early 1960s.

Bifurcation for Chinese-medium Schools: Local Textbooks in Hong Kong

In Hong Kong, the influence of the pre-war traditional textbooks did not diminish until the early 1950s when the colonial government wanted to exercise its own and exclusive influence on local education due to the political tensions in China built shortly after World War II. The apathy of the colonial government in Macao in response to the similar political tensions created a bifurcation for the mathematics curriculum in the Chinese-medium schools of these two territories.

The Kuomintang nationalistic programme for overseas Chinese education resumed in 1945, and included the publication of textbooks and educational materials (Chen 1992, p.309). In Hong Kong, the Kuomintang started to infiltrate and direct the Chinese press. Running schools was another focus, and in 1946 an estimated 35 private schools in Hong Kong were under the influence of the Kuomintang (Sweeting 1993, p.194). The government's concern about who controlled education was reflected in and increased by several incidents. For instance, in 1948 the Education Department proclaimed that amendments should be made to the ultra-nationalistic segments of Kuomintang-sponsored history, geography, and civics textbooks, and urged that a civics textbook especially prepared in and for Hong Kong should be published

(Sweeting 1993, p.196).

In the late 1940s, the government's wariness about the activities of the Kuomintang was overwhelmed by a new kind of anxiety due to the growing success of the Chinese Communist Party and the increasing intensity of the Cold War. In order to restrict the spread of Communist influence, the Education Ordinance was amended in 1948. It empowered the Director of Education to refuse to register any school teacher, deregister a registered teacher, close any school, and control the curricula and textbooks of all schools (Sweeting 1993, p.199). In 1949, a Special Bureau in the Education Department was set up to fight Communism in the schools. In 1952, as suggested by the Special Bureau, the first Hong Kong Chinese School Certificate Examination was instituted. At the same time, the separate committees on textbooks and syllabuses were replaced by the Syllabuses & Textbooks Committee to perform wider and more positive functions. The new committee's terms of reference were to draw up model syllabuses for use in schools; to advise the Director on textbooks and other teaching aids; and to stimulate the writing and publication of teaching notes and textbooks suitable for the model syllabuses (Sweeting 1993, pp.210-211).

By the end of 1955, the Syllabuses & Textbooks Committee had issued some model syllabuses for primary and secondary schools. A few locally-written textbooks were also produced (Sweeting 1993, p.215). As the least politically-related subject, syllabuses and textbooks for mathematics were not produced until the early 1960s.

Anti-Communism not only brought the first move towards curriculum control by the Hong Kong government; it also induced a gradual change of direction for the Chinese-middle schools, from American style to the English system which was adopted by the Anglo-Chinese schools. In 1961, the pre-war 3+3 system was replaced by the 5+1 system alongside the Anglo-Chinese 5+2 system. One year later a simple syllabus was published by the Education Department (Hong Kong, Education Department 1962), and officially adopted by the government Chinese-middle schools. Although non-government schools were not required to follow this suggested syllabus, their curricula were constrained by the syllabus of the Hong Kong Chinese School Certificate Examination and the entrance examination of the Chinese University of Hong Kong which was established in 1963.

The situation in Macao was very different due to the government's persisting non-interventionist attitude towards education for local Chinese. The long-established relationship between the Nationalist Party and Christianity, especially the Catholic Church, enabled the Kuomintang government quickly to resume its linkage with the Christian schools in Macao after the civil war. In 1954, the Overseas Chinese Education committee in Taiwan started to operate the entrance examination to Taiwan universities for Overseas Chinese (Chen 1992, p.391), and attracted secondary graduates from both Hong Kong and Macao. Unlike Hong Kong, Macao did not have its own school leaving or university entrance examination, and therefore the influence of this entrance examination was particularly significant. One major impact was the maintenance of the 3+3 system by all the Catholic Chinese-medium schools. Therefore, the influence of the Hong Kong published textbooks designed for the 5+1 system was limited, and pre-war textbooks were more popular among these Catholic schools.

The pro-Communist Macau Chinese Education Association (MCEA), as a minor opposing force to the majority of Catholic schools, also started to coordinate its member schools in the early 1950s (MCEA 1951, Vol.1-5). In contrast to the Catholic schools, these pro-Communist schools were more ready to turn to the 5+1 system and

the Hong Kong textbooks (MCEA 1966, Vol.25).

In short, in the early 1960s, all Hong Kong Chinese-medium schools changed to the 5+1 system and local Hong Kong textbooks became popular. Such change had political roots. However, mathematics curricula in Macao were not strongly affected. Pre-war textbooks remained popular among the Chinese-medium schools in Macao, most of which were run by the Catholic Church.

Further Diversification: The Modern Mathematics Movement

The difference between the pre-war and post-war traditional textbooks was small because both had adopted the so-called pre-1800 model (Cooper 1985, p.54). This traditional approach was not severely challenged until the upheaval of the worldwide Modern Mathematics movement in the late 1950s. This movement suggested that the traditional separate approach did not adequately reflect the nature of mathematics. Unity of different mathematics concepts was emphasised: Plane and Solid Geometry were integrated into a single course; Trigonometry was merged with Advanced Algebra; and deductive methods, the processes of searching for patterns, and structural concepts like sets, relations and functions were introduced (Fey 1978, pp.340-341).

Although decision-makers in different countries had different motives, much of the movement originated in the USA. The news in 1957 that the Russians had been the first to launch an artificial satellite, the Sputnik One, was one of the most important ignition points. Many Americans believed that in order to restore the status of their country, the education of scientists and technologists had to be modernised. Mathematics was considered to need particularly urgent attention, and large sums of federal government money became available for innovation (van der Blij et al. 1981, p.111).

The American movement inspired curriculum developers in countries as diverse as Hungary, Indonesia, Nigeria, France, Denmark and Sweden (Moon 1986; R. Morris 1981; Morris & Arora 1992). The influence was also felt in the United Kingdom, though many reforms there in the 1960s also had local roots (Cooper 1985; Howson 1978). Of course, some countries did not follow the trend. They included China (K.T. Leung 1980, p.45) and Italy (Castelnuovo 1989, p.52).

In the mid-1970s, the cry of 'back to basics' in the USA led to decline of the movement. Through experience, people found that the impact of the movement was disastrous. Teachers did not understand what was expected of them, and students were lost in a maze of abstractions and fancy notations. Many textbooks had reduced set theory to lists of manipulations of unions and intersections that were quite as pointless as the worst pages of Algebra in the traditional textbooks. Disillusion in the USA was paralleled by, and to some extent the cause of, disillusion in many other countries. Some educators reverted to traditional mathematics, others used traditional books to supplement the modern ones, and yet others sought an amalgamated approach.

The Modern Mathematics movement was introduced into Hong Kong in 1964, and led to a new Certificate Examination syllabus for secondary Form 5 students in 1969. The new topics included mathematical induction, logic, matrices and determinants, bases for integers, flow charts, three-dimensional coordinate geometry, transformation, symmetry, networks, three-dimensional figures, and groups and linear programming (Siu Chan et al. 1997, Unit 4). In the early 1970s, about half of the

schools in Hong Kong, including Anglo-Chinese and Chinese-middle, had adopted the Modern Mathematics syllabus (Brimer & Griffin 1985, p.7). In 1980, in order to overcome the problems of the failure of the movement, an amalgamated syllabus attempted to bring together the strengths of both traditional and modern approaches. Some of the Modern Mathematics topics and much of the jargon had been cut. At the same time, the use of calculators was permitted in the public examination.

Educational organisations in Macao also felt the shockwave of the Sputnik One and the Modern Mathematics movement (MCEA 1957, 1974, 1979), but their response was mild. Traditional textbooks and separate approach had never been completely abandoned in Chinese-medium schools. Most of these schools updated their content knowledge by devising a subtopic called set and logic at senior levels. A few schools had experimented with the Hong Kong modern textbooks for a few years and turned back to the traditional textbooks. Even in the late 1990s, amalgamated textbooks remained unpopular among the Chinese-medium schools.

The situation of the English-medium schools in Macao was quite similar to that of the Chinese-medium schools. A few English-medium schools joined the Modern Mathematics movement by adopting the Hong Kong Modern Mathematics textbooks; and these schools also turned to the Hong Kong amalgamated textbooks after the failure of the movement. The majority did not abandon the UK traditional textbooks until the late 1980s. The reason for them to turn to the Hong Kong amalgamated textbooks was not pedagogical but pragmatic, due to the extinction of these pre-war UK textbooks in Macao. Portuguese-medium schools in Macao adopted the Portuguese Modern Curriculum in the early 1970s, and did not change to the amalgamated curriculum until the early 1990s (Ponte et al. 1994, p.348).

In sum, the rise and fall of the worldwide Modern Mathematics movement provided a chance for local mathematics educators in Hong Kong to establish their local textbooks and curriculum. Although vestiges of UK and USA influences can still be identified, local elements have been incorporated into the curriculum and textbooks. None of the Chinese-medium schools and few of the English-medium schools in Macao were changed by the movement, and they therefore were left behind by their counterparts in Hong Kong in the early 1980s.

Different Responses to Challenges in the Late Colonial Period

During the 1970s, 1980s and 1990s, both Hong Kong and Macao experienced rapid economic, social and political development. This fact, together with the global advancement of computers and information technology, caused mathematics educators in both places to reconsider their curricula. On the one hand, they had to identify international trends and catch up with them; and on the other hand, they had to deal with local problems. Again, due to socio-historical patterns and different perceptions of mathematics educators in both places, the responses to these challenges differed.

Nine-year universal, free and compulsory education had been implemented in Hong Kong since 1978, and by the 1990 the retention rate in secondary Form 5 exceeded 90 per cent. Further, with the rapid expansion of tertiary education, most Form 5 graduates could proceed to further study. Individual differences in capability and aptitude became an increasingly important issue after the early 1990s. The examination syllabuses of the two well-established Advanced Level subjects, Pure

Mathematics and Applied Mathematics, were trimmed. Furthermore, two less-demanding Advanced Supplementary subjects, Applied Mathematics and Mathematics & Statistics were introduced in 1994. With these changes, the mathematics curricula at the matriculation level could more easily benefit both science and arts students.

The secondary Mathematics and Additional Mathematics curricula did not change significantly from the late 1970s to the 1980s. Only in the early 1990s was a holistic review of the mathematics curriculum urged by local mathematics educators. A new secondary mathematics curriculum was proposed with a more balanced emphasis on process and content. It was also intended to take into consideration social and technological changes; have more balanced consideration of both science and arts students; and have more balanced emphasis on the cognitive and affective development of the students (Siu Chan et al. 1997, Unit 4).

Mathematics curriculum development in Macao was uncoordinated when compared with Hong Kong. Eclectic approaches were adopted by most Macao schools when challenged by the rapid social, economic, political and technological changes. By the late 1980s, the traditional mathematics textbooks had become obsolete. The content knowledge was on the one hand too demanding for the majority, and on the other hand too remote from an information age. Some Catholic and Protestant Chinese-medium schools tried to replace the traditional textbooks by the new Hong Kong textbooks, but most of them turned back to the traditional textbooks in the early 1990s. The incompatibility between the Hong Kong 5+2 system with its own public examinations and the 3+3 Taiwan system with the Macao Taiwan university entrance examination was one of the main reasons for their failure.

Unlike the Christian schools, the pro-Communist schools had a more coordinated and successful reform. In 1987, the year of the Sino-Portuguese Joint Declaration, these schools turned from the Hong Kong Chinese-middle 5+1 system to the PRC 3+3 system. By the early 1990s, most of these schools had adopted the PRC textbooks. The compatibility between the PRC textbooks and the examination syllabus of the PRC university entrance examination for Macao students was one of the main reasons for successful reform. Yet although the new PRC textbooks were less problematic than the traditional Hong Kong textbooks, the curriculum was still too demanding and out of touch with modern technology (Siu Chan et al. 1997, Unit 3).

As mentioned above, the situation of the English-medium schools in Macao was quite problematic. The majority only turned to the new Hong Kong textbooks in the late 1980s because of the extinction of the pre-war UK textbooks. However, many teachers still supplemented the new Hong Kong textbooks with the old UK Algebra textbooks. This combined use of traditional and new textbooks reflected their traditional views on mathematics teaching and learning. The Portuguese-medium schools were in a better position because they followed the mathematics curriculum reform in Portugal in the early 1990s. The new curriculum had been designed by considering the impact of universal education and technological advancement. Most mathematics teachers in Macao Portuguese-medium schools welcomed this reform.

Before the 1984 Sino-British Joint Declaration and the return of Hong Kong to Chinese sovereignty in 1997, the curriculum development machinery in Hong Kong had been gradually built and had gained its own momentum for further development. The Curriculum Development Committee (CDC) was formed in 1972 in response to the introduction of compulsory primary education. Teachers were appointed to the mathematics subcommittee to advise on preparation of the teaching syllabuses.

Examination syllabuses were produced by a mathematics subcommittee of the Hong Kong Examinations Authority (HKEA). Both the CDC teaching syllabuses and the HKEA examination syllabuses heavily shaped the implemented mathematics curriculum. Since the reorganisation and renaming of the Curriculum Development Committee to Curriculum Development Council in 1988, together with the establishment of the Curriculum Development Institute (CDI) in 1992, many curriculum innovations have been brought into the development of mathematics curriculum. These have included the school-based curriculum development, core curriculum tailored syllabus, and the Target Oriented Curriculum.

Curriculum development organisation in Macao appeared immature when compared with Hong Kong. The Macao government only embarked on an active role in curriculum development in 1994. Curriculum development committees for different subjects were formed, with membership including teachers from both official and private schools and from the University of Macau. Provisional teaching syllabuses for different subjects at different levels were drafted by referring to the PRC, Taiwan and Hong Kong models. Although the provisional primary, junior and senior secondary mathematics syllabuses were written to face the new challenges and were launched in the Luso-Chinese schools in 1995/96, the Macao government had great difficulty in persuading the private schools to adopt these syllabuses (K.C. Tang 1999).

In summary, mathematics curriculum development was more coordinated in Hong Kong than in Macao. Mathematics educators in Hong Kong were involved quite actively within the organisational framework, and curriculum innovations were vigorous. In contrast, mathematics curriculum development in Macao was uncoordinated. An eclectic approach was adopted by most schools, and political influence was significant even in this relatively value-neutral subject.

Postcolonial Initiatives: Converging Goals and Diverging Paths

The reversion of sovereignty in Hong Kong and Macao in 1997 and 1999 respectively added fuel to the curriculum reform engines. In Hong Kong, immediately after the transition an ad hoc committee was set up under the Curriculum Development Council to review the mathematics curriculum. The committee was asked to recommend ways to enhance intra-level coherence in the curriculum at various levels, based on sound academic principles and practical demands. In 1998, at the request of the committee, the Education Department commissioned two studies to provide inputs. One report (Curriculum Development Council 1999a) presented the views of students, parents, teachers, university lecturers, curriculum planners and human resources personnel in the commercial sector. The other report (Curriculum Development Council 1999b) analysed mathematics curricula in major Asian and Western countries. The final report (Curriculum Development Council 2000a) presented an overview. The work formed the foundation of several detailed curriculum documents, including the syllabuses for secondary mathematics, primary mathematics, and secondary additional mathematics (Curriculum Development Council 1999c, 2000b, 2001b).

Restricted by the small-state constraints (Bray 1992c; Tang & Ngan 2002), the immature curriculum development organisation in Macaohad few material and human resources compared with Hong Kong. Partly because of this, provisional teaching syllabuses for junior and senior mathematics were drafted by referring to the PRC,

Taiwan and Hong Kong models without the support of local research. These syllabuses were tried out by several Luso-Chinese secondary schools, and the Macao government then invited local, Hong Kong and PRC mathematics educators to study the design and implementation of these provisional syllabuses. Finalised syllabuses were then published just a few months before the return of sovereignty (Macao, Department of Education & Youth 1999a, 1999b, 1999c).

The syllabuses in Hong Kong and Macao had significant similarities. Their aims, contents, proposed teaching methods and assessment strategies were all in line with the international trend identified by Niss (1996). This included contribution to technological and socio-economic development, contribution to cultural maintenance and development, and provision of prerequisites to help learners to cope with modern society. At the level of classroom teaching and learning, international trends emphasised mathematical thinking and creativity, personality development, mathematics in society and culture, and information technology in relation to mathematics.

This analysis shows that the mathematics curricula in Hong Kong and Macao were converging at the documentary level. This was especially evident at the junior secondary syllabus, because Macao explicitly abandoned the traditional approach by integrating algebra, geometry, analytical geometry, trigonometry, probability and statistics, and by adopting the spiral approach of content organisation (Macao, Department of Education & Youth 1999b, pp.3-6).

The convergence of educational goals in Hong Kong and Macao, together with other East Asian countries such as Singapore, reflected the strong impact of globalisation and the advent of the knowledge economy dominated by the West (Sharpe & Gopinathan 2002). However, in order to understand the stability and change of school knowledge, local socio-historical background and efforts of local mathematics educators should also be considered. Tang and Bray (2000), adopting the analytical framework proposed by Archer (1979, 1993), charted the emergence and development of the centralised and decentralised education systems in Hong Kong and Macao respectively. The structural properties of these two different systems were shown to be key factors conditioning the changing paths of these two places.

The nature of divergence within convergence may be identified by study of the implementation of the new syllabuses. The Hong Kong secondary syllabus (Curriculum Development Council 1999c) was launched in secondary Form 1 in 2001. The list of recommended textbooks again demonstrated the power of centralist forces. Although other factors encouraged the use of school-based materials, and although teachers were encouraged to exercise professional judgement in preparing and choosing learning materials, the Hong Kong Certificate of Education Examination constrained teachers from moving far from the official syllabus.

In Macao, implementation of official syllabuses was much less systematic. This was partly because of the lack of a centralised school-leaving examination. It also reflected the lack of locally-published textbooks, and the government's unwillingness to force unification of approaches by the Catholic, Protestant and pro-Communist schools. In other words, Macao's major implementation obstacles were at the system or administration level.

In 2000, a four-year mathematics curriculum experimentation programme was launched to tackle with this problem. One Protestant school, one Catholic school and two official Luso-Chinese schools were invited to join this programme. With the

academic and professional support from Beijing Normal University, mathematics teachers from these schools attended workshops and visited schools in Beijing. They were also given mentors from Beijing for on-site training and consultation in Macao.

This experiment certainly helped to bring the official Luso-Chinese and private Chinese-medium schools together for the adoption of the new mathematics syllabuses. However, the reform still encountered two major challenges. The first challenge was structural, and arose from the English-medium schools within the poly-centred decentralised system. Unlike the Portuguese schools which had been excluded from the government's financial umbrella since the reversion of sovereignty, most English-medium schools were part of the government-subsidised network. As a result, the mathematics curricula of these schools could not be ignored. Yet since the government appeared to have no plan to publish English versions of the syllabuses, the English-medium schools seemed destined to become abandoned children of the reform which could only passively follow the new Hong Kong syllabuses and use the new Hong Kong textbooks without systemic support for initiatives and innovations.

The second challenge was ideational, especially at junior level, and came from teachers and teacher-educators (K.C. Tang 1999). As mentioned above, the junior secondary syllabus explicitly abandoned the traditional approach by integrating the topics of algebra, geometry, analytical geometry, trigonometry, probability and statistics, and by adopting the spiral approach of content organisation (Macao, Department of Education & Youth 1999b, pp.3-6). In 2001, a basic competence assessment was conducted to assess the general achievement of secondary Form 3 students in Chinese, English and mathematics. Only algebra and geometry problems were included in the mathematics assessment paper, and questions on analytical geometry, trigonometry, probability and statistics were omitted (Macao, Department of Education & Youth 2001, Appendix). This appeared to indicate a failure of the junior mathematics reform launched in 1995/96.

In summary, in order to demonstrate the success of 'one country two systems', the Hong Kong and Macao governments worked hard on education reform projects around the period of reversion of sovereignty. In mathematics, the new syllabuses of both places were heavily influenced by international trends dominated by the West. A convergence of curriculum reform at document level was therefore observed. With the support of a centralised system and its structural and administrative tools, the Hong Kong government gained success at system level, though many challenges remained at school, classroom, teacher and student levels. Conditioned by the poly-centred history and the decentralised system, the Macao government was challenged at an early stage at system level. PRC influences on Chinese-medium schools, and Hong Kong influences on English-medium schools, remained significant. Divergent curriculum reform was therefore observed at implementation level.

Conclusion

This historical and comparative analysis of the stability and change of secondary school mathematics curriculum in Hong Kong and Macao shows that strong commonalities existed in the 1920s. Although colonial influence was significant in English-medium and Portuguese-medium schools, influence from the Republic of China was dominant in the Chinese-medium schools.

The nature of this external influence changed abruptly after the success of the Chinese Communists in 1949. For the Chinese-medium schools in Hong Kong and Macao, the difference in response of the two colonial governments to this change marked the point of bifurcation for the mathematics curricula in the early 1960s. At the same time, the worldwide Modern Mathematics movement gained momentum and a sweeping influence in Hong Kong. Local mathematics educators were involved in this development, and the colonial government played a less significant role. Mathematics curricula for both Chinese-medium and English-medium schools were affected. Mathematics educators in Macao were less willing to change, and major reform could only be found in the Portuguese-medium school due to the reaction of local mathematics educators in Portugal rather than in Macao. Most of the Chinese-medium and English-medium schools in Macao were only slightly affected by this worldwide movement.

The introduction of nine-year compulsory free education in Hong Kong in the late 1970s in Hong Kong reinforced this loose tie between colonial government and local mathematics educators. Curriculum development organisation was adjusted further in the early 1990s in order to face different internal and external challenges. Macao also started to develop its curriculum development organisations, but faced continuing systemic challenges. Macao's idiosyncratic socio-historical background and its vulnerability to PRC influence were the two main forces pushing it to a very different curriculum track from that of Hong Kong. In short, external influences on these two places have always been similar, but local socio-historical background and efforts of local mathematics educators have caused differences.

At a conceptual level, understanding of patterns can be facilitated by noting the interests and values attached to curricular arrangements. Researchers such as Cooper (1985), Moon (1986) and Stanic (1987a, 1987b) have observed that that the ways in which school knowledge is selected, organised and assessed are partly determined by the distribution of power. The sociological assumption is that the most important and overt relation between the organisation of curriculum knowledge and the dominant institutional order will be reflected in social stratification. If changes threaten power structures, resistance will be encountered.

Archer (1983, 1993) pointed out that theories about cultural transmission and reproduction tend to neglect education systems. Without incorporating different elements and structures of the educational systems for different countries or places, the theories cannot account for all the variances in stability and change in educational practice. Archer's Morphogenetic Systems Theory provides a useful tool for analysis of Hong Kong and Macao as well as other parts of the world.

Conclusions

14

Methodology and Focus in Comparative Education

Mark BRAY

The preceding chapters in this book have raised many issues from a range of perspectives. This final pair of chapters summarises and elaborates on some of the lessons that may be learned from the analyses. The present chapter comments on the contents of the earlier chapters within the framework of existing comparative education literature, particularly addressing methodological features. It begins by considering the widely-accepted purposes for undertaking comparative study of education. It then turns to dominant foci in the field, and finally to the approaches and tools commonly used by comparative educationists. The next chapter, following the subtitle of the whole book, identifies conceptual lessons concerning continuity and change in education.

The Purposes of Comparative Study of Education

The purposes of comparative study of education may be wide and varied. Much depends on who is doing the comparing, and under what circumstances. For example:

- parents commonly compare schools and systems of education in search of the institutions which will serve their children's needs most effectively;
- policy makers in individual countries examine education systems in other countries in order to discern ways to achieve political, social and economic objectives;
- international agencies compare patterns in different countries in order to improve the advice that they give to national governments and others;
- practitioners, including school principals and teachers, may make comparisons in order to improve the running of their institutions; and
- academics commonly undertake comparison in order to develop theoretical models which promote understanding of the forces which shape teaching and learning in different settings.

This particular book is (co-)published by a research centre within a university. The book does not aim directly to help parents seeking to find the best schools for their children, since that would have required a very different format and set of contents. Likewise, direct assistance to international agencies, policy makers and practitioners is not a primary goal, though the editors and authors certainly hope that people in such groups will read the book and gain insights which will assist their work. Rather, the book has been conceived principally as an academic work which aims to deepen understanding of the forces that shape education in different societies. The book chiefly focuses on the

education systems and institutions in two territories on the south coast of China; but the work also aims at wider conceptual understanding.

In this context, it is useful to note some of the purposes of comparative education identified by scholars at earlier points in history. A good place to start is with one of the great-grandfathers of the field of comparative education, Sir Michael Sadler. Writing in 1900 (reprinted 1964, p.310), Sadler suggested that:

> The practical value of studying, in a right spirit and with scholarly accuracy, the working of foreign systems of education is that it will result in our being better fitted to study and understand our own.

The emphasis in this quotation is of an individual looking outwards, identifying another society and then comparing patterns with those in that individual's own society. In the case of the present book, it would describe a resident of Hong Kong seeking to learn more about Hong Kong through comparison with Macao; and it would describe a resident of Macao seeking to learn more about Macao through comparison with Hong Kong. Sadler suggested (p.312) that the comparison might encourage appreciation of domestic education systems as well as heightening awareness of shortcomings:

> If we study foreign systems of education thoroughly and sympathetically – and sympathy and thoroughness are both necessary for the task – I believe that the result on our minds will be to make us prize, as we have never prized before, the good things which we have at home, and also to make us realise how many things there are in our [own education systems] which need prompt and searching change.

However, while the editors and authors of this book certainly hope that the work will help residents of Hong Kong and Macao to value and critique their own education systems, the editors and authors also hope that it will prove instructive to readers elsewhere. These readers might include people who have never visited, and indeed do not expect to visit, either Hong Kong or Macao. Such an aspiration emphasises a higher goal of conceptual understanding and theoretical construction.

In aiming for such a goal, again the book has many antecedents within the field. Isaac Kandel, for example, was a key figure in the generation which followed Sadler's. Kandel's 1933 book (p.xix) listed a set of problems which, he suggested, raised universal questions. Kandel then pointed out that:

> The chief value of a comparative approach to such problems lies in an analysis of the causes which have produced them, in a comparison of the differences between the various systems and the reasons underlying them, and, finally, in a study of the solutions attempted.

The tone of such a statement is more closely allied to theoretical goals; and Kandel's book to some extent established a tradition into which the present book fits.

Nearly half a century later, however, Farrell (1979, p.4) justifiably pointed out weaknesses in the quality of theorising in the field. He observed that:

> There is a lack of cumulation in our findings; we have many interesting bits and pieces of information, but they seldom seem to relate to one another. We have little in the way of useful and concise theory.

This situation partly arose from the fact that comparative education is a field in which

scholars of many ideological persuasions converge. Since Farrell wrote those words, moreover, the field's principal academic journals have hosted further controversy and discord. Positivists have clashed with post-modernists, structural-functionalists have disputed with conflict theorists, and so on (Epstein 1986; Psacharopoulos 1990; Paulston 1997, 1999; Bray 2003b; Crossley & Watson 2003).

Nevertheless, the goal of contributing to higher-level conceptual understanding remains not only legitimate in the scholarly arena but arguably the principal overall justification for undertaking academic studies. Such theorising, moreover, should not be seen as merely a form of self-gratification for small groups of thinkers whose work is distant from realities. As Farrell also pointed out (1979, p.4), it is through development of good theory that academics can be of greatest use to policy makers and practitioners:

> [We] will not find something useful to say simply by directing our efforts to studies of popular policy issues of the day – by being trendy. We will have something useful to say only when our observations regarding any particular policy problem are rooted in a more general understanding of how educational systems work, which is in turn based upon cumulated discoveries organized into and by theory.

Such remarks are pertinent to the present book as much as to others in the field.

Focus in Comparative Studies of Education

Locational Comparisons
Paralleling the diversity of ideological perspectives in the field of comparative education is a diversity in the foci of comparison. The field of comparative education is principally conceived in terms of locational comparisons, i.e. of phenomena in different places. Temporal comparisons may also be important, and are considered below, but historical and futuristic studies focusing on single locations are less likely to appear in the pages of comparative education journals.

Even within the category of locational comparisons, survey of the articles in the field's major journals would display a vast array of studies. The array would include diversity in the themes and in the countries, regions, levels of education, and types of education chosen for analysis. Within this array, however, two emphases have been dominant. First has been a stress on comparisons in which the main units of analysis are nations or countries (commonly treating these two words as synonyms, and ignoring the differences in meaning which are important to political scientists [e.g. Robertson 1993, p.331]). Second, a major focus has been on systems of education, many of which are described, rightly or wrongly, as national systems. Conceptually, of course, it is possible, and in many circumstances very desirable, to compare classrooms, schools and other units both between and within countries; but a considerable number of major works which have helped to define the field of comparative education have explicitly focused cross-nationally on systems of education. Sadler's 1900 presentation was in this category, as was Kandel's 1933 book. Subsequent works, spread over the decades, include Cramer & Browne (1956), Bielas (1973), Ignas & Corsini (1981), and Postlethwaite (1988).

To some extent, the present book fits in this tradition. The chapter by Adamson & Li on primary and secondary education sets part of the scene by describing what is widely called *the* Hong Kong education system, though Adamson & Li also observe the existence

of schools and even of systems in Hong Kong which lie outside the mainstream. Macao, by contrast, has not had a dominant entity which can be described as *the* Macao education system. Instead it has had a plurality of systems – a fact which has been the focus of considerable and important comment in the present book.

In a strict sense, however, the main focus in this book is not on cross-national comparisons. Hong Kong and Macao cannot be described as nations, and not even as countries. Prior to the 1997 and 1999 changes of sovereignty they were administered as colonies, albeit with substantial autonomy from the United Kingdom and Portugal; and since the change of sovereignty they have been Special Administrative Regions (SARs) of the People's Republic of China (PRC). As such, the book may be seen as helping to redress an imbalance in the field of comparative education by focusing on a pair of units which, particularly after 1997 (in the case of Hong Kong) and 1999 (in the case of Macao) may be called in*tra*national instead of in*ter*national.

Figure 14.1: A Framework for Comparative Education Analyses
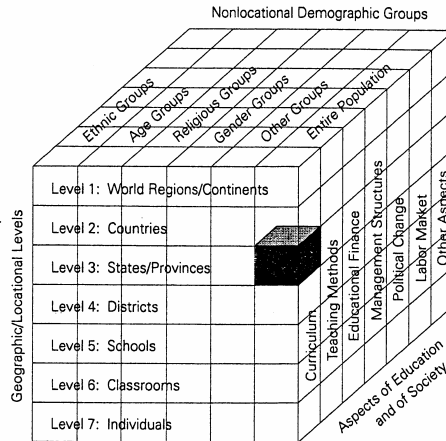
Source: Bray & Thomas (1995), p.475.

This observation may usefully be considered in conjunction with a comment about the value of multilevel analyses. Figure 14.1 reproduces a model for comparative analyses presented by Bray & Thomas (1995). The article from which it is taken pointed out that too many studies neglect discussion of the ways in which patterns at lower levels in education systems are shaped by patterns at higher levels, and vice versa. The article noted that the goals and resources available for some comparative studies necessarily limit their scope, but suggested that such studies should at least recognise both the mutual influences of other levels and the boundaries in their foci.

Along these lines, Figure 14.1 is helpful for showing what the present book has and has not covered. Within the figure, the smaller black cube represents a comparative study of curriculum in two or more states/provinces of a single country. That smaller cube would also be shaded if the contents of the present book were mapped against the large cube. In this case the vocabulary would refer to colonies/SARs rather than to states/provinces, but the basic idea is equivalent. This particular book has included a chapter on curriculum as a

whole (by Lo), and separate chapters on civic and political education (by Tse), secondary school history (by Tan) and secondary school mathematics (by Tang). This list on the one hand shows how the book has gone into detail, but on the other hand indicates the extent other hand indicates the extent to which further study is both possible and desirable. Many more subjects and cross-curricular domains remain to be analysed in the same way; and history and mathematics can instructively be compared at other levels in addition to the secondary level.

Other parts of the cube which would be shaded if the contents of the present book were mapped against Figure 14.1 would include levels of education as a whole. This would be done under age groups (or, if that is considered too rigid on the grounds e.g. that some 12-year olds may be in primary school while others are in secondary, under 'other groups') in the nonlocational demographic dimension of the cube. Concerning levels of education, the present book has compared pre-primary education in Hong Kong and Macao, and has given similar treatment to primary, secondary and higher education. Teacher education is not so much a level as a type of education. However, the book has omitted specific coverage of some other types of education, such as schooling for the blind, deaf and mentally handicapped. This again emphasises that although the present book is the product of a substantial amount of work, much further exploration remains to be done.

Concerning other levels of the cube, several chapters in the present book make explicit comparisons of institutions – particularly the chapters by Tan on secondary school history curricula, and by Yung and by Hui & Poon on higher education. Comparisons of classrooms and of individuals are mostly implicit rather than explicit. A similar observation applies to higher levels in the cube: several chapters refer to other countries and to world regions, but it has not been the goal of the authors to make systematic multilevel comparisons throughout each chapter. This certainly does not devalue the nature of the research; but the discussion does help to show the boundaries of the present book as well as its focus.

Temporal Comparisons

Turning to temporal comparisons, all chapters in this book place comments on contemporary events within the context of historical antecedents. Leung's chapter on church and state, for example, goes back to the 16th century with reference to Macao. Tang's chapter on mathematics curricula also has a strong historical element, albeit mainly confined to the 20th century. These and other chapters therefore contain comparisons over time as well as over place; and while temporal comparisons do not so readily find an accepted niche within the field of comparative education, they are considered legitimate and important by at least some major figures in the field (e.g. Cowen 1998, p.61; Thomas 1998, p.9).

Concerning the value of historical research in comparative education, Sweeting (2001, p.226) pointed out that "efforts to stretch comparisons across places, with little or no attention paid to time, are likely to create a thin, flat, quite possibly superficial outcome". In contrast, he added, efforts to enable comparisons to encompass time in addition to place are likely to enhance the profundity of analysis. The editors and authors certainly hope that this observation applies to the present study. All projects must of course seek balances within the framework of their objectives. By restricting its primary spatial focus to two locations, the present book sacrifices the insights that would come from systematic comparison of more locations. However, because the primary spatial focus was

restricted, greater depth has become possible through temporal comparison.

A further benefit from incorporating historical analysis is the possibility of clearer understanding of the actors and processes in education systems. As pointed out by Sweeting (2001, p.228):

> There is an understandable tendency of writers on comparative education to con-centrate on product documents such as White Papers, commission reports, and digests of statistics rather than the type of process documents that illuminate past decision-making (and fascinate historians). This leads, at times, to a failure to distinguish between the officially designated agents of policy-making and the actual ones.

Sweeting added that the superficiality necessitated when comparative education studies involve many locations may lead analysts to make false assumptions about sequence in policy making and implementation. Using the example of language policy for Hong Kong schools, Sweeting shows (p.6) that policy formulation does not necessarily precede implementation. Hong Kong has a long and tortuous history in the debate about appropriate policies for the medium of instruction, particularly at the secondary level. Only through historical comparisons is it possible to ensure that simplistic analyses are avoided. As observed elsewhere by Sweeting (1997, p.36):

> It could have helped the policy makers and advisers in 1973 and 1974, for example, as they debated whether to make Chinese the normal language of instruction in the early years of secondary education, if they had remembered to check what had happened in 1946 when language circulars proposing precisely this were with-drawn by the Education Department.... More recently, enthusiastic proponents of 'bridging programmes' to help students switch from one medium of instruction to the other would have benefited if they had examined both the strengths and weaknesses of the Special Classes Centre at Clementi Middle School in the years 1956-1963.

Readers will judge for themselves how well the chapters in this book have drawn insights from their historical frameworks and have avoided the superficiality which would have posed a stronger threat had the book taken more locations as its primary focus; but the methodological point remains that the restriction in the number of locations has permitted greater depth in historical analysis. This has permitted comparisons over time, which has been a key element enshrined even in the subtitle of the book about continuity and change. Temporal comparisons have also permitted authors to analyse processes of change, not relying on simplistic statements about products.

Changing Fashions and Opportunities

Discussion about focus in comparative education should include commentary about changing fashions in the types of topics which dominate the literature during particular decades. Kelly (1992, p.18) observed that the field "has always been influenced by contemporary events". At the same time, comparative education, like other fields, has some topics which remain strong foci for research and debate throughout the decades.

The contents of the present book were influenced by contemporary events in several ways. Most striking, particularly at the time of preparation of the first edition of the book, was the heightened sense of identity in both Hong Kong and Macao because of their changes of sovereignty. Hong Kong's transition attracted huge international media

attention, and created considerable self-consciousness within the territory. Macao's transition attracted less international attention, but was obviously of major significance to the residents of Macao and to some extent also more widely. In this sense, the book fits Kelly's description as a product stimulated by a pair of contemporary events.

The book also results in several important ways from opportunity. Prior to the publication of the first edition, no previous book of this type had been produced. This was not only because of the absence of a sharp stimulus such as the change of sovereignty; it also resulted from maturing expertise for work of this kind within the two locations. Partly as a result of the expansion of higher education described in the chapters by Yung, Ma and Hui & Poon, by the mid-1990s both Macao and Hong Kong had local research capacity of a scale and quality unprecedented in their histories.

This expansion of research capacity was especially obvious in Macao. Between the closure of St. Paul's University College in 1762 and the opening of the University of East Asia (UEA) in 1981, Macao had no local institution of tertiary education. The operation of the UEA, which in 1991 was renamed the University of Macau (UM), created a body of scholars who had a mandate to undertake research as well as to teach, and who had a strong reason to focus their research on the territory in which they lived. Before 1981, very little research was conducted in or on Macao. Its subsequent blossoming was due in no small measure to the establishment and growth of the UEA/UM. It is no coincidence that at some point in their careers eight of the 17 contributors have been employees of the University of Macau.

However, the pattern has another instructive dimension: seven of these eight authors were residents of Hong Kong before moving to Macao. In part because Macao had not had a university for centuries, in the early years of the existence of the UEA/UM Macao was unable from internal sources to provide even the majority of people needed to staff the institution. Hong Kong was an obvious ground for recruitment, since it had a much larger pool of suitable personnel, was close at hand, and had cultural and political affinities. The result for the present book was the formation of a group of people who already knew a great deal about education in Hong Kong and who subsequently learned a great deal about education in Macao. These people were therefore excellently placed to contribute to a comparative study of this sort.

A question which readers might next have in mind concerns the other authors in this book who have never taught at the University of Macau. One of them was born in Macao but then came to Hong Kong for much of his education and subsequent employment. A determining factor in his personal history was that Hong Kong had a stronger economy which attracted many migrants and their families; but the fact that he still had many relatives in Macao helped him to retain a strong interest in the territory. Others were born in Hong Kong but were drawn to undertake comparison by academic fascination with a neighbouring society which was both so similar and so different.

An additional factor in Hong Kong, which to some extent paralleled patterns in Macao but had a different emphasis, arose from the scale and nature of tertiary education. Hong Kong's first university, the University of Hong Kong, was founded in 1911 and has a much longer history than the UEA/UM. As recounted by Yung and by Ma, however, the 1990s brought considerable tertiary expansion. The higher education sector at this time was well resourced, but from the middle of the decade academics were placed under considerable pressure to produce evidence of productivity in research. For all disciplines, this combination of circumstances provided both the capacity and a strong incentive to

undertake research.

Within this climate, comparative research has been a particular beneficiary. To the fact that some contributors were born in Hong Kong but worked in Macao, or vice versa, should be added that the majority of contributors gained at least part of their postgraduate training in neither place. Travel to other countries and other cultures for research training greatly promoted inclinations to undertake comparative studies. The growing prosperity of both Hong Kong and Macao were important factors in this, for economic strength provided both finance for people to go abroad for training and employment opportunities on their return. The governments of both Hong Kong and Macao endeavoured to take every opportunity to enhance international links since they perceived such links to be part of the safeguard of autonomy in the post-colonial era.

Yet another dimension of this environment helps explain the circumstances of the three contributors to this book who were not born in Hong Kong or Macao, nor indeed in the region. Two of the three contributors were born in Europe, and had personal reasons for taking up employment in Hong Kong. The third was born in India, came first to Hong Kong as a child because her father was employed by a multinational company, and returned as an adult in part because she felt affinity with Hong Kong. The fact that these three individuals could take that path was made easier by Hong Kong's economic strength and therefore employment opportunities. The significance for the field of comparative education was that the individuals brought perspectives not only from their countries of origin but also from other places in which they had worked.

To summarise, this list of biographies has been presented not so much because of its intrinsic interest but to echo and elaborate on the observation by Kelly (1992, p.18) that the field of comparative education "has always been influenced by contemporary events". The contemporary events which led to this particular book included a confluence of stimulus and opportunity. Much of the stimulus lay in the change of sovereignty in the two places, while much of the opportunity lay in the existence of persons who had the skills and interest to undertake a study of this kind. In turn, the existence of these persons was partly the result of economic prosperity and a political desire for international connections. The Comparative Education Research Centre at the University of Hong Kong, which is the co-publisher of this book, was established in 1994 and to some extent is itself a product of this pattern of circumstances (Bray 2004b).

Allied to this, the influence of contemporary events is evident in one analytical theme which runs through the majority of chapters, namely the focus on colonial transition and postcolonialism. Because Hong Kong and Macao had undergone changes of sovereignty in 1997 and 1999 respectively, it was natural for a book prepared at this point in history to make the transition and its consequences a major focus. In turn, focus on colonial transition naturally led to focus on colonialism itself, including the main era and even, for some authors, the beginning of colonial rule.

However, survey of literature on comparative education shows that colonialism is a topic of sustained interest in the field as a whole. A sampling of writings over the decades could include Murray (1929), Mayhew (1938), Furnivall (1943), Lewis (1954), Ashby (1966), Altbach & Kelly (1978), Watson (1982a), Arnove & Arnove (1997), and Steiner-Khamsi & Quist (2000). In this respect, the contents of this book contribute to an existing body of knowledge on a topic which remains of widespread concern in the academic world. It does so, moreover, in at least two distinctive ways. The first is that comparison of Hong Kong and Macao requires comparison of British and Portuguese

colonial styles. While a considerable body of literature compares education in British and French colonies (e.g. Clignet & Foster 1964; Gifford & Weiskel 1971; Asiwaju 1975), little direct comparison has been made of education in British and Portuguese colonies. Watson's (1982b) 23-page bibliography contained no direct reference to any such work, and the only direct reference to comparison of British and Portuguese (plus Belgian and French) colonial styles in Kay & Nystrom's (1971) 19-page bibliography was a 1949 article by Lewis. Likewise, Altbach & Kelly's (1991) book omitted all mention of Portuguese colonialism. Comparison of colonial styles in Hong Kong and Macao therefore helps to reduce a longstanding neglect.

A second distinctive way in which this book contributes to the conceptual literature on this topic arises from distinctive features of the colonial transition in the two territories. Among these features were that:

- the transitions in Hong Kong and Macao were at the end of the 20th century rather than earlier, and thus took place in a very different global climate;
- the transitions took place over an extended time period;
- the transitions were not to independent sovereign statehood, but to reintegration with the country from which the colonies had previously been detached; and
- the colonies being handed over had far higher per capita incomes than had been the case in previous decolonisation exercises.

Because these features are distinctive to Hong Kong and Macao, as a pair they provide instructive contrasts to colonial transitions in other parts of the world and at earlier times in history (Bray 1994, 1997c).

However, colonial transition is of course not the only theme that runs through the majority of chapters. Another pair of themes deserves to be highlighted because it can again be related to both sustained interests and fashions in the comparative study of education. One partner in the pair, which has been the focus of sustained interest (see e.g. Reller & Morphet 1964; Lauglo & McLean 1985; Cummings & Riddell 1994; Mok 2003), concerns the control of education, including questions of centralisation or decentralisation and the role of churches and other non-government bodies at different levels of education systems. The more fashionable topic is privatisation in education – a topic which attracted particular attention during the 1980s, 1990s and initial decades of the present century (see e.g. Walford 1989; Jimenez & Lockheed 1995; Bray 1998c; Wang 2000; Belfield & Levin 2002).

Again, the book contributes perspectives which are important additions to the broader literature. Lo's chapter points out that in the domain of curriculum control, Hong Kong's mainstream education system is widely described as centralised. In Macao, by contrast, control of curriculum has been largely uncentralised (a word which is preferred to the term *de*centralised since the latter usually describes a situation which was previously centralised, whereas in Macao curriculum control was never centralised). During the 1990s, aspects of administration of Hong Kong schools were decentralised, with institutions being given stronger autonomy through the School Management Initiative and other schemes (K.C. Wong 1998). In other respects, however, control became more centralised. Perhaps the best example of this, explained in Koo's chapter, is the medium of instruction in secondary schools. Control also became more centralised in Macao, and in this respect the two societies not only began to resemble each other more, but also provided a useful counterpoint to the considerable literature which advocates

decentralisation of educational administration (e.g. Winkler 1989; Fiske 1996; USAID 1997; World Bank 2003), often in a rather generalised way.

Likewise, analysis of both Hong Kong and Macao provides useful insights for debates about privatisation. Macao is one of the few places in the world in which the majority of schools have been left to operate on their own with almost no government support, interference or control. However, the resulting patterns have been far from the idealistic pictures of efficiency and quality painted by advocates of privatisation such as Chubb & Moe (1990) and Cowan (1990). Because of the problematic features of the situation, in Macao the 1990s brought processes of publicisation rather than privatisation, very much against the world trend. Patterns in Hong Kong were more complex, but they also included a measure of publicisation through the Direct Subsidy Scheme (Ip 1994; Bray 1995b).

Moreover, careful analysis of Hong Kong schools shows the danger of superficial judgements by authors who do not take the trouble to look beyond the surface. For example, James (1988, p.96) looked at Hong Kong statistics, found that only 8 per cent of primary and 28 per cent of secondary pupils were in schools operated by the government, and mistakenly assumed that all the rest were in private schools. Had she looked more closely, she would have found that although the aided schools are legally non-government bodies, almost all their funding comes from the government and they are subject to considerable government control. As such, the aided schools would be much more appropriately classified in the public than the private sector. Such remarks illustrate the danger of superficiality in large-scale comparative research, particularly when it requires data from diverse settings to fit simple categories, and emphasise the value of studies which can examine matters in depth.

Approaches and Tools in Comparative Study of Education

Watson (1996, p.381) has highlighted the plurality of methods in the field of comparative education:

> Because comparative education is the product of many disciplines it cannot lay claim to any single conceptual or methodological tool that sets it apart from other areas of education or from the applied social sciences. It must be stressed, therefore, that there is *no* single scientific comparative research method in spite of the efforts of some scholars to argue that there is.

Just as the aims and foci of comparative studies of education may vary widely, so too may the methods. Comparative studies, like most others, may be primarily quantitative or primarily qualitative; and they may rely on questionnaires, on interviews, on documentary analysis, and on many other bases (Rust et al. 1999; Crossley & Watson 2003).

The present book nevertheless has features which place it in a sub-group within the field. The various chapters are mainly analytical accounts based on description of both policy and practice. As such, they are very different from exploratory research which seeks to generate hypotheses, or evaluative research which seeks to test hypotheses. They are also very different from the carefully-constructed comparative studies of the International Association for the Evaluation of Educational Achievement (IEA), in which specific school subjects have been investigated on a cross-national basis through carefully designed

questionnaires administered to equally carefully selected samples of schools and students (Postlethwaite 1999).

Figure 14.2: Bereday's Model for Undertaking Comparative Studies
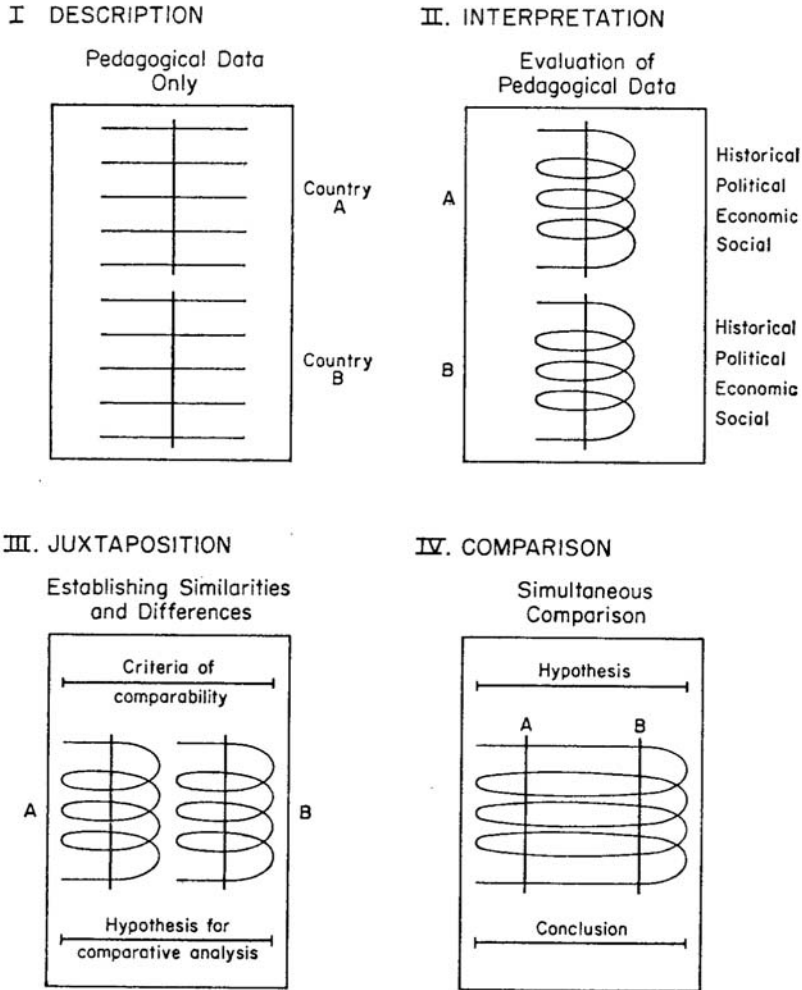
Source: Bereday (1964), p.28.

One strength of the present book, as mentioned in the Introduction, is that each chapter focuses on patterns in both Hong Kong and Macao, and undertakes explicit comparison. In this respect the book differs from many others in the field of comparative education. Some books (e.g. Mukherjee 1964; Sullivan 1997) place country chapters in sequence, and primarily present comparisons at the beginning and/or end rather than in each chapter. Other books which purport to be comparative (e.g. Fafunwa & Aisiku 1982; Mazurek & Winzer 1994) barely even do that; instead they are little more than collections of single-country studies bound together, and leave it to readers to make the comparisons.

The present work, it may be suggested, is in this respect more actively comparative.

In the process, whether consciously or unconsciously, almost all contributors to the present book have followed an approach allied to that advocated by Bereday (1964). Figure 14.2 reproduces Bereday's recommended four steps for undertaking comparative studies of education in two countries. The first step in the model is description of pedagogical data for two countries separately. This is followed by evaluation within historical, political, economic and social contexts. The third step requires juxtaposition according to criteria for comparability and hypotheses for comparative analysis; and the final step requires simultaneous comparison according to the hypothesis to reach a conclusion.

Of course, not all authors in this book followed these steps in precisely that sequence. Indeed, as noted by Jones (1971, pp.89-92), Trethewey (1979, pp.75-77) and Watson (1996, p.371), that would be very difficult to do. Even at the first stage, in the words of Jones (1971, p.89), "the complete isolation of pedagogical facts is extraordinarily difficult, as rarely do they have meaning without the help of explanation, using other disciplines". Further, it is doubtful whether any researcher should be recommended to follow Bereday's sequence rigidly, moving from one step to another without going back over earlier ground to make several iterations. However, the model remains useful several decades after it was first presented because it stresses the value of systematic and balanced enquiry. The model further emphasises the importance of viewing education phenomena within their broader contexts.

The Bereday model also helps to underline why Hong Kong and Macao are a worthwhile pair for comparison, namely that they have sufficient in common to make analysis of their differences meaningful. The commonalities, as noted in the Introduction, include the fact that they are both situated on the south coast of China, are both mainly populated by Cantonese-speaking Chinese, are both urban societies with economies based mainly on services and light industry and with insignificant agricultural sectors, have both been colonies of European powers, and since the end of the 20th century have both been returned to China and governed as Special Administrative Regions. Yet this book has shown that their education sectors have significant differences as well as similarities. This provides an excellent basis for meaningful comparison to identify the extent and the reasons for the differences and similarities, and to advance conceptual understanding through exploration of the forces at work and the relationships between those forces.

More detailed analysis of the approaches used by the various authors of this book again reveals both commonalities and variations. All the authors used documentary materials, which is a dominant characteristic of much comparative inquiry in education. These documentary materials included primary as well as secondary sources: many chapters refer to government reports and statistics, for example, and a few cite primary sources from archives or other sources. Several chapters also draw on interviews, and a few report data collected from questionnaires. In other words, the range of methods used to gather material for the comparison is broad. This matches the range that would be found in typical volumes of the major professional journals.

One further obstacle commonly encountered in comparative education is that of language. Translations are a poor substitute for direct communication, and, as observed by Halls (1990, p.63), "for comparative studies to thrive, the linguistic barrier remains the greatest to be overcome". Direct linguistic access to both secondary and primary sources permits researchers to identify important nuances, and to avoid some of the

misconceptions which might arise from inadequate translation and linguistic cultural bias. The present book has benefitted from the fact that almost all authors have knowledge of both English and Chinese, and that several also have a working knowledge of Portuguese. The authors who did not have fluency in Portuguese may have been slightly handicapped in access to certain materials and people in Macao. However, in recent years much official documentation in Macao has been translated into Chinese; and the number of potential informants who did not speak Chinese or English was very small. As a result, lack of fluency in Portuguese has been much less of a handicap than it would have been if conducting research in Brazil or Cape Verde, for example. For the present research, English and Chinese were by far the most important languages, and competence in both languages has given the authors much greater access than would have been possible for monolingual researchers.

A final methodological point concerns the scale of the societies. With its population of below half a million, Macao is among the smallest of the small. Hong Kong has a much larger population, but is still very small compared with such neighbours as mainland China, Indonesia, Philippines and Vietnam. From a research perspective, smallness of scale may create some problems but can also have substantial benefits (Bray & Packer 1993). One benefit is that 100 per cent samples can be achieved with small numbers. Tang's chapter on mathematics curriculum is partly based on his PhD thesis (K.C. Tang 1999), which surveyed all the secondary schools in Macao. Because Hong Kong is larger, most researchers have to take samples when investigating education there; but their samples are usually still substantially greater proportions of the total number of schools than would be possible for research on mainland China, for example. In the domain of higher education, as shown by Yung's chapter, even in Hong Kong it is easy to make explicit reference to every institution.

Smallness of scale may also permit identification of the personal factors which shape education systems. Leung's chapter on the church and state exemplifies this in its reference to individuals who have shaped both policy and practice in Hong Kong and Macao. Tan's chapter on history curricula identifies individuals who have founded particular schools and shaped curricula. Since this chapter uses schools as units of analysis, a similar approach could have been used in larger societies. However, the schools sampled still represented a much greater proportion of the total in each territory; and the fact remains that all chapters would have been qualitatively very different had they focused on China and India, for example, rather than on Hong Kong and Macao. Focus on larger units would require greater anonymity and preclude the degree of attention to internal variations that is possible in smaller units.

Conclusions

As an academic study, this book aims to contribute to conceptual understanding more than to specific recommendations for policy and practice. Along the lines proposed by Farrell (1979, p.4), however, the authors and editors hope that the book will still assist policy makers and practitioners by showing some of the ways that educational processes interact with and result from economic, social, political and other forces.

Returning to Sadler's remarks quoted above, one of the key roles of comparative education is to help individuals to understand more fully their own societies. Margaret

Mead, the anthropologist, is reported once to have said (approximately): "If a fish were to become an anthropologist, the last thing it would discover would be water" (Spindler & Spindler 1982, p.24). Similar remarks might be made about research in comparative education. While the value of inside perspectives seems obvious, Mead's remark emphasises also the value of outside perspectives.

An alternative way to promote objective understanding of one's own society, however, is first to look outwards and then to look back. Comparative education, like other forms of comparative enquiry, should make "strange patterns familiar", i.e. should permit and encourage researchers and readers to become more familiar with the features of education systems and societies which are not well known to them. At the same time the reverse may also apply, i.e. that comparative education can make "familiar patterns strange", calling into question features of education systems and societies which had been taken for granted by insiders simply because they were so familiar with them (see Spindler & Spindler 1982, p.43; Choksi & Dyer 1997, p.271). The authors and editors of this book hope that on the one hand readers based in Hong Kong and Macao will learn about each other's society and patterns of education, but also that they will be encouraged to reflect on their own society and patterns of education. In the process, they may see features of their own society and education which had been overlooked and which perhaps deserve attention for encouragement or reform.

Within the book, historical features have been given considerable attention. As noted above, this is a strong tradition within the mainstream of comparative education. Writing in 1984, Noah (reprinted 1998, p.52) showed how temporal and locational comparisons can be combined in a fruitful way by observing that:

> Not only is the nation that forgets its history likely to repeat it, but the nation that forgets (or is blind to) the educational system of its contemporaries is risking either stagnation, or the perils of burdensomely expensive experimentation. Comparative understanding can help countries break with old ways of arranging the educational systems without the danger that they indulge in foolish daydreams that there are just one or two fairly simplistic things they need to do in order to set their schools aright.

Again, this shows the functional uses of comparative education to readers in particular societies, and in this case Hong Kong and Macao.

However, this chapter has also stressed that the book makes a contribution to broader literatures, and should interest readers who are not residents of either Hong Kong or Macao. The themes addressed in the book are certainly of interest to analysts in many other parts of the world; and even this methodological chapter may be of value to readers who seek to understand the processes by which comparative studies may be assembled in a range of contexts. Once again, this is the value of analytical works. Were the book to focus on recommendations to policy makers and practitioners in Hong Kong and Macao, it would have relevance to a limited audience and would rapidly become out of date. It seems likely that many of the themes on which the contributors to this book focus will have a relevance which is both enduring and which reaches considerably beyond the small part of the south coast of China with which the book is primarily concerned.

15

Continuity and Change in Education

Mark Bray

The title of this final chapter follows the wording in the subtitle of the whole book. The chapter focuses on the lessons of the book for the understanding of continuity and change in education. Building on the methodological points made in the previous chapter, this one benefits from both temporal and locational comparisons. Although focus on continuity and change is most obviously a matter of temporal comparison, locational comparisons assist analysis because, even when they are 'snapshots' of particular places at particular points in time, they may still contribute to understanding. For example, much can be learned about the implications of colonial transition in Hong Kong and Macao at the end of the 20th century by comparing it with patterns in other colonies at their stages of colonial transition in earlier decades.

The literature on change is much more voluminous than that on continuity. This is partly because change is more obvious and often more threatening. A parallel exists in history books which focus much more on war than on peace. In the education sector, in addition to many books and articles, whole journals focus on change. They are published in diverse parts of the world, and include:

- *Change: The Magazine of Higher Learning*, which is published in the USA on behalf of the American Association for Higher Education and has evolved from a publication launched in 1970;
- the *Journal of Education and Social Change*, published by the Indian Institute of Education and launched in 1987;
- *Change: Transformations in Education*, published in Australia by the University of Sydney and launched in 1998; and
- the *Journal of Educational Change*, published in the Netherlands by Kluwer and launched in 2000.

In addition, several journals focus on the related domain of reform. They include:

- the *International Journal of Educational Reform*, launched in 1992 and now published in the USA by Scarecrow Press; and
- *China Education Reform*, launched in 2003 and published (in Chinese) by the Hong Kong Education Publishing Company.

No counterpart journals focus explicitly on continuity in education.

However, within the literature on change and education, in practice much discussion does also focus on continuity. Thus, much of the literature on reform concerns the obstacles to reform; and the framework on which the first part of this chapter is based was

presented by Thomas and Postlethwaite (1983a) in a book which was subtitled *Forces of Change* but which in practice was also about continuity. The book by Thomas and Postlethwaite is especially relevant to the present discussion because it focused on East Asia and included separate chapters on Hong Kong and Macao.

The Thomas and Postlethwaite Framework

Thomas and Postlethwaite began (1983b, p.7) by indicating that they used the terms 'force' and 'cause' synonymously. A force or a cause, they stated (p.7), is "a factor whose presence is necessary for an event to occur". Without each of the forces that press against each other in a kind of dialectical exchange, they added, events cannot happen in the way that they do. Use of the phrase "each of the forces" reflected the authors' commitment to the principal of multiple causation. According to this principle, an event is not simply the result of a single force but is always the result of many forces, some of which may be more powerful than others and therefore more worthy of note.

The principle of multiple causation, Thomas and Postlethwaite proceeded to observe (1983b, p.7), applies to both the horizontal and vertical dimensions of the timing of an event. By 'horizontal' they meant that several forces converge simultaneously to mould an event; and by 'vertical' they referred to the sequence or accumulation of causes over time. This, they pointed out, is the philosopher's principle of infinite regress: the idea that behind each cause is an earlier cause which led to the later one. Thomas and Postlethwaite did not attempt the impossible task of identifying all forces that converge horizontally to cause an event. Nor did they endeavour to trace far back into the past to uncover all the links in a vertical web that recedes into ancient times. Instead they restricted their main focus to the 20th century, and to the major causes of the events they analysed.

Thomas and Postlethwaite distinguished between enabling and direct forces for change. An enabling force was identified (1983b, p.10) as:

> a causal condition that provides an opportunity for educational innovation but is not directly involved in the change. In other words, an enabling event can take place without affecting the schooling process.

A direct force, in contrast, was identified as one that applied specifically to the process of schooling. Such a force, Thomas and Postlethwaite added (1983b, p.10) was:

> a characteristic – such as an attitude – or an act of a person that motivates others to promote a given educational change, that furnishes an alternative to current educational practice, or that provides resources for implementing the change.

The converse of an enabling force was described as a disabling one, i.e. a condition that obstructed change; and the possibility was noted that direct forces could be either positive or negative. For the present chapter, inclusion of disabling forces and direct negative forces is important because analysis here focuses on continuity as well as change.

For Thomas and Postlethwaite, however, the main focus was on change. With this in mind, they constructed an analytical framework with seven dimensions of change, namely: the magnitude of intended change; availability of alternatives; motivation or philosophical commitment; social and organisational stability; resource accessibility; organisational and technical efficiency; and adequacy of funding. Figure 15.1 gives examples of each category in the seven dimensions. These are of course not the only ways in which change

(and continuity) can be viewed and classified, as observed by Thomas and Postlethwaite themselves (1983b, p.6). However, the framework does promote understanding of patterns in Hong Kong and Macao, as well as in other parts of the world.

Figure 15.1: The Thomas & Postlethwaite Classification of Determinants of Change and Continuity

Positive Forces that Hasten Change | **Negative Forces that Retard Change**

Dimension 1: Magnitude of Intended Change

1.1 Population Size and Accessibility

Enabling forces: small population. Small territory, easily traversed terrain and waterways, mild climate. Advanced communication and transportation facilities – radio, telephone, television, electronic-computer systems, fast trains, ships, autos, aeroplanes.

Disabling forces: Large population. Large territory, rugged terrain and treacherous waterways, severe climate. Primitive communication and transportation facilities.

1.2 Complexity of Intended Change

Direct-positive forces: A few simple aspects of the education system to be changed.

Direct-negative forces: Many interrelated aspects of the education system to be changed.

Dimension 2: Availability of Alternatives

Enabling forces: A society with a high proportion of people holding modernisation views. A society that interacts freely with other societies and encourages new ideas.

Disabling forces: A society with a high proportion of people holding traditionalist views. A society isolated from interaction with other societies and that discourages innovation

Direct-positive forces: Educational leaders who seek new ideas and encourage varied opinions and proposals.

Direct-negative forces: Educational leaders who defend traditional practices, discourage differences of opinion and new proposals.

Dimension 3: Motivation or Philosophical Commitment

Enabling forces: A society with a high proportion of people holding modernisation views.

Disabling forces: A society with a high proportion of people holding conservative, traditionalist views.

Direct-positive forces: A high proportion of powerful educational leaders strongly committed to effecting the proposed change. Leaders have sanctions or propaganda techniques available for influencing educational personnel to support the change.

Direct-negative forces: A high proportion of powerful educational leaders who lack a strong commitment to the change or, more seriously, who choose to resist the change. Leaders have sanctions or propaganda available to influence educational personnel to resist the change.

Dimension 4: Social and Organisational Stability

Enabling forces: Peace and amity in the society, continuity of the ruling government, regular production of sufficient goods to meet people's needs.

Disabling forces: War, revolution, rioting, frequent changes of government, and such 'natural' disasters as floods, earthquakes, and crop failures.

Direct-positive forces: Amicable relations among the education-system's staff members, rewards to staff for efficient service, clear leadership direction, infrequent organisational change.

Direct-negative forces: Dissension among the education-system's staff members, jealousies, frequent organisational change, frequent displacement of existing projects with new projects, lack of rewards for efficient service.

Figure 15.1 (Continued)
Positive Forces that Hasten Change   **Negative Forces that Retard Change**

Dimension 5: Resource Accessibility

Enabling forces: A society with advanced industries and training systems.

Disabling forces: A society whose services for producing supplies and training personnel are few and inefficient.

Direct-positive forces: The use of efficient, nearby sources for producing the equipment and personnel required in the intended educational change.

Direct-negative forces: The lack of efficient, nearby facilities for producing the equipment and personnel required for the educational change.

Dimension 6: Organisational and Technical Efficiency

Enabling forces: A society with efficient organisational structures and a high degree of specialisation, technical expertise and advanced equipment for producing objects, processing data, communicating, training people, and the like.

Disabling forces: A society with ineffective organisational structures, little technical expertise in performing specialised tasks, and little or no advanced equipment for producing objects, processing data, communicating, training people and the like.

Direct-positive forces: The application in the educational-change system of advanced organisational structure, efficient specialisation, a high level of skill in the specialised tasks, and advanced equipment to perform tasks that are more effectively done by machines than by people. An effective method for adapting these systems to the local culture.

Direct-negative forces: An educational change system that is inefficiently organised or poorly suited to the local culture, that involves little or no specialisation or expertise in performing specialised tasks, and that uses no equipment for performing tasks – that is, the system uses only people.

Dimension 7: Adequacy of Funding

Enabling forces: A society with enough wealth to expend large sums for improving services, including educational services.

Disabling forces: A society marked by widespread poverty.

Direct-positive forces: Educational change advocates who present a convincing case for their project's receiving a high priority in obtaining available education funds.

Direct-negative forces: Other agencies or projects that make a more convincing case for deserving funds to support their projects than is made by advocates of the change-project under review.

Application of the Thomas and Postlethwaite Framework

The most sensible place to start the task of seeing how the Thomas and Postlethwaite framework can be applied to Hong Kong and Macao is with the relevant chapters of the Thomas and Postlethwaite book. The present work can go further, however. This book benefits from the passage of time, having been published 21 years after the volume edited by Thomas and Postlethwaite. The book also benefits from much greater depth, because it focuses on only two territories and draws on the considerably expanded base of scholarship within those two territories.

The individual country/territory chapters in the Thomas and Postlethwaite book began with Japan and then moved to Taiwan, mainland China, South Korea, North Korea, Hong Kong, and Macao. The Hong Kong chapter was written by Anthony Sweeting, whose subsequent work on the history of education in Hong Kong has been cited by several contributors to the present volume. The Macao chapter was written by R. Murray Thomas, the senior editor of the book. Thomas himself recognised that this was a second-best arrangement. In the Preface (p.vii), he wrote that:

> When the leading education officials in the Portuguese colony … were asked to suggest a suitable author, they explained that the limited size of their professional staff would not permit them to spare a member of it for such an assignment.

The University of East Asia was in its infancy, and could not furnish a suitable scholar. In the absence of an alternative, Thomas decided to write the chapter himself. However, he readily admitted (Thomas 1994) that he found the task challenging because he lacked the detailed knowledge necessary to conduct it thoroughly. As noted in Chapter 14, the subsequent growth of the number of scholars able to write in depth on education in Macao may be viewed with some satisfaction. Thomas would have much less difficulty today were he to prepare a revised edition and seek a knowledgeable author on the topic.

Magnitude of Intended Change
Under the heading of magnitude of intended change, Thomas and Postlethwaite highlighted the importance of such enabling/disabling factors as population, area, physical features, and availability of facilities for communication. Direct forces, they suggested, included the complexity of intended change, being positive if a few simple aspects of the education system were to be changed but negative if many interrelated aspects were to be changed.

In the prologue to the section of their book which focused on Hong Kong and Macao, Thomas (1983b, pp.266-267) wrote:

> Hong Kong and Macau are similar in the magnitude of their educational tasks and of the territory and populations they cover. Compared to the nations of East Asia around them, the two colonies are quite small. All schools in each colony can be reached by car within less than 1 hour, so that communication and the transport of supplies between the central headquarters and every unit of the school system is a simple matter.

This statement of similarity is important, because the people of Hong Kong and Macao sometimes perceive differences more than similarities when looking at each other. Hong Kong is of course much larger than Macao in both area and population; but both are very small when viewed in a regional context.

The point that educational reform may be easier to achieve in entities with smaller populations has also been made by other authors (e.g. Bray 1996, p.16; Randma 2001, p.169). The Commonwealth Secretariat (1985, p.2) has observed that:

> success has a greater effect on a small system. Any successful achievement in any part of the system can shed its light over other parts so that all can share in the afterglow. This obviously helps morale, and strengthens the sense of corporate identity for all those working in the service. Success when it comes tends to come quickly in the smaller system and to be more clearly seen, and that in time acts as an encouragement and spur to further reform.

Brock and Parker (1985, pp.44-45) have added the observation that when allied with compactness, smallness in population size:

> provides a degree of proximity and accessibility in respect of involvement and management that is simply not available to larger systems of education. The ability to communicate rapidly with (say), the Director of Education, the Minister of Education, Principal of the Teachers College, a Head Teacher and an individual

class teacher on the same day, perhaps even in the same street, obviously provides these compact systems with advantages in terms of responsiveness to the community's point of view. By the same token, it makes the community very much more aware of the realities of what is going on….

In Macao, until the late 1980s the authorities made little use of this enabling factor; and if communities were strongly aware of what was going on, they appeared to have little power to ensure that the various actors in the education sector operated in a coordinated way. Several contributors to this book have observed that Macao's schools evolved in a laissez-faire environment, and that the university was founded as a result of private rather than government initiative. During the 1990s, the Macao government adopted a more interventionist stance and was no doubt facilitated by the small population and area of the territory. However, the authorities were confronted during the 1990s by long traditions of school-level autonomy which continued to obstruct coordination. Thus although small size was enabling, the nature of educational change and non-change was shaped by many other factors.

The importance of other factors is illustrated by the fact that change in mainland China's schools during the decades after the publication of the Thomas and Postlethwaite book was perhaps even greater than in Macao. This was despite the fact that, in the opening words of Hawkins' chapter in the book (1983, p.136):

> From the Tian Shan range in the extreme West to the port of Shanghai in the East, from the cold steppes of Mongolia in the North to the tropical rain forests of Yunan in the South, China's 9½ million square kilometers of land contains almost one-fourth of the world's population.

Even in such a vast country, the administration of education, at least in the 1970s and 1980s and arguably even in the 1990s, was more centralised than in Macao. Rather more important were the macro-economic and macro-political contexts in China, which changed radically in the 1980s and 1990s and in turn altered the functioning of schools and universities (Y.M. Leung 1995; Mok 2003). The chief change in the environment which shaped schools was China's shift to a market economy and much greater freedom of personal expression. Specifically in the education sector, a set of reforms was launched in 1985 to universalise basic education, decentralise administration, restructure secondary education, promote technical and vocational education, and reshape the links between higher education and the labour market (Lewin et al. 1994). The pace and scale of change during the 1980s and 1990s were very dramatic despite the size of the population, the vastness of the country, its many geographic barriers arising from mountains, deserts and jungles, and the fact that the education and broader reforms had many interrelated components.

Hong Kong seems to provide a third model which was different from both Macao and mainland China. Over 50 sovereign states in the world have total populations which are smaller than that of Hong Kong, and on this scale Hong Kong might be considered relatively large. However, Hong Kong has a compact territory and excellent physical infrastructure. Moreover, during the 1980s and 1990s the government exercised centralised control over many aspects of Hong Kong's education system, which permitted both coordination and some reform. Hong Kong's schools did not change during these two decades as much as the schools in mainland China, but this was chiefly because the political and economic superstructures in Hong Kong were relatively stable, and because the authorities and the general population were content with incremental change rather than

fundamental overhaul.

It is also instructive to note a difference between the situations at the time that Thomas and Postlethwaite wrote and at the time of preparing this chapter. Page 309 of the Thomas and Postlethwaite book contained a table of population sizes in 1979. Hong Kong was listed as having a population of 4,622,000, and Macao as having a population of 320,000. Two decades later, one is struck by the growth. In 2002, Hong Kong had a population of 6,816,000 (Hong Kong, Information Services Department 2003, p.418), while Macao had a population of 441,600 (Macao, Department of Statistics & Census 2003, p.3). Postlethwaite and Thomas (1983, p.310) remarked that Hong Kong had succeeded in lowering its birth rate, and that "it is estimated that the colony's population will grow by only about 20 percent or one million people over the next 20 years if the low birth rate can be maintained and immigration reduced". The low birth rate was indeed maintained, but immigration was not reduced. As a result, within 20 years the population had increased by 2.2 million and nearly 50 per cent. In Macao the proportionate increase was lower but still considerable at 37 per cent.

While initial size of population may have been an enabling/disabling factor, growth of population was a major direct force of change. It required expansion of education in the two territories, and in some respects permitted diversification. Yung's chapter in this book points out that in both Hong Kong and Macao, higher education was one area in which diversification was particularly marked. Some diversity is also evident at the school level, e.g. in the numbers and types of international schools in both Hong Kong and Macao. However, as noted by Adamson and Li, in both Hong Kong and Macao academic approaches are very dominant, and neither territory has strong technical or prevocational education at the school level. Indeed in Hong Kong, growth of population has been accompanied by reduction of diversity in this respect because the 1980s and 1990s brought a trend in which technical and prevocational schools became increasingly like grammar schools.

On a related tack, Thomas and Postlethwaite suggested that change of a few simple aspects of an education system may be considered a direct-positive force, while change of many interrelated aspects of education would be a direct-negative force. While this statement seems intuitively true, the experience in mainland China shows that the combined weight of multiple changes can in fact become a direct-positive force. In contrast, reforms which are small may in fact be obstructed because they are piecemeal and do not take full account of other components in education and society. Dalin (1978, pp.9-10) observed that in many cases single innovations make little difference when pitted against the inertia of traditional ways of operation. Such remarks seem applicable to Hong Kong and Macao as well as to other parts of the world.

Availability of Alternatives
Under the heading of availability of alternatives, Thomas and Postlethwaite suggested that enabling forces included the existence in society of a high proportion of people holding modernisation views, and encouragement of new ideas through free interaction with other societies. Disabling forces included a high proportion of people holding traditionalist views, and isolation from other societies.

Both Hong Kong and Macao are widely considered open societies. In the Thomas and Postlethwaite book, they were sharply contrasted with North Korea, for example, which continued through the 1980s and 1990s as a 'hermit' society dominated by a rigid political structure and with minimal interaction with other countries. For Hong Kong and

Macao, external interaction was assisted by the bilingual skills of large proportions of the population. The fact that most people in each place could speak, read and write in Chinese facilitated interaction with Taiwan and mainland China, in particular; and the fact that many people could also speak, read and write English facilitated interaction with many other parts of the world. Also, in Macao a significant proportion of the leadership rank was fluent in Portuguese.

In practice, however, rather few innovations in the education sector were adopted from Chinese-speaking societies. The influences of mainland China and Taiwan were perhaps stronger in Macao than Hong Kong, because many of Macao's private schools recruited teachers and had other links with mainland China and Taiwan. Hong Kong educators and policy-makers had access to mainland China and Taiwan, but tended to feel that they had little to learn from those places. Instead, innovations tended to be imported from such countries as the Australia, Canada, the UK and the USA. Examples include the School Management Initiative, which was heavily influenced by models in Australia and to some extent the UK and USA (O'Donoghue & Dimmock 1998, p.52), and the Target Oriented Curriculum, which was heavily influenced by models in the UK and Australia (Carless 1998, p.228). Lest this be oversimplified, however, it must be stressed that most imported models were adapted and even substantially changed in the local context. With reference to the social studies curriculum, for example, Morris, McClelland and Wong (1998, p.123) pointed out that:

> There can be no dispute that the development of social studies in other countries, particularly the United Kingdom and the United States, influenced the curriculum in Hong Kong, especially at the policy and initiation stages. Nevertheless, the emergence of social studies in Hong Kong cannot be adequately explained simply by the influence of external models.

The authors added that although the external models provided exemplary materials, a rhetoric for change that enthused pioneers and policy-makers, and a means for justifying policies, the external models were modified beyond recognition in the design and adaptation to the local environment.

A related issue concerns the internationalisation of the leadership in Hong Kong and Macao. Colonial transition reduced the proportions of British and Portuguese administrators in the respective governments. However, in some respects, both Hong Kong and Macao became more internationalised because of the shortage of local higher education places during the 1980s. Shive (1992, p.216) reported that at the end of that decade, 35,000 Hong Kong students were enrolled in tertiary institutions outside the territory – a number far exceeding the 15,000 tertiary students within Hong Kong.

Academic staff in local institutions were also international in their outlook and experience. Data reported by Postiglione (1996a, p.196) indicated that in 1993, 33.0 per cent of academic staff in seven institutions funded by the University Grants Committee of Hong Kong were employed on non-local terms. Such academics brought with them perspectives from their home countries and elsewhere. Many local academics also had broad international experience. In 1993, 84.1 per cent of academic staff had obtained their highest qualifications outside Hong Kong (Postiglione 1996a, p.197). As observed by the chapters in this book by Yung and by Ma, Macao's tertiary education had been even more restricted in the 1980s; and Macao's institutions of higher education recruited external staff and local staff with non-local qualifications along the same lines as their counterparts in Hong Kong. Macao's institutions have had considerable proportions of Hong Kong staff

(compared with an almost insignificant number of Macao staff in Hong Kong's institutions), and have also been more open to recruitment from mainland China as well as other parts of the world (Bray et al. 2002).

   A related factor, which has been the focus of comment throughout this book, is the extent to which Hong Kong and Macao have been role models for each other. Wong's chapter does point out that at some points in history, Hong Kong preschools gained staff and ideas from their counterparts in Macao; and Adamson and Li highlight the shift of some Macao schools to Hong Kong shortly after the commencement of the British colonial period. In general, however, the balance has been very much on the other side, i.e. Macao learning from Hong Kong. A major underlying factor has been the relative expertise of the two territories. Because Hong Kong is larger and has paid more attention to tertiary education, it has had greater pools of expertise. Educators in Hong Kong have not generally felt that they had much to learn from Macao; but educators in Macao have commonly scrutinised innovations in Hong Kong with care. Tang's chapter shows that in the domain of mathematics education, some Macao educators have paid heed not only to Hong Kong's innovations but have also retained some of the old Hong Kong models no longer in use in Hong Kong.

   Stressing a point made in Chapter 14, it is also worth quoting a statement by Thomas (1983b, p.268) concerning research. He indicated that:

> In contrast to Hong Kong, educators in Macau have conducted very little research, so that few if any local studies are available as sources of educational innovation.

This aspect changed markedly during the period following publication of the Thomas and Postlethwaite book. Research output greatly increased in Macao, as evidenced by the chapters in this book and the references to other research that the various contributors make. The fact that the volume of research also greatly increased in Hong Kong to some extent maintained the gap between the two societies. However, the increased volume of research in the two territories meant that in both Macao and Hong Kong, data on alternative models for educational administration and implementation had become increasingly plentiful. Some actors in the two territories felt that this contributed to excessive change – that teachers, in particular, were subjected to a constant barrage of innovations as a result of the increased access to information on models in other parts of the world.

Motivation or Philosophical Commitment
As indicated in Figure 15.1, Thomas and Postlethwaite considered the enabling and disabling forces for motivation or philosophical commitment to be very similar to those for availability of alternatives. Overlap also exists in the nature of direct-positive and direct-negative forces. However, motivation and commitment move beyond mere availability of information about the nature of alternatives.

   Specifically referring to Hong Kong and Macao, Thomas (1983b, p.269) observed that, especially in comparison with mainland China, Taiwan, South Korea and North Korea, education policy-makers had had strong laissez faire stances. This book has shown that in general, the approach of the Macao government was much more laissez faire than that of the Hong Kong government; but it is instructive to place the two territories next to other parts of the region and see that both of them occupied one end of the spectrum. Thomas added (p.269) that in neither Hong Kong nor Macao did the schools foster the type of cohesive cultural commitment evident in Japan:

Instead, each of the colonies has permitted diverse socio-political and cultural pur-poses to be pursued in different schools – Christian and Buddhist versus communist, European language versus Chinese language, European culture versus Chinese culture. Apparently the dominant educational aim shared by the peoples of the two colonies is the pursuit of self-interest. Education is viewed not as a device for im-plementing a consciously designed socio-political program or a given set of cultural goals, but rather as an instrument for achieving personal success, for rising in the economic system and for gaining … social prestige.

A similar observation has been made about Hong Kong by Luk (1992, p.117). In remarks which would also be applicable to Macao, Luk observed that:

Unlike most national governments with its own cultural agenda to follow and the interests of its domestic power-base to promote through its educational policies, the colonial government of Hong Kong has not tried to impose its own or any one group's core values on the populace; rather, it has allowed the various groups to 'do their own things', and to thrive, wither, or change in the evolving socio-economic environment.

However, the Hong Kong government was much more interventionist than the Macao government when faced by the threat of communism, especially in the 1950s and 1960s. Leung's chapter in this book notes the ways in which the colonial authorities allied with the Christian churches, using education as a tool to maintain existing political structures in the territory. In Macao, by contrast, the government collapsed in the face of leftist demonstrations, and for some years after 1966 social order and security were chiefly maintained by the pro-China neighbourhood associations and other influential social, religious and economic organisations rather than by the government. The 1966 riots in Macao also marked a turning point in education, with the rise of pro-China schools and the decline in Catholic ones.

By the 1980s, the era of colonial transition had begun and the governments of both Hong Kong and Macao became more interventionist. Most obvious were the changes in Macao, where the authorities embarked on reform initiatives which sought to coordinate institutions in a more coherent way. The Macao government purchased the University of East Asia, and launched a scheme for fee-free basic education. It also embarked on curriculum reform, and sought ways to upgrade the quality of teachers. Parallel moves of this type were less urgent in Hong Kong because the territory already had a strong public sector in tertiary education, fee-free basic education, and a strong teaching force. However, many curriculum changes were considered desirable. Among them, the thrust for civic education, documented in Tse's chapter, was particularly notable. In both Hong Kong and Macao, during the 1990s and in the postcolonial period education was seen by the respective governments much more strongly than before as an instrument for implementing socio-political programmes and for cultural goals. Thus, were Thomas to revisit his chapter two decades later, he would need to modify that paragraph.

Social and Organisational Stability
Under this heading, Thomas and Postlethwaite suggested that enabling forces included peace and amity in the society, continuity of the ruling government, and regular production of sufficient goods to meet people's needs. Disabling forces included war, revolution, rioting, frequent changes of government, and disasters such as floods, earthquakes and crop failures. Direct-positive forces included amicable relations among the education

system's staff members, rewards to staff for efficient service, clear leadership direction, and infrequent organisational change; and direct-negative forces included dissension among staff members, jealousies, frequent organisational change, frequent displacement of existing projects with new projects, and lack of rewards for efficient service.

As already noted, Macao and also to some extent Hong Kong experienced social dislocation in the mid-1960s as a result of overspill of the Cultural Revolution in mainland China. Also, during subsequent decades, at the level of top leadership Macao was much more directly affected by political changes in Portugal than Hong Kong was by political changes in the United Kingdom (S.H.S. Lo 1995, pp.41-44). However, during the 1970s, 1980s and 1990s both territories were characterised much more by stability than by change. Indeed this was a major policy goal not only of the Hong Kong and Macao governments but also of the British, Portuguese and mainland Chinese governments. This stability provided an environment for government-orchestrated and, particularly in Hong Kong, fairly cautious change. Even after Hong Kong's change of sovereignty, at least in the initial years the continuities were more striking than the discontinuities. Also, on one specific criterion identified by Thomas and Postlethwaite, neither Hong Kong nor Macao suffered significantly from serious natural disasters.

However, the lack of abrupt changes in broad social and organisational structures should not cause observers to overlook more 'silent' social changes. Luk (1992, pp.117-118) highlighted the significance of the processes of industrialisation which changed Hong Kong society from the 1950s onwards. These processes, he suggested, have "profoundly changed the occupational profile, appropriate knowledge, necessary skills, and general attitudes". Similar remarks would apply to Macao. In part, moreover, the broader changes have resulted from changes in the scale and nature of educational provision. Education and society have operated in relationships in which each has shaped the other. Supply of school places increased in both territories, and at the school level supply to a large extent kept up with demand. At the post-school level, supply of tertiary places was inadequate to meet demand in either Hong Kong or Macao during the period up to the late 1980s. However, during the 1990s this situation changed too. Yung's chapter in this book points out that Hong Kong entered an era of mass higher education during the 1990s, and that Macao was not far behind.

The fact that the social and organisational framework remained stable despite political changes deserves further comment. Thomas (1983b, p.270), writing before the Sino-British and Sino-Portuguese Joint Declarations, suggested that:

> there is within both colonies the constant realization that the direction of life and schooling could be sharply diverted at any moment, should the People's Republic of China choose to take over the colonies. This realization casts over the colonies a sense of impermanence. If Hong Kong and Macau should become part of the People's Republic, the colonies' *laissez faire* approach to education and their great array of private schools would disappear.

Reviewing this paragraph two decades later, it certainly seems that the laissez faire approach to education has diminished, especially in Macao. However, little threat is posed to private schools, not least because they are now tolerated and even encouraged in the PRC itself (Mok 1997, 2003). Most of Macao's private schools have sacrificed some of their autonomy in return for financial and other support from the government, and to some extent a parallel development was evident when the Hong Kong government developed its Direct Subsidy Scheme in the early 1990s (Bray 1995b) and both revised and expanded it

a few years later (Hong Kong, Education & Manpower Bureau 2003b). However, in no sense have either Macao or Hong Kong been subjected to a wave of nationalisation of schools because of reunification with the socialist motherland. Even if mainland China were not itself moving in the direction of privatisation, private schools in Macao and Hong Kong would be protected by the concept of 'one country, two systems'.

This, moreover, is a domain in which colonial transition in Macao and Hong Kong, rather in contrast to dominant patterns in other parts of the world (Bray 1997a), has been characterised by continuity rather than change. Several chapters in this book point out that the long lead-times between the signature of the Joint Declarations and the actual change deserves particular mention, and one feature which comparative analysis helps to expose concerns official languages in the two territories. As noted in Chapter 9, in Hong Kong, the Basic Law (China 1990, Article 9) indicates that for at least 50 years in addition to the Chinese Language, English may also be used as an official language. By itself, that clause might not cause much remark, since many former British colonies have chosen to retain English as an official language because of its uses in the international arena. However, when a comparison is made with Macao, and when further comparisons are made with other former Portuguese colonies, the clause might appear deserving of further scrutiny. The Macao Basic Law was closely modelled on the Hong Kong one, and contained a clause which was exactly the same except that it gave place to Portuguese rather than English (China 1993, Article 9). Given that Portuguese has a much weaker international role, this might seem remarkable. These are among the dimensions of continuity rather than change which make the cases of Macao and Hong Kong so interesting within a broader comparative framework.

Resources

Thomas and Postlethwaite (1983b) had three headings concerned with resources. The first was labelled resource accessibility, the second was labelled organisational and technical efficiency, and the third was labelled adequacy of funding.

In these categories, enabling forces included advanced industries, training services, technical expertise, and general prosperity; while disabling forces included widespread poverty, inadequate services for producing supplies and training personnel, and generally ineffective organisational structures. Direct-positive forces included educational change advocates who presented a convincing case for their projects to receive available funds, and efficient specialisation in the necessary tasks. Direct-negative forces included inability of innovations to attract the resources that were available, and inefficient organisation.

Specifically referring to Hong Kong and Macao, Thomas (1983b, p.270) stated that:

> Hong Kong is stronger than Macau in resources and efficiency. Hong Kong has more highly trained personnel and is far ahead in the completeness and regularity of administrative reports on the condition of the educational enterprise.

While Macao had achieved considerable advances and had greatly narrowed the gap, most observers would consider that this statement retained some validity two decades later. Thomas proceeded (pp.270-271) to remark that both Hong Kong and Macao depended on similar sources of educational finance:

> Each colony maintains a small number of government-operated schools supported by public funds, and subsidies are provided by the governments to aid certain private institutions, with Hong Kong furnishing more financial subsidies than Macau…. From the viewpoint of furnishing instructional facilities, Hong Kong's schools

appear more adequately funded than Macau's.

This remained the case during subsequent decades, though again the gap was considerably reduced by stronger expenditure by the Macao government.

On another dimension identified by Thomas (1983b), even greater change was achieved. Thomas had written (p.271) that:

> In each of the colonies, the ability of the schools to attract apt, dedicated, and well-prepared teachers and administrators would apparently be enhanced if the schools paid salaries that competed more successfully with the income provided by other occupations in the colonies.

Macao's schools retained great diversity because the majority of them were private institutions. However, the reforms of the 1990s increased the government subsidies for private schools and generally raised teachers' salaries. By the mid-1990s, teachers were also considered well paid in Hong Kong – in comparison not only with other professions but also with teachers elsewhere. Brown (1997, pp.103-104) observed that a typical trained graduate with 10 years of experience earned HK$348,000:

> a figure that is well above the median for teachers in the United Kingdom and in all but a few of the United States. It is also far higher than the average income in business and industry.

Brown added (p.104) that the top point of the teachers' scale was equivalent to US$75,900 a year in 1995: "an unheard of salary for classroom teachers nearly anywhere else in the world". Teachers salaries had increased more rapidly than general inflation. Conditions deteriorated in the initial years of the 21st century, but even after the salary adjustments of that period Hong Kong's teachers were relatively well paid.

However, while Thomas (1983b, p.271) seemed to consider low salaries an inhibiting factor on educational change, Brown (1997, p.104) pointed out that high salaries may also inhibit change:

> One unexpected consequence of this relatively high level of income is that it substantially increases the recurrent costs of any educational reform that requires increasing the number of teachers.

Specifically, Brown referred to an estimate in Hong Kong's Education Commission Report No.5 (1992, p.7), which had observed that the cost of adding one non-graduate teacher to each primary and secondary school would be HK$330 million a year; and the additional cost of a graduate teacher would of course have been higher still.

Other Models of Stability and Change in Education

The Thomas and Postlethwaite framework for analysis of stability and change in education has been employed here because it is convenient, helpful, and easy to comprehend. Also, it was originally designed specifically for analysis of East Asia, including Hong Kong and Macao. As noted at the beginning of this chapter, however, it is certainly not the only model that could be used. Indeed some readers may not even consider it the most appropriate, perhaps feeling that important components of stability and change are not captured by the model. It is impossible here to review all the alternative models, but some core themes can be addressed on the structures of schooling, balances in power relations,

and the impact of globalisation.

The Grammar of Schooling

Concerning stability in education systems, it is useful to note the remarks by Tyack and Cuban (1995) about the "grammar of schooling" which focus on the USA but also have broader relevance. Tyack and Cuban observed (p.85) that:

> The basic grammar of schooling like the shape of classrooms, has remained remarkably stable over the decades. Little has changed in the ways that schools divide time and space, classify students and allocate them to classrooms, splinter knowledge into "subjects," and award grades and "credits" as evidence of learning.

Tyack and Cuban elaborated on their metaphor by explaining (p.85) that:

> Practices such as age-graded classrooms structure schools in a manner analogous to the way that grammar organizes meaning in verbal communication. Neither the grammar of schooling nor the grammar of speech needs to be consciously understood to operate smoothly. Indeed, much of the grammar of schooling has become taken for granted as just the way schools are. It is the *departure* from customary school practice that attracts attention…

These remarks are certainly applicable to Hong Kong and Macao as much as to other parts of the world, and link back to the observation at the beginning of this chapter that change arguably gains undeserved attention when compared with continuity. The various chapters in this book show that schools and universities in Hong Kong and Macao have had great continuity over the decades despite the expansion and other changes in the education systems. Even over the period of political transition, the basic grammar of schooling remained constant. Reformers did address aspects of the system; but the reforms were not always successful and even the far-reaching reforms, such as Hong Kong's linking of primary and secondary schools to create straight-through institutions or the shift towards Chinese as the medium of instruction in secondary schools, left many of the fundamentals untouched.

This phenomenon can be allied to the notion of "frozen ideologies". As explained by Haug (1999, p.237), institutional history has a force of its own:

> established attitudes, practices, matters of speech, knowledge, notions of good and bad, etc. do not simply disappear when they are replaced, or attempts are made to replace them, by new and more modern versions.

In many cases, a major reason for this continuity lies in the fact that the reforms are piecemeal, affecting only parts of the education systems; and even when they are broader in scope, they are commonly confined to the education system and do not interlock with the surrounding social, economic and political forces.

Power Relations in Education Systems

Related to these notions is the work of Archer (e.g. 1979, 1995), which deserves particular attention first because it has considerable significance in the evolving theoretical understanding of the subject, and second because it was an explicit basis for part of Tang's chapter in the present book.

Tang's chapter presented only a short commentary on the potential contribution of Archer's theory. However, Tang has developed this theme elsewhere with specific reference to Macao (K.C. Tang 1999, 2003). Tang's elaboration contributes also to an understanding of Hong Kong, as well as of other societies.

For some readers, Archer's framework, rather in contrast to the framework presented by Thomas and Postlethwaite, suffers from complexity and opaqueness. It was developed within the sociological domain, and uses both concepts and vocabulary which are not easy for non-sociologists to understand. Even K.C. Tang (1999), in a scholarly thesis of which the main text (i.e. excluding annexes) had 258 pages, felt (p.50) that he could not summarise the theory unmistakably within a few pages. The fact that even fewer pages are devoted to it here underlines the need for readers who wish to explore the topic thoroughly to go to Tang's more extended treatment and, more directly, to Archer's own books.

Nevertheless, for present purposes at least a few dimensions should be highlighted. First, for the present book which was conceived explicitly within the framework of comparative education, it is useful to note that Archer's own work arose from cross-national investigation. Her 1979 book drew particularly on analysis of Denmark, England, France and Russia. Second, referring back to the methodological observations of the previous chapter, Archer made explicit use of comparisons over time as well as over location. However, Archer also stressed (1984, p.14) that her analysis applied only to countries in which macroscopic change emerged autonomously; and not to settings where it can be attributed to external intervention via conquest, colonisation or territorial redistribution. Examination of the ways in which Archer's models do or do not apply to other settings is one way to develop her theories and to test the validity of some pro-positions.

The basic questions addressed by Archer (1984, p.1) were similar to those addressed by Thomas and Postlethwaite. First, she asked, why does education have the particular structure, relations to society and internal properties which characterise it at any given time? The basic answer was held to be very simple: education has the characteristics it does have because of the goals pursued by those who control it. The second question Archer asked was why these characteristics change. The basic answer was equally simple: change occurs because new goals are pursued by those who have the power to modify education's previous structural form, definition of instruction, and relationship to society. However, Archer then proceeded to show that these answers have deceptive simplicity. Yet although the real answers are more complex, she added, they supplement rather than contradict the simple answers. Archer emphasised (1984, p.2) that "to understand the nature of education at any one time, we need to know not only who won the struggle for control, but also how: not merely who lost, but also how badly they lost out". These remarks dovetail with those of Tyack and Cuban (1995, p.7).

Archer's overall concern, as highlighted in the title of her 1984 book, was not so much with educational processes as with educational systems. While many analysts now take the existence of systems for granted, Archer pointed out (1984, p.3) that educational systems were rare before the 18th century. They emerged within complex social structures

and cultures, which Archer set out to study. She identified two cycles of evolution in education systems in which the starting point of the first cycle was a collection of privately-owned schools which were gradually brought together into a relatively unified system. The second cycle commenced with the existence of state systems, and showed a range of patterns in which some moved towards centralisation while others moved towards decentralisation.

The focus on systems brings out, once more, the idiosyncratic nature of Macao, in particular. Despite the fact that few countries had educational systems before the 18th century, by the early and mid-20th century few countries and even colonial territories did not have them. As noted by Adamson and Li's chapter, a key date in the construction of Hong Kong's dominant education system was the passage of the 1913 Education Ordinance, which gave the government's Education Department power over, and some responsibility for, a large group of private schools which had previously operated independently (Sweeting 1990, pp.220-221, 284-288). Macao only reached what may be considered an equivalent stage in 1991 with the passage of a comparable law (Macau, Governo de 1991). As a result, even up to the late 1990s Macao's situation corresponded to a pattern which most other parts of the world had passed decades or even centuries previously. Changes in Hong Kong, by contrast, were more easily comparable to patterns in other relatively mature education systems, with significant (though not entirely linear or consistent) moves to reduce the role of the state.

In this connection, it is also useful to note the work of Green (1990), who explored relationships between education and state formation. Green considered Archer's descriptive typology of different educational structures to be "the most powerful comparative framework that has yet been produced" (p.73). However, he added, for all its sophistication and comparative insight, Archer's study was missing a crucial dimension. He observed (p.75) that in England and France, and also in countries which were not included in Archer's study, "it was not only the nature of group conflict which determined educational change, but also the nature of the state and the relation of classes in civil society to the state". While this statement emphasises change, it also has relevance to continuity.

In the present book, relationships between education and the state have been addressed directly and indirectly by several authors. Green's 1990 book was mainly concerned with England, France and the USA; and while a subsequent work (Green 1997) broadened his scope to consider other parts of the world including Asia, Green was necessarily constrained in the extent to which he could examine all dimensions that could be relevant to Macao and Hong Kong. One of the threads running through the present work has been the relationship between education and the colonial state in Macao and Hong Kong. The fact that both were colonies of European powers led to considerable commonalities, e.g. in the role of Christian churches and the introduction of European languages. On the other hand, differences in the orientations of the Portuguese and British colonial regimes were among the major reasons for differences in the nature of educational provision in Macao and Hong Kong.

At the same time, the prospect of reunification with China brought a third state actor to the fore. This affected both territories in comparable ways, creating pressures on the one hand to consolidate local identity during the years prior to the change of sovereignty, and on the other hand to find ways to promote values in the local populations which would be harmonious with dominant values espoused by leaders in the PRC. This must necessarily be seen as a long-term process, requiring decades rather than years; and much will depend

on how mainland China evolves as well as how Hong Kong and Macao evolve. In the meantime, some observers argued that mainland China was a recolonising force (Law 1997); and although the operation of 'one country, two systems' seemed to be working well, the shadow of Beijing was felt to be never far from policy-makers' minds.

The Impact of Globalisation

Running alongside these developments have been forces of economic globalisation which have impacted on curricula and labour-market attributes (Spring 1998; Burbules & Torres 2000; Carnoy & Rhoten 2002). Globalisation has become what Ilon (1997, p.609) calls the "silent partner" in the process of educational planning:

> While a global system of production may seem at first blush only vaguely linked to the classroom or educational policy, the distance between them is an illusion. The parameters established by this emerging system pervade every aspect of formal institutional, financial, and social systems. In fact, the global economic system directly influences the opportunities for employment, wage rates, the ability of governments to fund public services, and the returns individuals face when investing in schooling. As these very basic parameters change, so too do the systems by which education is organized.

Schools in Hong Kong and Macao have come to resemble each other in part because they also resemble schools in almost all other parts of the world. Williams (1997, p.119) points out that almost all over the world, schools are now basically similar in their functions and organisation. They house groups of students who sit in rows, holding books and facing a single teacher who stands in front of the class. As noted by Adamson and Li, the schools of Hong Kong and Macao do exhibit traditions derived from their Chinese cultural ancestry as well as from imported models; but in basic organisation and function, the schools fit closely to a model which has become globalised and which is affected by transnational economic forces as well as by local ones.

However, as shown by such authors as Green (1997), Gopinathan (2001), and Mok and Welch (2003), the power of globalisation does not always overwhelm that of the state. This is especially evident in mainland China, where the state remains strong and central policy-makers still feel able to manipulate variables within the borders of the nation. It is also evident in Hong Kong and Macao, where government policies certainly do have an effect on the nature of educational provision.

Law (2003) has remarked with reference to Hong Kong that globalisation may be both a threat and an opportunity to the teaching profession. The threat in part comes from the skills that teachers must retain or acquire, with competence in English language and Information & Communications Technology (ICT) being the chief foci of Law's analysis. Teachers are forced by globalisation to keep ahead in the competition in these and other domains. Yet Law also points out that the Hong Kong government has used the forces of globalisation to legitimate adjustments that it has wished to make. Law examines what he called calls (p.172) "the complicated dynamics of professionalization, reprofessionalization and deprofessionalization", in which the government has demanded certain skills from the teaching force and has been a positive actor in change rather than just a passive instrument of globalisation.

The chapter in this book on language policies has shown that in that domain the dynamics in Macao have been rather different. The authorities have been ambivalent about the role of English alongside Portuguese and Chinese, and have on the whole adopted

laissez faire stances. They have also been less aggressive in promoting ICT use. Thus the contrasts between the territories are again at least as obvious as the similarities.

Globalisation is also touched upon in other chapters, in some cases with conceptualisation which predates contemporary descriptions of the phenomenon. For example, several chapters refer to policies and practices across the British empire which was in many respects quasi-global in scope, or across the Portuguese empire which was less extensive but nevertheless spanned several continents. On another tack, Leung's chapter refers to the global work of the Roman Catholic church, and remarks on ways in which patterns in Hong Kong and Macao matched or differed from those elsewhere in the world. On a further dimension, Tang's chapter notes the global sweep of the Modern Mathematics movement, which had a major impact on Hong Kong though a lesser impact on Macao; and Yung refers to the global shift from fee-free higher education to fee-charging patterns in which institutions are also expected to become more managerial and enterprise-oriented.

In addition to currents and counter-currents at global and Special Administrative Region levels, some of these remarks also identified forces at the national level. Tse's chapter on civic and political education is particularly instructive in this respect. Tse observes (p.198) that in the postcolonial period in both Hong Kong and Macao:

> the quest for nationalism was accompanied by focus on globalisation. In response to the accelerated pace of globalisation and international competition, there was a strange blend of nationalism and transnationalism in the representation of citizenship. For example, Hong Kong was eager both to find its niche in the globalised economy and to re-position itself as an international Chinese city. Hong Kong's image was strategically tailored for different audiences based on very different economic and political considerations. On the one hand, Hong Kong was presented to its 'homeland' as an inalienable part of China. On the other hand, Hong Kong was presented to the world as an 'East meets West' city, as 'Asia's world city', and as a gateway to mainland China. In Macao, similar efforts were devoted to the promotion of the territory's image as a tourist destination and the propagation of a historic city with multicultural heritage.

This set of comments captures well the complexity of situations and the changing emphases at different times for different audiences.

For reasons such as this, fascinating domains for continuing research will include the relationships between the local state as evidenced by the Hong Kong and Macao Special Administrative Regions, the nation state in the shape of the PRC, and the international forces of globalisation. In no case will the picture be either simple or static, and the multiple forces which will continue to operate will have the effect of promoting elements of continuity as well as change. Such a research agenda would fit well into the vision set out by Arnove (2003), who stressed the need to "reframe" comparative education with reference to the dialectic of the global and the local. Thus, the field of comparative education can itself respond to changing dynamics (Marginson & Mollis 2002; Bray 2003c); and analysis of patterns in such territories as Hong Kong and Macao can contribute to broader conceptual understanding as well as to more local debates.

Conclusion

Throughout this book, analysis of continuity and change in education has been linked to patterns in the wider environments. This approach is among the strong traditions in the field of comparative education, and is among the contributions which the field can make to areas of educational studies which tend to be focused more narrowly. The importance of wider environments has been stressed by key figures in comparative education since the early history of the field. In the much-quoted words of Sadler (1900, reprinted 1964, p.310):

> In studying foreign systems of education we should not forget that the things outside the schools matter even more than the things inside the schools, and govern and interpret the things inside.

And in the words of another pioneer in the field, Kandel (1933, p.xxi):

> Educational systems are in fact colored far more by prevailing social and political concepts than by psychological theories or educational philosophies which attempt to deal with the individual as an isolated personality.

Taking two particular societies as its main focus, and juxtaposing developments in those societies over a period of time, this particular book has been able to analyse many of the determinants and outcomes of continuity and change. As indicated in the Introduction to the book, Hong Kong and Macao make a particularly good pair for such comparative analysis because they have so much in common as well as some significant differences. Parts of this book have taken Hong Kong and Macao as a pair for comparison and contrast with other parts of the world as well as for comparison and contrast with each other. The editors and authors hope that the book will stimulate more work of this kind, deepening the analysis and exploring further dimensions that could not be covered here.

Notes on the Authors

Bob ADAMSON is an Associate Professor in the Faculty of Education and a former Director of the Comparative Education Research Centre (CERC) at the University of Hong Kong. He is also a Past-President of the Comparative Education Society of Hong Kong (CESHK). He is currently on leave at the Queensland University of Technology, Australia. He teaches and publishes in the fields of English language teaching, curriculum studies and comparative education, with particular reference to the Chinese mainland and to Hong Kong. *Correspondence*: TESOL-LOTE Unit, Faculty of Education, Queensland University of Technology, Kelvin Grove, Brisbane, Queensland 4059, Australia. E-mail: b.adamson@qut.edu.au.

Robert F. ARNOVE is Chancellor's Professor Emeritus of Educational Leadership & Policy Studies, Indiana University, USA. He is a past-president of the Comparative & International Education Society (CIES), and is Chair of the Special Projects Standing Committee of the World Council of Comparative Education Societies (WCCES). He has also been a Visiting Professor at the Hong Kong Institute of Education. He has produced several seminal works in the field, and is co-editor with Carlos Alberto Torres of *Comparative Education: The Dialectic of the Global and the Local* (Lanham: Rowman & Littlefield, 1999, 2003 2nd edition). *Correspondence*: School of Education, Indiana University, Bloomington, Indiana 47405, USA. E-mail: arnove@indiana.edu.

Mark BRAY is Dean of the Faculty of Education, Chair Professor of Comparative Education, and a former Director of the Comparative Education Research Centre (CERC) at the University of Hong Kong. He is also a Past-President of the Comparative Education Society of Hong Kong (CESHK), and since 2000 has been Secretary General of the World Council of Comparative Education Societies (WCCES). He previously taught in secondary schools in Kenya and Nigeria, and at the Universities of Edinburgh, Papua New Guinea and London. He has published extensively on aspects of the administration and financing of education, and on methodology in comparative education. *Correspondence*: Comparative Education Research Centre, The University of Hong Kong, Pokfulam Road, Hong Kong, China. E-mail: mbray@ hku.hk.

HUI Kwok Fai, Philip is a Lecturer in the Department of Educational Policy & Administration at the Hong Kong Institute of Education. He previously taught at the University of Macau. He holds a doctorate in comparative education from the State University of New York at Buffalo. He has extensive consultancy experience in a range of countries. His current research focuses on policy studies in education, higher education, information & communications

technologies in education, and poverty reduction. *Correspondence*: Department of Educational Policy & Administration, The Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, New Territories, Hong Kong, China. E-mail: phui@ied.edu.hk.

Koo Ding Yee, Ramsey is a Senior Lecturer in the Department of Educational Policy & Administration at the Hong Kong Institute of Education. He is also President of the Association for Childhood Education International (ACEI) Hong Kong & Macau Branch. He received his doctorate from the University of San Francisco, and was an Assistant Professor at Lincoln University in California during 1980-86. From 1993 to 1995 he was Director of the Educational Research Centre at the University of Macau. In 1999 he was awarded by the Macao Government the Macao Curriculum Evaluation Project on civic education, social studies, mathematics, and visual arts and crafts. *Correspondence*: Department of Educational Policy & Administration, The Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, New Territories, Hong Kong, China. E-mail: rkoo@ied.edu.hk.

Kwo Wai Yu, Ora is an Associate Professor in the Faculty of Education at the University of Hong Kong. Her research and consultancy experience includes membership in 2000/01 of review team for higher education in Macao. She has a particular interest in the theory and practice of teacher education, and in 1999 she was awarded a Universitas 21 fellowship for the study of links between teaching and research at the University of British Columbia, Canada. *Correspondence*: Faculty of Education, The University of Hong Kong, Pokfulam Road, Hong Kong, China. E-mail: wykwo@hku.hk.

Leong Man Wai, Aliana is the Director and an Associate Professor of the School of Continuing Studies, in the Faculty of Management & Administration of the Macao University of Science & Technology. She is also Vice Chairperson of the Macao Adult Education Association. She is the former Director of the Centre for Continuing Education & Special Programs at the University of Macau, and the former Director of the Institute of Professional Studies at the Macao Millennium College. She previously taught at the Institute for Tourism Education as an Assistant Professor, Coordinator of Tourism major and Librarian. *Correspondence:* School of Continuing Studies, Macao University of Science & Technology, Alameda Dr. Carlos d'Assumpção 335-341, Hotline Centre 10/F, Macao, China. E-mail: alleong@must.edu.mo.

Leung Kit Fun, Beatrice is a Professor in the Department of International Affairs, Wenzao Ursuline College of Languages, Kaohsiung, Taiwan. She previously taught in the Department of Politics & Sociology at Lingnan University, Hong Kong. She is the author of over 40 scholarly articles on various aspects of church-state relations, religious policy and religious education in mainland China, Hong Kong and Macao. She is also the author/editor of six books. *Correspondence:* Department of International Affairs, Wenzao Ursuline College of Languages, 900, Minchiu First Road, Kaohsiung, Taiwan. E-mail: leungbea9933@yahoo.com.hk.

Li Siu Pang, Titus works for the Education & Youth Affairs Bureau of the Government of Macao. Prior to this, he was principal of a primary school in Hong Kong, and, before that, a lecturer in the Faculty of Education at the University of Macau. His research interests include juvenile delinquency,

comparative education, home-school links, special education and teacher education. *Correspondence*: Division of Studies and Policies on Educational Reform, Education & Youth Affairs Bureau, 7-9 Avenida de D. João IV, 1st floor, Macao. E-mail: spli@dsej.gov.mo.

Lo Yiu Chun, Jennifer is a Senior Lecturer in the Department of Curriculum & Instruction at the Hong Kong Institute of Education. Prior to joining the Institute, she taught in the Faculty of Education at the University of Macau. Her research interests include curriculum reform, school-based curriculum development, curriculum leadership, and assessment for learning. *Correspondence*: Department of Curriculum & Instruction, The Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, New Territories, Hong Kong, China. E-mail: yclo@ied.edu. hk.

Ma Hing Tong, William is a School Development Officer in the Centre for University & School Partnership at the Faculty of Education of the Chinese University of Hong Kong. From the mid-1970s to the early-1990s, he was a primary and secondary school teacher in Hong Kong. He then taught at the Hong Kong Polytechnic and the University of Macau, and served as a research fellow in Monash University (Australia) and the Chinese University of Hong Kong. His research interests include the costs and benefits of higher education, higher education and the labour force, environmental education, mathematics and science education, and special education. *Correspondence:* Centre for University & School Partnership, Faculty of Education, The Chinese University of Hong Kong, Shatin, Hong Kong, China. E-mail: htma@cuhk.edu.hk.

Poon Lai Man, Helen is a Lecturer in the Department of the Educational Studies at the Hong Kong Institute of Education. She obtained her Masters degree in International & Comparative Education from Indiana University. Her research interests are in comparative education, gender, and teacher thinking. *Correspondence:* Department of Education Psychology, Counselling & Learning Needs, The Hong Kong Institute of Education, 10 Lo Ping Road, New Territories, Hong Kong, China. E-mail: hpoon@ied.edu.hk.

Nirmala Rao is an Associate Professor and Associate Dean of the Faculty of Education at the University of Hong Kong. She was born in India, but received part of her schooling in Hong Kong. She studied for her first degree in India, and her doctorate in the USA. She has published extensively in the domains of early childhood education and educational psychology. She has also published comparative studies of basic education in China and India. *Correspondence*: Faculty of Education, The University of Hong Kong, Pokfulam Road, Hong Kong, China. E-mail: nrao@hku.hk.

Tan Kang, John is Principal of Valtorta College, Hong Kong. For his doctoral work at the University of Hong Kong, he studied educational policy in the context of Church-State relations during the period of Hong Kong's decolonisation. He also holds an MEd degree from the University of Hong Kong. Among his other posts of responsibility have been the Assistant Honorary Secretary of the Hong Kong Subsidised Secondary Schools Council and Vice-chairman of the Liberal Studies Subject Committee of the Hong Kong Examinations Authority. *Correspondence*: Valtorta College, Pui Yin Lane, Tai Po, Hong Kong, China. E-mail: johnktan@hotmail.com.

Tang Kwok Chun is an Assistant Professor in the Department of Education Studies at

the Hong Kong Baptist University. He was born in Macao, and moved to Hong Kong when he was aged eight. He was a secondary mathematics teacher from 1983 to 1993 in Hong Kong. Subsequently he taught at the University of Hong Kong and the Open University of Hong Kong. His PhD study for the University of Hong Kong focused on the stability and change of secondary school mathematics knowledge in Macao. His research interests include curriculum studies, sociology of knowledge, and mathematics teaching and learning. *Correspondence*: Department of Education Studies, Hong Kong Baptist University, Waterloo Road, Kowloon, Hong Kong, China. E-mail: kctang@hkbu.edu. hk.

TSE Kwan Choi, Thomas is an Assistant Professor in the Department of Educational Administration & Policy at the Chinese University of Hong Kong. He teaches and publishes in the fields of civic education, youth studies and sociology of education. He has undertaken a major comparative study of civic education in mainland China, Taiwan, Hong Kong and Macao. *Correspondence*: Department of Educational Administration & Policy, The Chinese University of Hong Kong, Shatin, Hong Kong, China. E-mail: kctse@cuhk.edu.hk.

WONG Ngai Chun, Margaret is Principal Lecturer and Associate Dean of the School of Early Childhood Education at the Hong Kong Institute of Education. She previously taught in the Faculty of Education at the University of Macau, where she was co-ordinator of preschool teacher education programmes. Her current research focuses on the assessment of preschool programme quality, the project approach in preschools, and comparative studies of early childhood education. *Correspondence*: School of Early Childhood Education, The Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, New Territories, Hong Kong, China. E-mail: mwong@ied.edu.hk.

YUNG Man Sing, Andrew is a teaching consultant and project coordinator in the Department of Educational Studies at the Hong Kong Baptist University. He previously taught in secondary and evening schools, and served as an educational administrator in two school sponsoring bodies, namely Sik Sik Yuen and Tung Wah Group of Hospitals. His research interests include higher education, comparative education, economics of education, and educational administration. *Correspondence*: Department of Educational Studies, Hong Kong Baptist University, Waterloo Road, Kowloon, Hong Kong, China. E-mail: amsyung@hkbu.edu.hk.

References

Adams, Don (2004): *Education and National Development: Priorities, Policies, and Planning*. Series: 'Education in Developing Asia'. Hong Kong: Comparative Education Research Centre, and Manila: Asian Development Bank.

Adamson, Bob & Auyeung Lai, Winnie (1997): 'Language and the Curriculum in Hong Kong: Dilemmas of Triglossia', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.87-100.

Agelasto, Michael & Adamson, Bob (1998): 'Editors' Introduction', in Agelasto, Michael & Adamson, Bob (eds.), *Higher Education in Post-Mao China.* Hong Kong: Hong Kong University Press, pp.1-10.

Ahamad, Bashir & Blaug, Mark (1973): *The Practice of Manpower Forecasting.* Amsterdam: Elsevier Scientific Publishing Company.

Almond, Gabriel A. & Verba, Sidney (1963): *The Civic Culture.* Princeton, NJ: Princeton University Press.

Altbach, Philip G. (1987): 'The Oldest Technology: Textbooks in Comparative Context'. *Compare: A Journal of Comparative Education,* Vol.17, No.2, pp.93-106.

Altbach, Philip G. & Kelly, Gail P. (eds.) (1978): *Education and Colonialism.* New York: Longman.

Altbach, Philip G. & Kelly, Gail P. (eds.) (1984): *Education and the Colonial Experience.* New Brunswick: Transaction Books.

Altbach, Philip G. & Kelly, Gail P. (eds.) (1988): *Textbooks in the Third World: Policy, Content and Context.* New York: Garland.

Altbach, Philip G. & Kelly, Gail P. (eds.) (1991): *Education and the Colonial Experience*. Revised 2nd edition. New York: Advent Books.

Anon. (1991): *World History,* Vol.2. Beijing: People's Education Press. [in Chinese]

Anon. (1992): *World History,* Vol.3. Beijing: People's Education Press. [in Chinese]

Apple, Michael (1990): *Ideology and the Curriculum.* 2nd edition. London: Routledge.

Archer, Margaret Scotford (1981): 'Educational Systems'. *International Social Science Journal*, Vol.33, No.2, pp.261-284.

Archer, Margaret Scotford (1983): 'Process without System'. *Archives Européennes de Sociologie*, Vol.24, No.1083, pp.196-221.

Archer, Margaret Scotford (1984): *Social Origins of Educational Systems*. University Edition, London: Sage.

Archer, Margaret Scotford (1993): 'Bourdieu's Theory of Cultural Reproduction:

French or Universal?' *French Cultural Studies*, Vol.3, No.12, pp.225-240.

Archer, Margaret Scotford (1995): *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.

Archer, Margaret Scotford (2000): *Being Human: The Problem of Agency*. Cambridge: Cambridge University Press.

Arnove, Robert F. (2003): 'Introduction – Reframing Comparative Education: The Dialectic of the Global and the Local', in Arnove, Robert F. & Torres, Carlos Alberto (eds.), *Comparative Education: The Dialectic of the Global and the Local*. 2nd edition. Lanham, Maryland: Rowman & Littlefield, pp.1-23.

Arnove, Anthony K. & Arnove, Robert F. (1997): 'A Reassessment of Education, Language, and Cultural Imperialism: British Colonialism in India and Africa', in Cummings, William K. & McGinn, Noel F. (eds.), *International Handbook of Education and Development: Preparing Schools, Students and Nations for the Twenty-First Century*. Oxford: Pergamon Press, pp.87-101.

Ashby, Eric (1966): *Universities: British, Indian, African – A Study in the Ecology of Higher Education*. London: Weidenfeld & Nicholson.

Asiwaju, A.I. (1975): 'Formal Education in Western Yorubaland, 1889-1960: A Comparison of the French and British Colonial Systems'. *Comparative Education Review*, Vol.19, No.3, pp.434-450.

Australia, Bureau of Statistics (1994): *Labour Force Status & Educational Attainment, Australia, Feb. 1994*. Canberra: Australian Government Publishing Service.

Australia, Department of Employment, Education, Training & Youth Affairs (1997): *Overseas Student Statistics 1996*. Canberra: Australian Government Publishing Service.

Australia, Department of Employment, Education, Training & Youth Affairs (2003): *Overseas Student Statistics 2002*. Canberra: Australian Government Publishing Service.

Ball, Stephen J. (1983): 'Imperialism, Social Control and the Colonial Curriculum in Africa'. *Journal of Curriculum Studies*, Vol.15, No.3, pp.237-263.

Barnett, Ronald (1994): *The Limits of Competence: Knowledge, Higher Education and Society*. Buckingham: The Society for Research into Higher Education & Open University Press.

Becker, Gary S. (1975): *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 2nd edition. Princeton: Princeton University Press.

Belfield, Clive R. & Levin, Henry M. (2002): *Education Privatization: Causes, Consequences and Planning Implications*. Paris: UNESCO International Institute for Educational Planning.

Bell, Daniel (1973): *The Coming of Post-industrial Society*. New York: Basic Books.

Bennell, Paul (1996): 'Using and Abusing Rates of Return: A Critique of the World Bank's 1995 Education Sector Review'. *International Journal of Educational Development,* Vol.16, No.3, pp.235-248.

Bennell, Paul (1998): 'Rates of Return to Education in Asia: A Review of the Evidence'. *Education Economics,* Vol.6, No.2, pp.107-120.

Bereday, George Z.F. (1964): *Comparative Method in Education*. New York: Holt, Rinehart & Winston.

Berlie, J.A. (1999): 'Macao's Education: A Question of Language – Chinese, Portuguese, and English', in Berlie, J.A. (ed.), *Macao 2000*. Hong Kong: Oxford University Press, pp.71-104.

Bickley, Gillian (1997): *The Golden Needle: The Biography of Frederick Stewart (1836-1889)*. Hong Kong: David C. Lam Institute for East-West Studies, Hong Kong Baptist University.

Bielas, Léon (1973): 'Comparison of Systems of Education in Two Countries with Common Historical Traditions and Different Social Orders: The German Democratic Republic and the Federal Republic of Germany', in Edwards, R., Holmes, B. & van de Graaf, J. (eds.), *Relevant Methods in Comparative Education*. Hamburg: UNESCO Institute for Education, pp.143-149.

Biggs, John (1996): 'The Assessment Scene in Hong Kong', in Biggs, John (ed.), *Testing: To Educate or To Select?* Hong Kong: Hong Kong Educational Publishing Company.

Blakemore, Kenneth & Cooksey, Brian (1980): *A Sociology of Education for Africa*. London: George Allen & Unwin.

Blaug, Mark (1970): *An Introduction to the Economics of Education*. London: Penguin.

Bond, Michael Harris (1991): *Beyond the Chinese Face: Insights from Psychology.* Hong Kong: Oxford University Press.

Bourke, S. (1994): 'Some Responses to Changes in Australian Education', *Australian Educational Researcher,* Vol.21, No.1, pp.1-18.

Boutilier, J.A. (1978): 'Missions, Administration and Education in the Solomon Islands 1893-1942', in Boutilier, J.A., Hughes, D.T. & Tiffany, S.W. (eds.), *Mission, Church and Sect in Oceania*. Lanham, MD: University Press of America, pp.139-161.

Bowman, Frank (1936): *Elementary Calculus*. London: Longman.

Boyle, Joseph (1997): 'Native-speaker Teachers of English in Hong Kong'. *Language and Education*, Vol.11, No.3, pp.163-181.

Bray, Mark (1992a): 'Colonialism, Scale and Politics: Divergence and Convergence of Educational Development in Hong Kong and Macau'. *Comparative Education Review,* Vol.36, No.3, pp.322-342.

Bray, Mark (1992b): 'Centralisation versus Decentralisation in Curriculum Development: Contrasting Patterns in Hong Kong and Macau'. *New Horizons,* No.33, pp.15-23.

Bray, Mark (1992c): *Educational Planning in Small Countries.* Paris: UNESCO.

Bray, Mark (1993): 'Financing Higher Education: A Comparison of Government Strategies in Hong Kong and Macau', in Bray, Mark (ed.), *The Economics and Financing of Education: Hong Kong and Comparative Perspectives*. Education Paper No.20, Hong Kong: Faculty of Education, The University of Hong Kong, pp.32-50.

Bray, Mark (1994): 'Decolonisation and Education: New Paradigms for the Remnants of Empire'. *Compare: A Journal of Comparative Education*, Vol.24, No.1, pp.37-51.

Bray, Mark (1995a): 'Macau', in Morris, Paul & Sweeting, Anthony (eds.), *Education and Development in East Asia*. New York: Garland, pp.185-201.

Bray, Mark (1995b): 'The Quality of Education in Private Schools: Historical

Patterns and the Impact of Recent Policies', in Siu, Ping Kee & Tam, Tim Kui, Peter (eds.), *Quality in Education: Insights from Different Perspectives.* Hong Kong: Hong Kong Educational Research Association, pp.183-198.

Bray, Mark (1996): 'Educational Reform in a Small State: Bhutan's New Approach to Primary Education'. *International Journal of Educational Reform,* Vol.5, No.1, pp.15-25.

Bray, Mark (1997a): 'Education and Decolonization: Comparative Perspectives on Change and Continuity', in Cummings, William K. & McGinn, Noel F. (eds.), *International Handbook of Education and Development: Preparing Schools, Students and Nations for the Twenty-First Century.* Oxford: Pergamon Press, pp.103-118.

Bray, Mark (1997b): 'Education and the Labour Market', in Postiglione, Gerard A. & Lee, Wing On (eds.), *Schooling in Hong Kong: Organization, Teaching and Social Context.* Hong Kong: Hong Kong University Press, pp.43-63.

Bray, Mark (1997c): 'Education and Colonial Transition: The Hong Kong Experience in Comparative Perspective', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.11-23.

Bray, Mark (1998a): 'Education and Political Transition in Hong Kong and Macau: A Comparative Analysis', in Ramos, R., Dinis, J.R., Wilson, R. & Yuan, D.Y. (eds.), *Macau and its Neighbors toward the 21ˢᵗ Century.* Macau: University of Macau and Macau Foundation, pp.199-209.

Bray, Mark (1998b): 'Regional Examinations Councils and Geopolitical Change: Commonality, Diversity, and Lessons from Experience'. *International Journal of Educational Development*, Vol.18, No.6, pp.473-486.

Bray, Mark (1998c): 'Privatisation of Schooling: Strategies and Policy Implications in Less Developed Countries', in Aggarwal, Yash & Premi, Kusum K. (eds.), *Reforming School Education: Issues in Policy Planning and Implementation.* New Delhi: Vikas Publishing House, pp.275-299.

Bray, Mark (2001): 'Higher Education and Political Transition: Market Forces and State Intervention in a Small Society'. In Bray, Mark & Lee, W.O. (eds.), *Education and Political Transition: Themes and Experiences in East Asia.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Bray, Mark (2003a): 'Other Fields and Ours: Academic Discourse and the Nature of Comparative Education'. Keynote address to the conference of the Bulgarian Comparative Education Society, in Popov, Nikolay (ed.), *Comparative Education in Teacher Training.* Sofia: Bureau for Educational Services, pp.9-20.

Bray, Mark (ed.) (2003b): *Comparative Education: Continuing Traditions, New Challenges, and New Paradigms.* Dordrecht: Kluwer Academic Publishers.

Bray, Mark (2003c): 'Comparative Education in the Era of Globalization: Evolution, Missions and Roles'. *Policy Futures in Education*, Vol.1, No.2, pp.209-224.

Bray, Mark (2004a): *The Costs and Financing of Education: Trends and Policy Implications.* Series: 'Education in Developing Asia'. Hong Kong: Comparative Education Research Centre, and Manila: Asian Development Bank.

Bray, Mark (2004b): *Comparative Education: Traditions, Applications, and the Role*

of HKU. 20th Anniversary Inaugural Professorial Lecture. Hong Kong: Faculty of Education, The University of Hong Kong.

Bray, Mark, Butler, R., Hui, P., Kwo, O. & Mang, E. (2001): *Higher Education in Macau: Strategic Development for the New Era – Report of a Consultancy Study.* www.gaes.gov.mo/p_index.html.

Bray, Mark with Butler, R., Hui, P., Kwo, O. & Mang, E. (2002): *Higher Education in Macau: Growth and Strategic Development*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Bray, Mark, Clarke, Peter B. & Stephens, David (1986): *Education and Society in Africa.* London: Edward Arnold.

Bray, Mark & Hui, Philip Kwok Fai (1991a): 'Curriculum Development in Macau', in Marsh, Colin J. & Morris, Paul (eds.), *Curriculum Development in East Asia.* London: Falmer Press, pp.181-201.

Bray, Mark & Hui, Philip Kwok Fai (1991b): 'Structure and Content of Education', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.299-313.

Bray, Mark & Ieong, Pedro (1996): 'Education and Social Change: The Growth and Diversification of the International Schools Sector in Hong Kong'. *International Education*, Vol.25, No.2, pp.49-73.

Bray, Mark & Kwo, Ora (2003): 'Higher Education in Small Territories: Political Transition and Development in Macau'. *Higher Education Policy*, Vol.16, No.4, pp.413-432.

Bray, Mark & Lee, Wing On (1993): 'Education, Democracy and Colonial Transition: The Case of Hong Kong'. *International Review of Education*, Vol.39, No.6, pp.541-560.

Bray, Mark & Lee, Wing On (eds.) (1997): *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Bray, Mark & Packer, Steve (1993): *Education in Small States: Concepts, Challenges and Strategies.* Oxford: Pergamon Press.

Bray, Mark & Tang, Kwok Chun (1994a): 'Imported Textbooks, Non-interventionist Policies and School Curricula in Macau'. *Curriculum and Teaching,* Vol.9, No.2, pp.29-43.

Bray, Mark & Tang, Kwok Chun (1994b): 'Comparative Education in a Microcosm: Diversity and Evolution of Secondary School Curricula in Macau'. *Educational Research Journal* [Hong Kong], Vol.9, No.1, pp.5-14.

Bray, Mark & Thomas, R. Murray (1995): 'Levels of Comparison in Educational Studies: Different Insights from Different Literatures and the Value of Multilevel Analyses'. *Harvard Educational Review*, Vol.65, No.3, pp.472-490.

Brimer, Alan & Griffin, Patrick (1985): *Mathematics Achievement in Hong Kong Secondary Schools*. Hong Kong: Centre of Asian Studies, The University of Hong Kong.

Brock, Colin & Parker, Roy (1985): 'School and Community in Situations of Close Proximity: The Question of Small States', in Lillis, Kevin (ed.), *School and Community in Less Developed Areas*. London: Croom Helm, pp.42-56.

Brock, Colin & Tulasiewicz, Witold (1988): 'Western Christianity, Educational Provision and National Identity: An Editorial Introduction', in Brock, Colin &

Tulasiewicz, Witold (eds.), *Christianity and Educational Provision in International Perspective*. London: Routledge, pp.1-16.

Brown, David (2000): *Contemporary Nationalism: Civic, Ethnocultural, and Multicultural Politics*. London: Routledge.

Brown, Deborah (2001): 'The Roman Catholic Church in Hong Kong: Freedom's Advocate Struggles with the SAR Government in Electoral Politics and Education'. *American Asian Review*, Vol.19, No.4, pp.19-61.

Brown, Hubert O. (1997): 'Teachers and Teaching', in Postiglione, Gerard A. & Lee, Wing On (eds.), *Schooling in Hong Kong: Organization, Teaching and Social Context*. Hong Kong: Hong Kong University Press, pp.95-116.

Bruning, Harald (2001): 'And while they're at it, why not "Macow"?', *South China Morning Post* [Hong Kong], 27 January, p.13.

Bruning, Harald (2003): 'China to Trade on Macau's Heritage'. *South China Morning Post* [Hong Kong], 13 October, p.1.

Budiardjo, C. & Liem, S.L. (1984): *The War Against East Timor*. London: Zed Books.

Burbules, Nicholas C. & Torres, Carlos A. (eds.) (2000): *Globalization and Education: Critical Perspectives*. New York: Routledge.

Burney, Edmund (1935): *Report on Education in Hong Kong.* London: Crown Agents for the Colonies.

Carless, David R. (1998): 'Managing Systemic Curriculum Change: A Critical Analysis of Hong Kong's Target-Oriented Curriculum Initiative', in Stimpson, Philip & Morris, Paul (eds.), *Curriculum and Assessment for Hong Kong: Two Components, One System*. Hong Kong: Open University of Hong Kong Press, pp.223-244.

Carmody, B.P. (1992): *Conversion and Jesuit Schooling in Zambia*. New York: E.J. Brill.

Carnoy, Martin (1974): *Education as Cultural Imperialism.* New York: David McKay.

Carnoy, Martin (1995): 'Introduction to Section IV: Education, Economic Growth, and Technological Change', in Carnoy, Martin (ed.), *International Encyclopedia of Economics of Education*. 2nd edition. Oxford: Pergamon Press, pp.191-192.

Carnoy, Martin (1996): 'Universities, Technological Change, and Training in the Information Age', in Salmi, Jamil & Verspoor, Adriaan (eds.), *Revitalizing Higher Education*. Oxford: Pergamon Press, pp.41-91.

Carnoy, Martin & Rhoten, Diana (2002): 'What does Globalization Mean for Educational Change? A Comparative Approach'. *Comparative Education Review*, Vol.46, No.1, pp.1-9.

Castelnuovo, Emma (1989): 'The Teaching of Geometry in Italian High Schools during the Last Two Centuries: Some Aspects Related to Society', in Keitel, Christine (ed.), *Mathematics, Education, and Society.* Paris: UNESCO, pp.51-52.

Chan, Che Po & Leung, Beatrice (1996): 'The Voting Behaviour of Hong Kong Catholics in the 1995 Legislative Council Election', in Kuan, H.C., Lau, S.K., Louie, K.S. & Wong, K.Y. (eds.), *The 1995 Legislative Council Elections in Hong Kong.* Hong Kong: Institute of Asia-Pacific Studies, The Chinese University of Hong Kong, pp.275-314.

Chan, K.I. (1991): *Special Publication for the 65th Anniversary of St. Joseph's College*. Macau: St. Joseph's College. [in Chinese]

Chan, Yan Yan (ed.) (1993): *The Present State of Development in Macau.* Hong Kong: Wide Angle. [in Chinese]

Chan, Yan Yan (ed.) (1995): *Social Problems in Macau.* Hong Kong: Wide Angle. [in Chinese]

Chang, Jaw Ling Joanne (1988): *Settlement of the Macao Issue: Distinctive Features of Beijing's Negotiating Behavior (with text of 1887 protocol and 1987 declaration)*. Baltimore: University of Maryland.

Chapple, Christopher (1993): 'Introduction', in Chapple, Christopher (ed.), *The Jesuit Tradition in Education and Missions: A 450-Year Perspective.* Scranton: University of Scranton Press, pp.1-18.

Chen, E. (1994): 'The Present Situation and Problems in Macau's Education'. Paper presented in International Conference on Chinese Education in Southeast Asia, 6-8 June.

Chen, Guohua (1992): *Footprints of the Trailblazers: 300 Years of Chinese Education Overseas*. Toronto: Royal Kingsway. [in Chinese]

Chen, Yangguang & Reid, Ivan (2002): 'Citizenship Education in Chinese Schools: Retrospect and Prospect'. *Research in Education*, Vol.67, No.1, pp.58-69.

Cheng, Christina Miu Bing (1999): *Macau: A Cultural Janus*. Hong Kong: Hong Kong University Press.

Cheng, Joseph Y.S. (1995): 'Higher Education in Hong Kong: The Approach to 1997 and the China Factor'. *Higher Education*, Vol.30, No.4, pp.257-271.

Cheng, Kai Ming (1992): 'Educational Policymaking in Hong Kong: The Changing Legitimacy', in Postiglione, Gerard A. with Leung, Julian Y.M. (eds.), *Education and Society in Hong Kong: Toward One Country and Two Systems*. Hong Kong: Hong Kong University Press, pp.97-116.

Cheng, Kai Ming (1997a): 'Realise the Weakness of the Present Education System and Make Necessary Innovation to Catch up with Asian Countries'. *Shun Pao,* 6 November. [in Chinese]

Cheng, Kai Ming (1997b): 'Hong Kong Education in Retrospect', in Wang, Gungwu (ed.), *Hong Kong History: New Perspectives*, Vol.II. Hong Kong: Joint Publishing Company, pp.465-491. [in Chinese]

Cheng, Kai Ming (1998): 'The University in School and Community – New Challenges and New Roles'. Keynote Paper at the ASAIHL Conference, Brunei Darussalam 12-14 November.

Cheng, Kai Ming (1999): 'Lifelong Learning, Self Enhancement'. *Hong Kong Economic Journal*, 19 August. [in Chinese]

Cheng, Tung Choy (1949): *The Education of Overseas Chinese: A Comparative Study of Hong Kong, Singapore and the East Indies.* MA thesis, University of London.

Cheong, C.M., Lai, I.M. & Vong, S.K. (1992): 'A Comparison of Education between Hong Kong and Macau, and Preview of their Prospects.' Paper presented at the 9th Annual Conference of the Hong Kong Educational Research Association. [in Chinese]

Cheong, Pak Lin (1991): 'Relationships between School Autonomy and Government Administration', in Wong, Hon Keong (ed.), *Education Reform*

in Macau. Macau: Centre of Macau Studies, University of East Asia, pp.115-119. [in Chinese]

Cheung, Anthony B.L. (1991): 'The Civil Service', in Sung, Yun Wing & Lee, Ming Kwan (eds.), *The Other Hong Kong Report 1991.* Hong Kong: The Chinese University Press, pp.27-54.

Cheung, C.F. (1955): *Overseas Chinese Education New Issue*. Taipei: Central Cultural Material Supplier. [in Chinese]

Cheung, C.F. (1956): *Simplified Developmental History of Culture and Education of Overseas Chinese*. Taipei: Ng Tai Publisher. [in Chinese]

Cheung, Chau Kiu & Leung, Kwan Kwok (1994): *Political Attitudes of Senior Secondary Students during the Transition Period in Hong Kong.* Hong Kong: Department of Applied Social Studies, City Polytechnic of Hong Kong.

Cheung, Hang Kin (1987): 'The Secondary School Chinese History Curriculum in Hong Kong over the Post War Forty Years'. *Education Journal*, Vol.15, No.2, pp.76-82. [in Chinese]

Cheung, Hang Kin (1990): *The Turbulent Years*. Hong Kong: Youth Book House. [in Chinese]

Cheung, Kwok Cheung (1996): 'Teacher Education in Macau: Achievements and Challenges during the Transition Period', in Ramos, R., Dinis, J.R., Wilson, R. & Yuan, D.Y. (eds.), *Macau and its Neighbours in Transition*. Macau: University of Macau & Macau Foundation, pp.339-349.

China, Ministry of Education (2001): *Guiding Framework of Kindergarten Education (on trial basis)*. Beijing: Ministry of Education. [in Chinese]

China, National Affairs Office (1996): 'The National Affairs Office's Circular to the State Education Commission and Other Departments. On Reinforcing the Work of Early Childhood Education', in Jiangsu Education Commission (ed.), *A Selection of Early Childhood Education Documents.* Jiangsu: Jiangsu Education Commission, pp.27-33.

China, People's Republic of (1982): *The Constitution of the People's Republic of China.* Beijing: Government of the People's Republic of China.

China, People's Republic of (1990): *The Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China.* Hong Kong: Consultative Committee for the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China.

China, República Popular da (1993): *Lei Básica da Região Administrativa Especial de Macau de República Popular da China.* Macau: Conselho Consultivo da Lei Básica da Região Administrativa Especial de Macau de República Popular da China.

China, State Education Commission (1996a): 'Kindergarten Management Regulations in the People's Republic of China', in Jiangsu Education Commission (ed.), *A Selection of Early Childhood Education Documents.* Jiangsu: Jiangsu Education Commission, pp.7-23.

China, State Education Commission (1996b): 'Statute of Kindergartens in the People's Republic of China', in Jiangsu Education Commission (ed.), *A Selection of Early Childhood Education Documents.* Jiangsu: Jiangsu Education Commission, pp.1-6.

Chiu, Iok San & Ng, Cheong San (1991): 'Cooperation between Guangdong and Macau in Teacher Education', in Wong, Hon Keong (ed.), *Education Reform*

in Macau. Macau: Centre of Macau Studies, pp.167-169. [in Chinese]

Choi, Ben Cheung & Koo, Ramsey Ding Yee (eds.) (2001): *Education and Social Development in Macau*. Hong Kong: Department of Educational Policy & Administration, Hong Kong Institute of Education. [in Chinese]

Choi, Chi Cheung (1991): 'Settlement of Chinese Families in Macau', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.61-80.

Choi, Ming Fai (1997): *The Changes of Political Culture Reflected in Textbooks: A Content Analysis of EPA Textbooks in the Transitional Period of Hong Kong.* MPhil thesis, The Chinese University of Hong Kong.

Choi, Po King (1990): 'From Dependence to Self-sufficiency: Rise of the Indigenous Culture of Hong Kong, 1945-1989'. *Asian Culture*, Vol.14, pp.161-177. [in Chinese]

Choi, Po King (1995): 'Civic Education and Nationalistic Education'. *Daily Express*, 23 July. [in Chinese]

Choksi, Archana & Dyer, Caroline (1997): 'North-South Collaboration in Educational Research: Reflections on Indian Experience', in Crossley, Michael & Vulliamy, Graham (eds.), *Qualitative Educational Research in Developing Countries: Current Perspectives*. New York: Garland, pp.265-299.

Chubb, John E. & Moe, Terry M. (1990): *Politics, Markets and America's Schools*. Washington DC: The Brookings Institution.

Chui, Sai On (2000): 'Reforço de Cooperação Regional e Desenvolvimento de Ensino Superior de Macau'. Paper presented at the Conference on Co-operation and Development of Higher Education in Guangdong, Hong Kong and Macau, Macau Polytechnic Institute, 31 October - 1 November.

Chung, Man Kin (2000): *School-based Civic Education in Hong Kong: Case Study of Three Schools.* MPhil thesis, The Chinese University of Hong Kong. [in Chinese]

Chung, Yue Ping (2003): *The Student Loans Scheme in Hong Kong*. Bangkok: UNESCO.

Chung, Yue Ping & Ma, Hing Tong (1997): 'The Supply of Overseas University Manpower: From Dependence to Independence'. Paper presented at the Annual Conference of the Comparative & International Education Society, Mexico City.

Clayton, Thomas (2000): *Education and the Politics of Language: Hegemony and Pragmatism in Cambodia 1979-1989.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Cleverley, John (1991): *The Schooling of China: Tradition and Modernity in Chinese Education.* 2nd edition. Sydney: Allen & Unwin.

Clignet, Remi & Foster, Philip (1964): 'French and British Colonial Education in Africa'. *Comparative Education Review*, Vol.8, No.3, pp.191-198.

Collins, K.T., Downes, L.W., Griffiths, S.R. & Shaw, K.E. (1973): *Key Words in Education*. London: Longman.

Commonwealth Secretariat, The (1985): 'Educational Development for the Small States of the Commonwealth: A Review of Issues'. Paper for the Pan-Commonwealth Meeting on Educational Development for the Small States of the Commonwealth, Mauritius.

Cónim, Custódio N.P.S. & Teixeira, Maria Fernanda Bragança (1999): *Macau e a sua População 1500-2000: Aspectos Demográficos, Sociais e Económicos*. Anexos. Macau: Direcção dos Serviços de Estatística e Censos.

Cooper, Barry (1985): *Renegotiating Secondary School Mathematics: A Study of Curriculum Change and Stability*. London: Falmer Press.

Correia, Celina Veiga de Oliveira Eisabel (1994): *São Paulo: Historia de um Colégio.* Macau: Committee of Celebration of the Portuguese Discovery.

Cowan, L. Gray (1990): *Privatization in the Developing World*. New York: Greenwood Press.

Cowen, Robert (1998): 'Thinking Comparatively about Space, Education and Time: An Approach to the Mediterranean Rim', in Kazamias, Andreas M. & Spillane, Martin G. (eds.), *Education and the Structuring of European Space: North-South, Centre-Periphery, Identity-Otherness*. Athens: Seirios Editions, pp.61-72.

Crahay, M. (1990): *Which Research Paradigm for the IEA Longitudinal Quality of Life Study?*. Paper prepared for the preprimary study, International Association for the Evaluation of Educational Achievement. Michigan: High/Scope Education Research Foundation.

Cramer, John Francis & Browne, George Stephenson (1956): *Contemporary Education: A Comparative Study of National Systems.* New York: Harcourt, Brace & Company.

Cremer, Rolf Dieter (1991): 'From Portugal to Japan: Macau's Place in the History of World Trade', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.23-38.

Cribbin, John (2002): 'Lifelong Learning Opportunities in Hong Kong: Is the Market Fair and Does it Provide Quality?'. www.ignou.ac.in/Theme-2/John %20 Cribbin.htm.

Crisswell, C.N. (1974): *Modern Europe 1870-1960*. Hong Kong: Longman.

Cross, Michael (1987): 'The Political Economy of Colonial Education: Mozambique, 1930-1975'. *Comparative Education Review*, Vol.31, No.4, pp.550-569.

Crossley, Michael (1999): 'Reconceptualising Comparative and International Education'. *Compare: A Journal of Comparative Education*, Vol.29, No.3, pp.225-241.

Crossley, Michael & Watson, Keith (2003): *Comparative and International Research in Education: Globalisation, Context and Difference*. London: RoutledgeFalmer.

Crystal, David (2003): *English as a Global Language*. 2nd edition, Cambridge: Cambridge University Press.

Cummings, William K. & Riddell, Abby (1994): 'Alternative Policies for the Finance, Control and Delivery of Basic Education'. *International Journal of Educational Research*, Vol.21, No.8, pp.751-776.

Curriculum Development Committee (1985): *Guidelines on Civic Education in Schools.* Hong Kong: Government Printer.

Curriculum Development Committee (1995): *The Development of Civic Awareness of Hong Kong Primary and Secondary School Students*. Hong Kong: Government Printer.

Curriculum Development Council (1984): *Guide to the Kindergarten Curriculum*. Hong Kong: Government Printer.

Curriculum Development Council (1993): *Guide to the Primary School Curriculum*. Hong Kong: Government Printer.

Curriculum Development Council (1996): *Guidelines on Civic Education in Schools.* Hong Kong: Curriculum Development Council.

Curriculum Development Council (1998): *Civics (S1 to S3) Syllabus*. Hong Kong: Curriculum Development Council.

Curriculum Development Council (1999a): *An Analysis of the Views of Various Sectors on the Mathematics Curriculum.* Hong Kong: Curriculum Development Council.

Curriculum Development Council (1999b): *Comparative Study of the Mathematics Curricula of Major Asian and Western Countries*. Hong Kong: Curriculum Development Council.

Curriculum Development Council (1999c): *Syllabuses for Secondary Schools: Mathematics Secondary 1-5.* Hong Kong: Curriculum Development Council.

Curriculum Development Council (2000a): *Report on Holistic Review of the Mathematics Curriculum*. Hong Kong: Curriculum Development Council.

Curriculum Development Council (2000b): *Syllabuses for Primary Schools: Mathematics Primary 1-6.* Hong Kong: Curriculum Development Council.

Curriculum Development Council (2001a): *Learning to Learn: Life-long Learning and Whole-person Development*. Hong Kong: Curriculum Development Council.

Curriculum Development Council (2001b): *Syllabuses for Secondary Schools: Additional Mathematics Secondary 4-5*. Hong Kong: Printing Department.

Curriculum Development Council (2002a): *The Basic Education Curriculum Guide: Building on Strengths*. Hong Kong: Curriculum Development Council.

Curriculum Development Council (2002b): *Personal, Social & Humanities Education: Key Learning Area Curriculum Guide (Primary 1 - Secondary 3)*. Hong Kong: Curriculum Development Council.

Curriculum Development Institute (1993): *Guide to the Kindergarten Curriculum*. Hong Kong: Government Printer.

Curriculum Development Institute (1996): *Guide to the Pre-Primary Curriculum*. Hong Kong: Government Printer.

Curriculum Reform Group, Department of Education & Youth (1995a): *Moral and Civic Education Syllabus (Primary Education)*. Macau. [in Chinese]

Curriculum Reform Group, Department of Education & Youth (1995b): *Moral and Civic Education Syllabus (Junior Secondary Education)*. Macau. [in Chinese]

Dalin, Per (1978): *Limits to Educational Change*. Basingstoke: Macmillan.

Dearing, Ron (Chairman) (1997): *The National Committee of Inquiry into Higher Education in the United Kingdom*. London: Her Majesty's Stationery Office.

Deng, Kaisong & Lu, Xiaomin (1997): *Relations between Hong Kong and Guangdong 1840-1984*. Hong Kong: Qilin Press. [in Chinese]

Dove, Linda (1986): *Teachers and Teacher Education in Developing Countries: Issues in Planning, Management and Training*. London: Croom Helm.

Drago, João (2003): 'New Aims in Higher Education'. *Macau* [Government Information Bureau, Macau Special Administrative Region], No.15, pp.68-84.

Duffy, James (1959): *Portuguese Africa*. Cambridge: Harvard University Press.

Durell, Clement V. (1920): *Modern Geometry: The Straight Line and Circle*. London: Macmillan.

Edmonds, R.L. (1989): 'Introduction', in Edmonds, R.L. (ed.), *Macau*. World Bibliographical Series, Vol.105. Oxford: Clio Press, pp.xxiii-xxv.

Education Commission, The (1984): *Education Commission Report No.1*. Hong Kong: Government Printer.

Education Commission, The (1986): *Education Commissioe Report No.2.* Hong Kong: Government Printer.

Education Commission, The (1988): *Education Commission Report No.3: The Structure of Tertiary Education and the Future of Private Schools*. Hong Kong: Government Printer.

Education Commission, The (1990): *Education Commission Report No.4: The Curriculum and Behavioural Problems in Schools.* Hong Kong: Government Printer.

Education Commission, The (1992): *Education Commission Report No.5: The Teaching Profession.* Hong Kong: Government Printer.

Education Commission, The (1995): *Education Commission Report No.6: Enhancing Language Proficiency – A Comprehensive Strategy.* Hong Kong: Government Printer.

Education Commission, The (1997): *Education Commission Report No.7: Quality School Education*. Hong Kong: Government Printer.

Education Commission, The (1999): *Education Blueprint for the 21st Century: Review of Academic System – Aims of Education.* Hong Kong: Government Printer.

Education Commission, The (2000): *Learning for Life, Learning through Life: Reform Proposals for the Education System in Hong Kong.* Hong Kong: Government Printer.

Education Commission, The (2003a): *Progress Report on the Education Reform (2).* Hong Kong: Education Commission.

Education Commission, The (2003b): *Review of the Academic Structure of Senior Secondary Education: Executive Summary*. Hong Kong: Education Commission.

Endacott, George B. (1962): 'The Beginnings', in Harrison, Brian (ed.), *University of Hong Kong: The First 50 Years, 1911-1961.* Hong Kong: Hong Kong University Press.

Endacott, George B. (1964): *A History of Hong Kong*. Hong Kong: Oxford University Press.

Epstein, Erwin H. (1986): 'Currents Left and Right: Ideology in Comparative Education', in Altbach, Philip G. & Kelly, Gail P. (eds.), *New Approaches to Comparative Education*. Chicago: University of Chicago Press, pp.233-259.

Ernst & Young Ltd. (1996): *Hong Kong Government Student Financial Assistance Agency Report: Consultancy Study on the Local Student Finance Scheme*. Hong Kong: Ernst & Young Management Consultancy Ltd.

Errante, Antoinette (1998): 'Education and National Personae in Portugal's Colonial and Postcolonial Transition'. *Comparative Education Review*, Vol.43, No.3, pp.267-308.

Fafunwa, A. Babs & Aisiku, J.U. (eds.) (1982): *Education in Africa: A Comparative*

Survey. London: George Allen & Unwin.

Fägerlind, Ingemar & Saha, Lawrence J. (1989): *Education and National Development.* 2nd edition, Oxford: Pergamon Press.

Fan, K. (1995): 'An Examination of the Effects of Hong Kong Education Policy on Chinese Language Teaching Materials in Secondary Schools from the 1950s to 1970s', in Siu, Ping Kee & Tam, Tim Kui Peter (eds.), *Quality in Education: Insights from Different Perspectives.* Hong Kong: The Hong Kong Educational Research Association, pp.233-245. [in Chinese]

Farrell, Joseph P. (1979): 'The Necessity of Comparisons in the Study of Education: The Salience of Science and the Problem of Comparability'. *Comparative Education Review*, Vol.23, No.1, pp.3-16.

Faure, Edgar (Chairman) (1972): *Learning to Be: The World of Education Today and Tomorrow*. Paris: UNESCO.

Fehr, H.F. (1970): 'Education for Change: What Change?'. *New Trends in Mathematics Teaching*, Vol.II, Paris: UNESCO, pp.199-213.

Feitor, Renato & Cremer, Rolf Dieter (1991): 'Macau's Modern Economy', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.202-206.

Feng, Zengjun & Lai, I Meng (1999): *An Introduction to Macao's Education.* Guangzhou: Guangdong Education Press. [in Chinese]

Fey, J.T. (1978): 'Change in Mathematics Education since the late 1950's – Ideas and Realisation: U.S.A.'. *Educational Studies in Mathematics*, Vol.9, No.3, pp.339-353.

Fine, H.B. (1905): *College Algebra*. New York: Dover Publications.

Firth, Stewart & Darlington, Robert (1993): 'Racial Stereotypes in the Australian Curriculum: The Case-study of New South Wales', in Mangan, J.A. (ed.), *The Imperial Curriculum: Racial Images and Education in the British Colonial Experience.* London: Routledge, pp.79-92.

Fiske, Edward B. (1996): *Decentralization of Education: Politics and Consensus*. Washington DC: The World Bank.

FitzSimons, Gail E. (2002): 'Introduction: Cultural Aspects of Mathematics Education', *Journal of Intercultural Studies*, Vol.23, No.2, pp.109-118. [in Chinese]

Fok, Shui Chi (2001): Meeting the Challenge of Human Rights Education: The Case of Hong Kong. *Asia Pacific Education Review*, Vol.2, No.1, pp.56-65.

Fok, Shui Chi (2002): 'Implementation and Development of Civic Education in Hong Kong Secondary Schools: The Implications of a Survey'. *Education Reform and Development in the 21st Century: Proceedings of the 8th Educational Conference of Mainland China, Taiwan, Hong Kong, and Macau*. Macao: Organising Committee of the 8th Educational Conference of Mainland China, Taiwan, Hong Kong, and Macau, pp.50-55.

Foley, Douglas (1984): 'Colonialism and Schooling in the Philippines, 1898-1970', in: Altbach, P. & Kelly, G. (eds.), *Education and the Colonial Experience.* New Brunswick: Transaction Books, pp.33-53.

Fong, Peng Long (2000a): *A Context Analysis of Personal and Social Development Curriculum Policy in Primary Schools of Macao*. MEd dissertation, Faculty of Education, The University of Macau. [in Chinese]

Fong, Ping Lung (2000b): 'The System of Selecting Textbooks in Macau'. paper presented at the conference on textbook systems, Taipei. [in Chinese]

French, Nigel (1997): *Higher Education in Hong Kong: Recent Developments and Future Challenges*. Hong Kong: University Grants Committee Internet Virtual Library, www.ugc.edu.hk.

Fu, K.Y., Chan, Y.F. & Kuong, L.K. (1994): 'Teacher Education: Responding to the New Realities in a Changing Society', in Koo, Ramsey Ding Yee & Ma, Hing Tong (eds.), *Macau Education: Continuity and Change*. Macau: Macau Foundation, pp.100-109. [in Chinese]

Fullan, Michael (1994): *Change Forces: Probing the Depths of Educational Reform*. London: Falmer Press.

Fung, H.S. (1960): *Overseas Chinese Education in Macau.* Taipei: Overseas Publication Service. [in Chinese]

Fung, P.W. (1980): *World History*. Hong Kong: Everymans Book Co. Ltd.

Fung, Y.W. & Lee, C.K. (1987): 'Development of Geographical Education in Hong Kong in Postwar Years'. *Education Journal*, Vol.15, No.2, pp.60-67. [in Chinese]

Furnivall, John Sydenham (1943): *Educational Progress in South East Asia*. New York: Institute of Pacific Relations.

Gifford, Prosser & Weiskel, Timothy C. (1971): 'African Education in a Colonial Context: French and British Styles', in Gifford, Prosser & Louis, William Roger (eds.), *France and Britain in Africa*. New Haven: Yale University Press, pp.663-711.

Gimmestad, M.J. & Hall, G.E. (1995): 'Structure of Teacher Education Programs', in Anderson, Lorin W. (ed.), *International Encyclopedia of Teaching and Teacher Education*, 2nd edition, Oxford: Pergamon Press, pp.548-552.

Ginsburg, M., Cooper, S., Raghu, R. & Zegarra, H. (1990): 'National and World-system Explanations of Educational Reform'. *Comparative Education Review,* Vol.34, No.4, pp.474-499.

Giroux, Henry A. (1983): *Theory and Resistance in Education: A Pedagogy for the Politics of the Opposition.* New York: Bergin & Garvey.

Goldman, M. and Perry, E.J. (eds.) (2002): *Changing Meanings of Citizenship in Modern China*. Cambridge: Harvard University Press.

Goodstadt, Leo (2003): 'Foreword: Faith, Citizenship and Colonialism in Hong Kong', in Leung, Beatrice & Chan, Shun Hing, *Changing Church and State Relations in Hong Kong, 1950-2000.* Hong Kong: Hong Kong University Press, pp.ix-xvi.

Gopinathan, Saravanan (2001): 'Globalisation, the State and Education Policy in Singapore', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Themes and Experiences in East Asia*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.21-36.

Granville, William Anthony (1909): *Plane and Spherical Trigonometry*. New York: Ginn.

Green, Andy (1990): *Education and State Formation: The Rise of Education Systems in England, France and the USA*. London: Macmillan.

Green, Andy (1997): *Education, Globalization and the Nation State*. London: Macmillan.

Griffin, P., Falvey, P. & Owen, J. (1993): 'Targets and Target-Related Assessment

(TTRA): Implications for Hong Kong of Experience Elsewhere'. *Curriculum Forum*, Vol.2, No.1, pp.14-18.

Guillen-Nuñez, Cesar (1984): *Macau.* Hong Kong: Oxford University Press.

Gunn, Geoffrey C. (1996): *Encountering Macau: a Portuguese City-State on the Periphery of China, 1557-1999.* Boulder: Westview Press.

Hailey, Lord (1957): *An African Survey: A Study of Problems arising in Africa South of the Sahara*. London: Oxford University Press.

Halls, W.D. (1990): 'Trends and Issues in Comparative Education', in Halls, W.D. (ed.), *Comparative Education: Contemporary Issues and Trends*. London: Jessica Kingsley, pp.21-65.

Hanson, E. (1978): *Catholic Politics in China and Korea*. Maryknoll, New York: Orbis Books.

Harber, Clive (1985): 'Weapon of War: Political Education in Zimbabwe'. *Journal of Curriculum Studies*, Vol.17, No.2, pp.163-174.

Harber, Clive (1989): *Political Education in Africa.* London: Macmillan.

Hargreaves, Andy (1995): *Changing Teachers, Changing Times.* London: Cassell.

Hargreaves, Andy (2003): *Teaching in the Knowledge Society: Education in the Age of Insecurity.* Milton Keynes: Open University Press.

Harms, T. & Clifford, R.M. (1980): *Early Childhood Environment Rating Scale*. New York: Teachers College, Columbia University.

Harris, D.J. (1995): 'Endogenous Learning and Economic Growth', in Carnoy, Martin (ed.), *International Encyclopedia of Economics of Education.* 2nd edition. Oxford: Pergamon Press, pp.199-204.

Harrison, Brian (1962): 'The Years of Growth', in Harrison, Brian (ed.), *University of Hong Kong: The First 50 Years, 1911-1961.* Hong Kong: Hong Kong University Press, pp.45-57.

Haug, Peder (1999): 'Formulation and Realization of Social Justice: The Compulsory School for All in Sweden and Norway'. *European Journal of Special Needs Education*, Vol.14, No.3, pp.231-239.

Havelock, R.G. (1973): *The Change Agent's Guide to Innovation in Education.* New York: Educational Technology Publications Inc.

Hawkins, John N. (1983): 'The People's Republic of China (Mainland China)', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press, pp.136-187.

Heads of Universities Committee (HUCOM) (1998): *Working Group on Duration of Undergraduate Programmes: Consultation Document*. Hong Kong: Lingnan College Internet Home Page, www.ln.edu.hk.

Heater, Derek Benjamin (1991): 'What is Citizenship?'. *Citizenship*, Vol.1, No.2, pp.3-5.

Hinchliffe, Keith (1995): 'Manpower Analysis', in Carnoy, Martin (ed.), *International Encyclopedia of Economics of Education.* 2nd edition. Oxford: Pergamon Press, pp.370-375.

Ho, Edmund (2000): *Government Policy Plan for the Year 2000 Financial Year of the Macao Special Administrative Region of the People's Republic of China.* 29 March.

Ho, Edmund (2001): *Policy Address for the Fiscal Year 2001 of the Government of the Macao Special Administrative Region (MSAR) of the People's Republic of*

China. 9 November.

Ho, Edmund (2002): *Policy Address for the Fiscal Year 2002 of the Macao Special Administrative Region (MSAR) of the People's Republic of China*. Macao.

Ho, Edmund (2003): *Policy Address for the Fiscal Year 2003 of the Macao Special Administrative Region (MSAR) of the People's Republic of China*. Macao.

Holmes, Brian (ed.) (1967): *Educational Policy and the Mission Schools: Case Studies from the British Empire*. London: Routledge & Kegan Paul.

Hong Kong, Census & Statistics Department (1996): *Quarterly Report on General Household Survey October to December 1996*. Hong Kong: Census & Statistics Department.

Hong Kong, Census & Statistics Department (2001): *Hong Kong Statistics*. Hong Kong: Census & Statistics Department.

Hong Kong, Education Department (1955a): *General School Circular No.22: List of Chinese Textbooks Approved for Schools*. Hong Kong: Education Department. [in Chinese]

Hong Kong, Education Department (1955b): *General School Circular No.25: List of English Textbooks Approved for Schools*. Hong Kong: Education Department.

Hong Kong, Education Department (1958): *Education Report*. Hong Kong: Education Department.

Hong Kong, Education Department (1959): *Education Report*. Hong Kong: Education Department.

Hong Kong, Education Department (1962): *Suggested Syllabus for Mathematics in Chinese-Middle Schools*. Hong Kong: Education Department. [in Chinese]

Hong Kong, Education Department (1972): *Education Report*. Hong Kong: Education Department.

Hong Kong, Education Department (1971): *Education Regulations*. Hong Kong: Government Printer.

Hong Kong, Education Department (1986): *Report on the Evaluation of the Implementation of the Guidelines on Civic Education in Schools*. Hong Kong: Government Printer.

Hong Kong, Education Department (1987): *Second Report on the Evaluation of the Implementation of the Guidelines on Civic Education in Schools*. Hong Kong: Government Printer.

Hong Kong, Education Department (1989): *Report of the Working Group set up to Review Language Improvement Measures*. Hong Kong: Government Printer.

Hong Kong, Education Department (1990): *Annual Summary 1988-1989*. Hong Kong: Government Printer.

Hong Kong, Education Department (1993): *School Education in Hong Kong: A Statement of Aims*. Hong Kong: Government Printer.

Hong Kong, Education Department (1994): *Manual of Kindergarten Practice*. Hong Kong: Government Printer.

Hong Kong, Education Department (1997): *Medium of Instruction: Guidance for Secondary Schools*. Hong Kong: Education Department.

Hong Kong, Education Department (1999): 'List of Dos and Don'ts for Kindergartens'. Schools Curriculum Circular No. 4/99. Hong Kong: Education Department.

Hong Kong, Education Department (2000): 'Language Proficiency Requirement for English and Putonghua Teachers'. Hong Kong: Education Department.

Hong Kong, Education Department (2000a): 'Key Statistics for Kindergarten Education'. Hong Kong: Education Department.

Hong Kong, Education Department (2000b): *Performance Indicators for Kindergartens*. Hong Kong: Education Department.

Hong Kong, Education Department & Social Welfare Department (2002): *Working Party on Harmonisation of Pre-primary Services. Consultation Document.* Hong Kong: Government Printer.

Hong Kong, Education & Manpower Branch (1994): *Manpower 2001 Revisited.* Hong Kong: Education & Manpower Branch, Government Secretariat.

Hong Kong, Education & Manpower Bureau (1997): *Degree and Sub-degree Tuition Fees Rate, 1997-2001*. Press Release, 15 July.

Hong Kong, Education & Manpower Bureau (1999). *Consultancy Study on Rates of Return to Education Final Report.* Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2000). *Report on Manpower Projection to 2005.* Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2001): 'A Paper Prepared for Legislative Council Panel on Education, Subcommittee on Increase in Post-secondary Education Opportunities'. Paper No CB (2) 1664/00-01 (02), Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2003a): 'Key Statistics for Kindergarten Education'. Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2003b): 'Direct Subsidy Scheme'. Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2003c): 'Education Facilities for Non-Chinese Speaking Children'. Hong Kong: Education & Manpower Bureau.

Hong Kong, Education & Manpower Bureau (2003d): 'Language Proficiency Assessment for Teachers Results'. www.info.gov.hk/gia_general/200306/02/ 0602174.htm.

Hong Kong, Financial Secretary (1999): *The 1999/2000 Budget: Onward with New Strengths.* Hong Kong: Government of the Hong Kong Special Administrative Region.

Hong Kong, Government of (1981): *Primary Education and Pre-primary Services* [White Paper]. Hong Kong: Government Printer.

Hong Kong, Government of (1982a): *Child Care Centres Ordinance* (revised edition) Hong Kong: Government Printer.

Hong Kong, Government of (1982b): *Child Care Centres Regulations* (revised edition) Hong Kong: Government Printer.

Hong Kong, Government of (1986): *Activity Guidelines for Day Nurseries*. Hong Kong: Government Printer.

Hong Kong, Information Services Department (1998): *Hong Kong: A New Era.* Hong Kong: Information Services Department.

Hong Kong, Information Services Department (2003): *Hong Kong 2002*. Hong Kong: Information Services Department.

Hong Kong, Social Welfare Department (1963): *Social Welfare Department Report.* Hong Kong: Government Printer.

Hong Kong, Social Welfare Department (1977): *Social Welfare Department Report*. Hong Kong: Government Printer.

Hong Kong, Social Welfare Department (2003): *Department Report, 2002-2003*. Hong Kong: Government Printer.

Hong Kong Association of Secondary School Principals (2001): *A Survey of Medium of Instruction in Form 4*. Hong Kong: Hong Kong Association of Secondary School Principals.

Hong Kong Baptist College (1957): *Hong Kong Baptist College Annual Bulletin.* Hong Kong: Hong Kong Baptist College.

Hong Kong Baptist College (1988): *Manual of Academic Regulations, Policies and Procedures.* Hong Kong: Hong Kong Baptist College.

Hong Kong Council of Early Childhood Education & Services (1993): *Training Needs Analysis of Early Childhood Workforce in Hong Kong*. Hong Kong: Hong Kong Council of Early Childhood Education & Services.

Hong Kong Educationists' Association & Hong Kong Resource Centre (1996): *Basics in Civic Education: Knowing Your Own Country.* Hong Kong: Fai Ho Publisher. [in Chinese]

Howes, Carollee (1997): 'Children's Experiences in Center-based Child Care as a Function of Teacher Background and Adult-child Ratio'. *Merrill-Palmer Quarterly*, Vol.43, No.3, pp.404-425.

Howes, C. & Marx, E. (1992): 'Raising Questions about Improving the Quality of Child Care: Child Care in the United States and France'. *Early Childhood Research Quarterly*, Vol.7, No.3, pp.347-366.

Howes, C., Phillips, D.A. & Whitebrook, M. (1992): 'Thresholds of Quality: Implications for the Social Development of Children in Center-based Care'. *Child Development*, Vol.63, No.2, pp.449-460.

Howson, A.G. (1978): 'Change in Mathematics Education since the late 1950's – Ideas and Realisation: Great Britain'. *Educational Studies in Mathematics*, Vol.9, No.2, pp.183-223.

Huang, Fu Shan (1995): *Dictionary of Adult Education*. Taipei: Taiwan Adult Education Association. [in Chinese]

Huang, Wei Chiao (1988): 'An Empirical Analysis of Foreign Student Brain Drain to the United States'. *Economics of Education Review,* Vol.7, No.2, pp.231-243.

Hughes, A.S. (1991): 'Curriculum Policies', in Lewy, Arieh (ed.), *The International Encyclopedia of Curriculum.* Oxford: Pergamon Press, pp.137-138.

Hui, Philip Kwok Fai (1994): 'Higher Education in Macau: From Private to Public', in Koo, Ramsey Ding Yee & Ma, Hing Tong (eds.), *Macau Education: Continuity and Change*. Macau: Macau Foundation, pp.46-59. [in Chinese]

Hui, Philip Kwok Fai (1999): *A Comparative Historical Analysis of Higher Education Development in Macau and Hong Kong: State Intervention, Portuguese and British Imperialism and Colonialism*, PhD thesis, State University of New York at Buffalo.

Husén, Torsten (1986): *The Learning Society Revisited*. Oxford: Pergamon Press.

IBM Business Consulting Services (2003): *Strategic Review of Hong Kong Examinations and Assessment Authority: Final Consultancy Report.* Hong Kong: IBM Corporation.

Ichilov, Orit (1994): 'Political Education', in Husén, T. & Postlethwaite, T.N. (eds.),

International Encyclopedia of Education. 2nd edition. Oxford: Pergamon Press, pp.4568-4571.

Ieong, Pedro (1993): 'The Financing of Hong Kong Kindergartens', in Bray, Mark (ed.), *The Economics and Financing of Education: Hong Kong and Comparative Perspectives*. Education Paper No.20, Hong Kong: Faculty of Education, The University of Hong Kong, pp.96-121.

Ieong, S.L. (1994): 'Reflections on the Language Issues in Macau: Policies, Realities, and Prospects', in Koo, Ramsey Ding Yee & Ma, Hing Tong (eds.), *Macau Education: Continuity and Change.* Macau: Macau Foundation, pp.60-69. [in Chinese]

Ieong, Wan Chong (Chief Writer) (2000): *Macau 2020: The Long Term Objectives and Development Strategies in 20 Years*. Macao: Macao Development Strategy Research Centre and Macao Association of Economic Sciences.

Ignas, Edward & Corsini, Raymond (eds.) (1981): *Comparative Education Systems.* Itasca, Illinois: F.E. Peacock Publishers.

Igwe, Sam Okoronkwo (1987): *Education in Eastern Nigeria 1847-1975, Development and Management: Church, State and Community*. London: Evans Brothers.

Ilon, Lynn (1997): 'Educational Repercussions of a Global System of Production', in Cummings, William K. & McGinn, Noel F. (eds.), *International Handbook of Education and Development: Preparing Schools, Students and Nations for the Twenty-First Century.* Oxford: Pergamon Press, pp.609-629.

Ip, Kin Yuen (1994): *Organisational Change: The Case of a 'Leftist School' in Joining the Direct Subsidy Scheme*. MEd dissertation, The University of Hong Kong.

James, Estelle (1988): 'The Public/Private Division of Responsibility for Education: An International Comparison', in James, Thomas & Levin, Henry M. (eds.), *Comparing Public and Private Schools*. Vol.I, New York: Falmer Press, pp.95-127.

Jansen, Jonathan (1989): 'Curriculum Reconstruction in Post-Colonial Africa: A Review of the Literature'. *International Journal of Educational Development*, Vol.9, No.3, pp.219-231.

Jarvis, Peter (1983): *Adult and Continuing Education: Theory and Practice.* New York: Routledge.

Jarvis, Peter & Griffin, Colin (1998): *Theory and Practice of Learning*. London: Kogan Page.

Jimenez, Emmanuel & Lockheed, Marlaine E. (1995): *Public and Private Secondary Education in Developing Countries: A Comparative Study*. Discussion Paper No.309, Washington DC: The World Bank.

Johnson, Robert Keith (2001): 'Political Transitions and the Internationalisation of English: Implications for Language Planning, Policy-making and Pedagogy', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Themes and Experiences in East Asia*. 2nd edition, Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.59-74.

Jones, Philip E. (1971): *Comparative Education: Purpose and Method*. St. Lucia: Queensland University Press.

Jones, V. (1965): 'The Content of History Syllabuses in Northern Nigeria in the

Early Colonial Period'. *West African Journal of Education*, Vol.9, pp.145-148.

Kamens, D.H. & Benavot, A. (1992): 'A Comparative and Historical Analysis of Mathematics and Science Curricula, 1800-1986', in Meyer, J.W., Kamens, D.H. & Benavot, A. with Cha, Y.K. & Wong, S.Y., *School Knowledge for the Masses: World Models and National Primary Curricular Categories in the Twentieth Century*. London: Falmer Press, pp.101-123.

Kan, Flora & Vickers, Edward (2002): 'One Hong Kong, Two Histories: 'History' and 'Chinese History' in the Hong Kong School Curriculum'. *Comparative Education*, Vol.38, No.1, pp.73-89.

Kandel, Isaac L. (1933): *Studies in Comparative Education*. London: George G. Harrap & Company.

Kariyewasam, Sunderi (1996): 'Ideals and Reality: Sri Lanka's Attempts to Resolve the Roles of Educational Assessment', in Little, Angela & Wolf, Alison (eds.), *Assessment in Transition: Learning, Monitoring and Selection in International Perspective*, Oxford: Pergamon Press, pp.88-95.

Kay, Stafford & Nystrom, Bradley (1971): 'Education and Colonialism in Africa'. *Comparative Education Review*, Vol.15, No.3, pp.240-259.

Keane, M. (2001): 'Redefining Chinese Citizenship'. *Economy and Society*, Vol.30, No.1, pp.1-17.

Kellaghan, Thomas & Greaney, Vincent (1992): *Using Examinations to Improve Education: A Study in Fourteen African Countries*. Technical Paper No.165, Washington DC: The World Bank.

Kelly, Gail P. (1984): 'Colonialism, Indigenous Society, and School Practices: French West Africa and Indochina, 1918-1938', in Altbach, Philip G. & Kelly, Gail P. (eds.), *Education and the Colonial Experience*. New Brunswick: Transaction Books, pp.9-32.

Kelly, Gail P. (1992): 'Debates and Trends in Comparative Education', in Arnove, Robert F., Altbach, Philip G. & Kelly, Gail P. (eds.), *Emergent Issues in Education: Comparative Perspectives*. Albany: State University of New York Press, pp.13-22.

Kelly, Gail P. & Altbach, Philip G. (1984): 'Introduction: The Four Faces of Colonialism', in Altbach, Philip G. & Kelly, Gail P. (eds.), *Education and the Colonial Experience*. New Brunswick, N.J.: Transaction Books, pp.1-8.

Kerr, Clark (1982): 'The Idea of a Multiversity', in Kerr, Clark, *The Uses of the University*. Cambridge, Mass: Harvard University Press, pp.1-34.

King, Ambrose Y.C. (1981a): 'Administration Absorption of Politics in Hong Kong: Emphasis on the Grass Roots Level', in King, Ambrose Y.C. & Lee, Rance P.L. (eds.), *Social Life and Development in Hong Kong*. Hong Kong: The Chinese University Press, pp.127-146.

King, Ambrose Y.C. (1981b): 'The Political Culture in Kwun Tong: A Chinese Community in Hong Kong', in King, Ambrose Y.C. & Lee, Rance P.L. (eds.), *Social Life and Development in Hong Kong*. Hong Kong, The Chinese University Press, pp.147-168.

Knowles, Malcolm (1980): *The Adult Learner: A Neglected Species*. Houston: Gulf Publishing Company.

Kong, Shun Mei (1992): 'An Experience in Organising Programmes of Civic Education', in Wong, H.K. (ed.), *Civic Education in Macau*. Macau: Macau

Research Centre, University of Macau, pp.157-160. [in Chinese]

Koo, Ramsey Ding Yee (1997): 'Macau Education: Critical Changes and Challenges in the Post-transitional Period'. *Asian Studies,* Vol.22, No.1, pp.217-234. [in Chinese]

Koo, Ramsey Ding Yee (1998a): 'A Comparative Perspective on Education Development in the Transition Period for Hong Kong and Macau', in Yee, Albert (ed.), *A Tale of Two Cities: Political, Economic, and Social Development in Hong Kong and Macau.* Macau: Macau Association for Social Sciences, pp.327-345. [in Chinese]

Koo, Ramsey Ding Yee (1998b): 'A Study of the Relationships between Father's Educational Level, Self-Expectation, and Academic Performance of Junior High School Students in Hong Kong'. Paper presented at the UNESCO-ACEID International Conference on Secondary Education and Youth at the Crossroads, Bangkok, 10-13 November.

Koo, Ramsey Ding Yee & Ma, Hing Tong (eds.) (1994): *Macau Education: Continuity and Change.* Macau: Macau Foundation. [in Chinese]

Koo, Ramsey Ding Yee, Kam, C.K & Choi, B. (2003): 'Education and Schooling in Hong Kong: Under One Country, Two Systems'. *Childhood Education*, Vol.79, No.3, pp.137-144.

Koo, Ramsey Ding Yee, Wu, Siu Wai & Li, Titus Siu Pang (eds.) (2003): *Education Development and Curriculum Innovations: Perspective and Experience from Mainland China, Taiwan, Hong Kong and Macao*. Hong Kong: Association for Children Education International – Hong Kong and Macau.

Kopf, D. (1984): 'Orientalism and the Indian Educated Elite', in Altbach, Philip G. & Kelly, Gail P. (eds.), *Education and the Colonial Experience*. New Brunswick, N.J.: Transaction Books, pp.117-136.

Kwo, O., Moore, T. & Jones, J. (2004): 'Prologue: A Focus on Learning Amidst University Changes', in Kwo, O., Moore, T. & Jones, J. (eds.), *Developing Learning Environments: Creativity, Motivation, and Collaboration in Higher Education*. Hong Kong: Hong Kong University Press, pp.1-17.

Lai, I Meng (1996): 'The Other Side of "The Contribution of Catholic Education in Macau"'. Macau: manuscript. [in Chinese]

Lai, I.F. (1995): 'Teacher Education in Macau: The Present and the Direction of the Future', in South China Normal University, *The Collection of Year 1991*. Guangzhou: Guangdong Education Press, pp.180-195. [in Chinese]

Lai, Pak Sang & Byram, Michael (2003): 'The Politics of Bilingualism: A Reproduction Analysis of the Policy of Mother Tongue Education in Hong Kong after 1997'. *Compare: A Journal of Comparative Education*, Vol.33, No.3, pp.315-334.

Lam, Ka Ka (1994): *Interaction Between Politics and Education: Case Study of a 'Patriotic School' in Hong Kong.* MPhil thesis, The Chinese University of Hong Kong. [in Chinese]

Lamb, Michael E. (1998): 'Nonparental Child Care: Context, Quality, Correlates and Consequences', in Damon, W. (series editor) and Sigel, I.E. & A. Renninger (volume editors), *Handbook of Child Psychology: Vol. 4. Child Psychology in Practice.* New York: John Wiley & Sons, pp.73-133.

Lau, Kam Ling (2002): *An Investigative Study of the Education and Youth*

Department's Moral Education Guidelines' State of Recognition and Implementation in Macao Catholic Elementary Schools*. MEd dissertation, University of Macau. [in Chinese]

Lau, Sin Peng (1994): *A Preliminary Study of Historical Value of St. Paul's University College in Macau.* Macau: Department of Culture. [in Chinese]

Lau, Sin Peng (1995): 'Bilingual Elites and Cultural Exchange'. *Macau Education*, Vol.166, No.3. [in Chinese]

Lau, Sin Peng (1996): 'Macau Education in the World War II', in Macau Chinese Education Association, *Selection of Educational Papers*. Macau: Macau Education Publisher, pp.3-17. [in Chinese]

Lau, Sin Peng (1997): 'The Main Duty and Timely Task of Educational Organisation is Providing the Status of Teaching Professionalism for Teachers'. Paper presented at the 4th Two Coasts Plus Hong Kong & Macau Regions Educational Studies Conference, 25-26 October, Macau. [in Chinese]

Lau, Sin Peng (2002a): *The History of Macao Education.* Beijing: People's Education Press. [in Chinese]

Lau, Sin Peng (2002b): *Engravings of the Century: Important Educational Events in 20th Century Macao.* Macao: Lau Sin Peng. [in Chinese]

Lau, Siu Kai (1982): *Society and Politics in Hong Kong.* Hong Kong: The Chinese University Press.

Lau, Siu Kai & Kuan, Hsin Chi (1988): *The Ethos of the Hong Kong Chinese.* Hong Kong: The Chinese University Press.

Lauglo, Jon & McLean, Martin (eds.) (1985): *The Control of Education: Issues in the Centralisation-Decentralisation Debate*. London: Heinemann.

Law, Fanny (2003): 'Opening Address to Yew Chung Foundation 70th Anniversary International Education Symposium: Educating the Global Child'. 4 November. www.emb.gov.hk/emb/eng/info/speech/psem/20031104.html.

Law, Wing Wah (1997): 'The Accommodation and Resistance to the Decolonisation, Neocolonisation and Recolonisation of Higher Education in Hong Kong', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.41-63.

Law, Wing Wah (2003): 'Globalization as both a Threat and Opportunity for the Hong Kong Teaching Profession'. *Journal of Educational Change*, Vol.4, No.2, pp.149-179.

Lazzarotto, A. (1982): *The Catholic Church in Post-Mao China*. Hong Kong: Holy Spirit Study Centre.

Lee, C.K., Cheung, C.M. & Cheung, Y.S. (2002): *Curriculum Integration: School Based Curriculum Development.* Hong Kong: The Chinese University of Hong Kong. [in Chinese]

Lee, Siu Ming (1987): 'Political Education and Civic Education: The British Perspective and Hong Kong Perspective'. *International Journal of Educational Development*, Vol.7, No.4, pp.251-263.

Lee, Wing On (1998): 'Social Class, Language and Achievement', in Postiglione, Gerard A. & Lee, Wing On (eds.), *Schooling in Hong Kong: Organization, Teaching and Social Context.* Hong Kong: Hong Kong University Press, pp.155-174.

Lee, Wing On (1999): 'Controversies of Civic Education in Political Transition', in

Torney-Purta, J., Schwille, J. & Amadeo, J.A. (eds.), *Civic Education Across Countries: Twenty-four National Case Studies from the IEA Civic Education Project*. Amsterdam: IEA, pp.313-340.

Lee, Wing On & Bray, Mark (1995): 'Education: Evolving Patterns and Challenges', in Cheng, Joseph & Lo, S.H. (eds.), *From Colony to SAR: Hong Kong's Challenges Ahead*. Hong Kong: The Chinese University Press, pp.357-378.

Lee, Wing On & Leung, Sai Wing (1999): *Institutional Constraints on Promoting Civic Education in Hong Kong Secondary Schools: Insight from the IEA Data*. Occasional Paper Series No.8, Hong Kong: The Hong Kong Polytechnic University.

Lee, Wing On & Sweeting, Anthony (2001): 'Controversies in Hong Kong's Political Transition: Nationalism versus Liberalism', in Bray, Mark & Lee, W.O. (eds.), *Education and Political Transition: Themes and Experiences in East Asia*. 2nd edition, Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.101-121.

Lei, Heong Iok (2000): 'The Direction of Higher Education Development after the Hand-over', in Wu, Ziliang & Ieong, Wan Chong (eds.), *Macau 2000*. Macao: Macao Foundation, pp.307-318. [in Chinese]

Lei, Heong Iok (2001): *Research on St. Paul's University College*. Macao: Macau Daily News. [in Chinese]

Lei, Pui Lam (1999): 'From the Centre for Professional Training to the Direction of Macau Adult Education Development', in Leao, João & Leong, Man Wai (eds.), *Conference Proceedings of Adult Education and Social Development*. Macao: Centre for Continuing Education & Special Programs, University of Macau, and Macau Adult Education Association, pp.23-29. [in Chinese]

Leong, Man Wai (1999): 'The Professionalism in Adult Education', in Chan, Kai I (ed.), *Conference Proceedings of the Direction of Macau Education after Hand-over*. Macao: Chinese Association for Education & Education Committee for the Celebration of the Handover, pp.78-92. [in Chinese]

Leong, Man Wai (2001): 'The Opportunities and Challenges of the PRC and Taiwan Joining WTO: The Responses of the Center for Continuing Education and Special Programs, University of Macau', *Proceedings of Adult Education Academic Conference 2001*. Taipei: Chung Jung University and Taiwan Adult Education Association, pp.170-184. [in Chinese]

Leung, Beatrice (1992): *Sino-Vatican Relations: Problems of Conflicting Authority*. Cambridge: Cambridge University Press.

Leung, Beatrice (1999): 'Strategic Development of the Hong Kong SAR: Social Policy, EIB Model, and Implications', in Hsiung, James C. (ed.), *Hong Kong the Super Paradox: Life After Return to China*. New York: St. Martin's Press, pp.125-152.

Leung, Beatrice & Chan, Shun Hing (2003): *Changing Church and State Relations in Hong Kong, 1950-2000*. Hong Kong: Hong Kong University Press.

Leung, C.K. (1995): 'Foreword by the Director', in HKIEd, *Course Handbook 1995-96*. Hong Kong: Hong Kong Institute of Education.

Leung, Frederick K.S. (2003): 'Issues Concerning Teacher Education in the East Asian Region'. *Asia-Pacific Journal of Teacher Education and Development*, Vol.6, No.2, pp.5-21.

Leung, K.K. (1995): 'The Basic Law and the Problem of Political Transition', in Cheng, Y.L. & Sze, M.H. (eds.), *The Other Hong Kong Report 1995*. Hong Kong: The Chinese University Press, pp.33-50.

Leung, K.T. (1980): 'Development of Mathematics Curriculum in Recent Two Decades in Hong Kong'. *Dou Sou*, Vol. 38, pp.44-56. [in Chinese]

Leung, Sai Wing (1995): 'Depoliticization and Trivialization of Civic Education in Secondary Schools: Institutional Constraints on Promoting Civic Education in Transitional Hong Kong', in Siu, Ping Kee & Tam, Tim Kui Peter (eds.), *Quality in Education: Insights from Different Perspectives*. Hong Kong: The Hong Kong Educational Research Association, pp.283-312.

Leung, Sai Wing (1997): *The Making of an Alienated Generation: The Political Socialization of Secondary School Students in Transitional Hong Kong*. Aldershot: Ashgate.

Leung, Yan Wing (1998): 'The Conflict Between Civic Education and Nationalistic Education'. *Reflection*, 56 (July). [in Chinese]

Leung, Yan Wing & Cheng, Y.T. (eds.) (1998): *Nationalistic Education: Research and Reflection*. Hong Kong: The Joint Committee on Civic Education. [in Chinese]

Leung, Yan Wing & Lau, Kit Fai (1997): *Political Education in a Hong Kong Setting: Theory and Practice*. Hong Kong: Hong Kong Christian Institute. [in Chinese]

Leung, Yat Ming (1995): 'The People's Republic of China', in Morris, Paul & Sweeting, Anthony (eds.), *Education and Development in East Asia*. New York: Garland, pp.203-242.

Lewin, Keith M., Xu, H., Little, A.W. & Zheng, J. (1994): *Educational Innovation in China: Tracing the Impact of the 1985 Reforms*. Harlow, Essex: Longman.

Lewis, Leonard John (1949): 'Education in Africa', in *The Year Book of Education 1949*. London: Evans Brothers, pp.312-337.

Lewis, Leonard John (1954): *Educational Policy and Practice in British Tropical Areas*. London: Nelson.

Lewy, Arieh (1991): *National and School-based Curriculum Development*. Paris: International Institute for Educational Planning.

Li, Mao Sen (1990): 'Moral Education in the People's Republic of China'. *Journal of Moral Education*, Vol.19, No.3, pp.159-171.

Li, Siu Pang Titus & Choi, Ben (2000): 'Teacher Education and Teacher Development in Macau', in Hui, P.K.F. & Chan, P.K. (eds.) *Reform of Educational Systems and Teacher Education: The Asian Experience*. Hong Kong: The Hong Kong Institute of Education, pp.156-163. [in Chinese]

Lim, Elaine P.Y. & Tan, Annie (1999): 'Educational Assessment in Singapore'. *Assessment in Education*, Vol.6, No. 3, pp.391-404.

Lin, Alfred H.Y. (2002): 'The Founding of the University of Hong Kong: British Imperialist Ideals and Chinese Practical Common Sense', in Chan Lau, Kit-ching & Cunich, Peter (eds.), *An Impossible Dream: Hong Kong University from Foundation to Re-establishment, 1910-1950*. Hong Kong: Oxford University Press, pp.1-22.

Lin, Man Lee (1993): *A Study of the Chinese-Cultural Essential Elements in the Text Content of the Chinese Language Subject in Hong Kong Secondary School*. MA dissertation, The Chinese University of Hong Kong. [in Chinese]

Little, Angela W. (2003): 'Motivating Learning and the Development of Human Capital'. *Compare: A Journal of Comparative Education*, Vol.33, No.4, pp.437-452.

Liu, Z. (1973): *Overseas Chinese Education.* Taipei: Chung Hwa Book Company Ltd. [in Chinese]

Llewellyn, John (Chairman) (1982): *A Perspective on Education in Hong Kong: Report by a Visiting Panel*. Hong Kong: Government Printer.

Lo, Leslie Nai Kwai & Man, Si Wai (1996): 'Introduction: Nurturing the Moral Citizens of the Future', in Lo, Leslie Nai Kwai & Man, Si Wai (eds.), *Research and Endeavours in Moral and Civic Education*. Hong Kong: Hong Kong Institute of Educational Research, The Chinese University of Hong Kong, pp.1-10.

Lo, Shiu Hing Sonny (1993): 'Decolonisation of Hong Kong and Macau: A Comparison'. *Hong Kong Journal of Social Sciences*, No.1, pp.79-99.

Lo, Shiu Hing Sonny (1995): *Political Development in Macau*. Hong Kong: The Chinese University Press.

Lo, Yiu Chun (1999): 'School Based Curriculum Development: The Hong Kong Experience'. *The Curriculum Journal*, Vol.10, No.3. pp.419-442.

Lo, Yiu Chun (2001): 'The Development of School Based Curriculum in Hong Kong'. *Exploring Education Development*, Vol.21, No.4, pp.44-47. [in Chinese]

Lopes, Gilberto (2003): 'Training More Portuguese-Speaking Cadres'. *Macau*, [Government Information Bureau, Macau Special Administrative Region] No.16, pp.136-140.

Lugard, Frederick J.D. (1909): 'Hongkong University', in *The Conception and Foundation of the University of Hongkong: 1908-1913 Miscellaneous Documents.* Hongkong: Hongkong University.

Lugard, Frederick J.D. (1910): *Hongkong University: Objects, History, Present Position, and Prospects.* Hongkong: manuscript.

Lugard, Frederick J.D. (1912): *Hongkong University: Present Position, Constitution, Objects and Prospects.* Hongkong: Naronha & Co..

Luk, Hung Kay Bernard (1991): 'Chinese Culture in the Hong Kong Curriculum: Heritage and Colonialism'. *Comparative Education Review*, Vol.35, No.4, pp.650-668.

Luk, Hung Kay Bernard (1992): 'Hong Kong', in Wielemans, Willy & Chan, Choi Ping Pauline (eds.), *Education and Culture in Industrializing Asia*. Leuven: Leuven University Press, pp.111-150.

Ma, Andrew (1997): 'The Higher Adult Education in Hong Kong', in Taiwan Adult Education Association (ed.), *Higher Adult Education*. Taipei: Taiwan Normal University Press, pp. 361-377. [in Chinese]

Ma, Hing Tong (1994): 'A Profile of Overseas University Education and Employment in Macau'. Paper presented at the Annual Conference of the Hong Kong Educational Research Association, 26-27 November.

Macao, Department of Education & Youth (1999a): *Teaching Syllabus for Senior Secondary School: Mathematics*. Macao: Department of Education & Youth. [in Chinese]

Macao, Department of Education & Youth (1999b): *Teaching Syllabus for Junior*

Secondary School: Mathematics. Macao: Department of Education & Youth. [in Chinese]

Macao, Department of Education & Youth (1999c): *Teaching Syllabus for Primary School: Mathematics*. Macao: Department of Education & Youth. [in Chinese]

Macao, Department of Education & Youth (2000): *Collection of Papers from the Seminar on Curriculum Reform 2000*. Macao: Department of Education & Youth. [in Chinese]

Macao, Department of Education & Youth (2001): *Assessment on Academic Achievement for Basic Education in Macao: A Research Report*. Macao: Department of Education & Youth. [in Chinese]

Macao, Department of Education & Youth (2003): *Statistics on Teachers in the School Year 2001/02.* www.dsej.gov.mo. [in Chinese]

Macao, Department of Statistics & Census (2001): *Macao in Figures*. Macao: Department of Statistics & Census.

Macao, Department of Statistics & Census (2003): *Macao in Figures*. Macao: Department Statistics & Census.

Macao, Public Administration & Civil Service Bureau. (2002): *Human Resources in Macao Public Administration*. Macao: Public Administration & Civil Service Bureau. [in Chinese]

Macau, Direcção dos Serviços de Administração e Função Pública (2004): 'Dados Estatísticos dos Recursos Humanos'. www.safp.gov.mo/external/chin/statistics.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (1994a): *Organização Curricular: Ensinos Pré-escolar, Preparatório, Primário e Secundário Geral*, Decreto-Lei No.38/94/m de 18 de Julho. Macau: Imprensa Oficial.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (1994b): *Caracteristicas dos Sistema de Ensino de Macau, 1992/93: Curriculo*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (1994c): *Estabelecimentos de Ensino de Macau*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (1997a): *Estabelecimentos de Ensino de Macau 1996-97*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (1997b): *Educação e Formação em Números*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (2003a): *Educação em Números 2002/2003 (Ensino não Superior)*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (2003b): *Progresso Contínuo, Desenvolvimento Apropriado: Proposta para a Revisão do Sistema Educativo de Macau*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (2004a): *Educação em Números 2003/2004 (Ensino não Superior)*. Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Educação e Juventude [DSEJ] (2004b): *Proposta de Lei do Sistema Educativo da Região Administrativa Especial de Macau: Texto para Recolta de Comentários.* Macau: Direcção dos Serviços de Educação e Juventude.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1989): *Inquérito ao Ensino 1987/1988*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1990): *Inquérito ao Ensino 1988/1989*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1994): *Inquérito ao Ensino 1992/1993*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1997a): *Anuáro Estatístico 1996*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1997b): *Inquérito ao Ensino 1995/1996*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1998a): *Anuáro Estatístico 1997*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (1998b): *Inquérito ao Ensino 1996/1997*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Direcção dos Serviços de Estatística e Censos [DSEC] (2003): *Inquérito ao Ensino 2001/2002*. Macau: Direcção dos Serviços de Estatística e Censos.

Macau, Governo de (1984): *Linhas de Acção Governativa: Plano de Investimentos.* Macau: Imprensa Oficial.

Macau, Governo de (1984): *Linhas de Acção Governativa: Plano de Investimentos.* Macau: Imprensa Oficial.

Macau, Governo de (1991): *Sistema Educativo de Macau: Lei No.11/91/M.* Macau: Imprensa Oficial.

Macau, Governo de (1992): *Decreto-Lei No.81/92/M.* Macau: Imprensa Oficial.

Macau, Governo de (1993): *Decreto-Lei No.38/93/M.* Macau: Imprensa Oficial.

Macau, Governo de (1994): *Decreto-Lei No.38/94/M.* Macau: Imprensa Oficial.

Macau, Governo de (1995): *Decreto-Lei No.29/95/M.* Macau: Imprensa Oficial.

Macau, Governo de (1996): *Decreto-Lei No.15/96/M.* Macau: Imprensa Oficial.

Macau, Governo de (1997): *Decreto-Lei No.41/97/M.* Macau: Imprensa Oficial.

Macau Chinese Education Association (1951): *Macau Education (Vol.1-5):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1957): *Macau Education (Vol.11):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1966): *Macau Education (Vol.25):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1967): *Macau Education (Vol.26-29):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1968): *Macau Education (Vol.30-31):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1974): *Macau Education (Vol.67):* Macau: Macau Chinese Education Association. [in Chinese]

Macau Chinese Education Association (1979): *Macau Education (Vol.102):* Macau: Macau Chinese Education Association. [in Chinese]

MacKenzie, Clayton G. (1993): 'Demythologising the Missionaries: A

Reassessment of the Functions and Relationships of Christian Missionary Education under Colonialism'. *Comparative Education*, Vol.29, No.1, pp.45-66.

Maglen, Leo (1993): *Assessing the Economic Value of Education Expansion: A Preliminary Review of the Issues and Evidence.* Canberra: Economic Planning Advisory Council Background Paper, No.27.

Mak, Grace C.L. & Postiglione, Gerard A. (1996): 'Hong Kong', in Postiglione, Gerard A. & Mak, Grace C.L. (eds.), *Asian Higher Education: An International Handbook and Reference Guide.* Armonk, NY: M. E. Sharpe, pp.57-73.

Man, Si Wai (1995): 'Poor Civic Education Philosophy: A Critique of Education Convergence's "Opinions on Civic Education"'. *Sing Tao Daily*, 25 October. [in Chinese]

Manuel, Paul Christopher (1996): *The Challenges of Democratic Consolidation in Portugal: Political, Economic and Military Issues, 1976-1991.* Westport: Praeger.

Marginson, Simon & Mollis, Marcela (2001): '"The Door Opens and the Tiger Leaps": Theories and Reflexivities of Comparative Education for a Global Millennium'. *Comparative Education Review*, Vol.45, No.4, pp.581-615.

Marques, A.H. de Oliveira (1972): *History of Portugal, Vol.II: From Empire to Corporate State.* New York: Columbia University Press.

Marsh, Colin J. (1997): *Key Concepts for Understanding Curriculum 2: Planning, Management and Ideology*. London: Falmer Press.

Marsh, Colin & Morris, Paul (eds.) (1991): *Curriculum Development in East Asia.* London: Falmer Press.

Marshall, Thomas Humphrey (1950): *Citizenship and Social Class and Other Essays.* Cambridge: Cambridge University Press.

Massy, William (1997): 'Teaching and Learning Quality Process Review: The Hong Kong Programme'. *Quality in Higher Education*, Vol.3, No.3, pp.249-262.

Maurais, Jacques (2003): 'Towards a New Global Linguistic Order?', in Maurais, Jacques & Morris, Michael A. (eds.), *Languages in a Globalising World.* Cambridge: Cambridge University Press, pp.13-35.

Mayhew, A. (1938): *Education in the Colonial Empire*. London: Longmans.

Mayne, A.B. (1938a): *The Essentials of School Arithmetic*. London: Macmillan.

Mayne, A.B. (1938b): *The Essentials of School Algebra*. London: Macmillan.

Mazurek, Kas & Winzer, Margret (eds.) (1994): *Comparative Special Education.* Washington DC: Gallaudet University Press.

McClelland, J.A.G. (1991): 'Curriculum Development in Hong Kong', in Marsh, Colin & Morris, Paul (eds.), *Curriculum Development in East Asia.* London: Falmer Press, pp.106-128.

McMahon, Walter (2002): *Education and Development: Measuring the Social Benefits*. Oxford: Oxford University Press.

Mellor, Bernard (1988): *The University of East Asia: Origin and Outlook.* Hong Kong: UEA Press.

Memmi, Albert (1965): *The Colonizer and the Colonized.* Boston: Beacon Press.

Meyer, J. (1990): 'Moral Education in the People's Republic of China', *Moral Education Forum*, Vol.15, No.2, pp.3-26.

Miners, Norman John (1996): *The Government and Politics of Hong Kong.* 5th edition. Hong Kong: Oxford University Press.

Modern Educational Research Society, Ltd. (1994): *Macau Modern Society.* Hong Kong: Modern Educational Research Society. [in Chinese]

Mok, Ka Ho (1997): 'Privatization or Marketization: Educational Development in Post-Mao China'. *International Review of Education*, Vol.45, Nos.5-6, pp.547-567.

Mok, Ka Ho (2001): Book Review: Bray, Mark & Koo, Ramsey (eds.) (1999), *Education and Society in Hong Kong and Macau: Comparative Perspectives on Continuity and Change* (Hong Kong: Comparative Education Research Centre, The University of Hong Kong). *Asia Pacific Education Review*, Vol.2, No.1, pp.121-122.

Mok, Ka Ho (ed.) (2003): *Centralization and Decentralization: Educational Reforms and Changing Governance in Chinese Societies*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Kluwer Academic Publishers.

Moon, Bob (1986): *The 'New Maths' Curriculum Controversy: An International Story*. London: Falmer Press.

Morgan, G. (1985): 'The Government Perspective', in Morgan, G., Curry, N., Endsley, R., Braradbard, M., Rashid H. & Epstein A. (eds.), *Quality in Early Childhood Programs: Four Perspectives*. High/Scope Early Childhood Policy Papers No.3, Ypsilanti, MI: High/Scope.

Morris, Paul (1990): *Curriculum Development in Hong Kong*. Education Paper No.7, Hong Kong: Faculty of Education, The University of Hong Kong.

Morris, Paul (1992a): 'The Context of Curriculum Development in Hong Kong: Problems and Possibilities', in Morris, Paul, *Curriculum Development in Hong Kong*. 2nd edition. Education Paper No.7, Hong Kong: Faculty of Education, The University of Hong Kong, pp.4-22.

Morris, Paul (1992b): 'Preparing Pupils as Citizens of the Special Administrative Region: Curriculum Change and Control during the Transitional Period', in Morris, Paul, *Curriculum Development in Hong Kong*. 2nd edition. Education Paper No.7, Hong Kong: Faculty of Education, The University of Hong Kong, pp.120-143.

Morris, Paul (1997): 'Civics and Citizenship Education in Hong Kong', in Kennedy, Kerry (ed.), *Citizenship Education and the Modern State.* London: Falmer Press, pp.107-125.

Morris, Paul (1998): *The Hong Kong School Curriculum: Development, Issues and Policies.* 2nd edition. Hong Kong: Hong Kong University Press.

Morris, Paul (2000): 'The Commissioning and Decommissioning of Curriculum Reforms: The Career of the Target Oriented Curriculum', in Adamson, B., Kwan, T. & Chan, K.K. (eds.), *Changing the Curriculum: The Impact of Reform on Primary Schooling in Hong Kong.* Hong Kong: Hong Kong University Press, pp.21-40.

Morris, Paul (2002): 'Promoting Curriculum Reforms in the Context of a Political Transition: An Analysis of Hong Kong's Experience'. *Journal of Education Policy*, Vol.17, No.1, pp.13-28.

Morris, Paul, Adamson, B., Au, M.L., Chan, K.K., Chan, W.Y., Ko, P.Y., Lai Auyeung, W., Lo, M.L., Morris, E., Ng, F.P., Ng, Y.Y., Wong, W.M. & Wong, P.H. (1996): *Target Oriented Curriculum Evaluation Project: Interim Report.*

Hong Kong: In-service Teacher Education Programme, Faculty of Education, The University of Hong Kong.

Morris, Paul, Adamson, B., Chan, K.K., Che, M.W., Chik, P.M., Fung Lo M.L., Ko, P.Y., Kwan, Y.L., Mok, A.C., Ng, F.P. & Tong, S.Y. (1999): *Final Report: The Project on Feedback and Assessment.* Hong Kong: Curriculum Development Institute.

Morris, Paul & Chan, Ka Ki (1997): 'The Hong Kong School Curriculum and the Political Transition: Politicisation, Contextualisation and Symbolic Action', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.10l-118.

Morris, Paul, Lo, M.L. & Adamson, B. (2000): 'Improving Schools in Hong Kong: Lessons from the Past', in Adamson, B., Kwan, T. & Chan, K.K. (eds.), *Changing the Curriculum: The Impact of Reform on Primary Schooling in Hong Kong.* Hong Kong: Hong Kong University Press, pp.245-262.

Morris, Paul & Morris, Esther (2000): 'Civic Education in Hong Kong: From Depoliticisation to Chinese Values'. *International Journal of Social Education,* Vol. 14, No.1, pp.1-18.

Morris, Paul & Morris, Esther (2001): 'Becoming Civil in Hong Kong: A Tale of Two Schools', *International Journal of Educational Research*, Vol.35, No.1, pp.11-27.

Morris, Paul & Sweeting, Anthony (1991): 'Education and Politics: The Case of Hong Kong from an Historical Perspective'. *Oxford Review of Education,* Vol.17, No.3, pp.249-267.

Morris, Paul, McClelland, Gerry & Wong, Ping Man (1998): 'Explaining Curriculum Change: Social Studies in Hong Kong', in Stimpson, Philip & Morris, Paul (eds.), *Curriculum and Assessment for Hong Kong: Two Components, One System.* Hong Kong: The Open University of Hong Kong Press, pp.103-124.

Morris, Paul, McClelland, J.A.G. & Leung, Y.M. (1994): 'Higher Education in Hong Kong: The Context of and Rationale for Rapid Expansion'. *Higher Education*, Vol.27, No.1, pp.125-140.

Morris, Robert (ed.) (1981): *Studies in Mathematics Education*, Vol.2, Paris: UNESCO.

Morris, Robert & Arora, M.S. (eds.) (1992): *Studies in Mathematics Education*, Vol.8, Paris: UNESCO.

Morrison, Keith (2002): 'Testing to Destruction: A Problem in a Small State'. *Assessment in Education*, Vol.9, No.3, pp.289-317.

Morrison, Keith (2003): 'Towards an Educational Agenda for Macau at the Start of the New Millennium', in Macau Ricci Institute (ed.), *Macau on the Threshold of the Third Millennium*. Macao: Macau Ricci Institute, pp.273-288.

Mouat Jones, B. & Adams, Sir Walter (1950): 'Visit to University of Hong Kong, April, 1950: Report by Mouat Jones, B. & Adams, Sir Walter'. London: The Inter-University Council for Higher Education in the Colonies.

Mukherjee, L. (1964): *Comparative Education for Students and Educationists*. 2nd edition. Allahabad, India: Kitab Mahal.

Murray, A. Victor (1929): *The School in the Bush: A Critical Study of the Theory and Practice of Native Education in Africa*. London: Longmans, Green & Co..

Musgrove, Frank (1955): History Teaching within a Conflict of Cultures. *History,* Vol.15, No.140, pp.300-318.

Nadel, George H. & Curtis, Perry (1964): *Imperialism and Colonialism.* New York: The Macmillan Company.

National Institute of Child Health & Human Development, Early Child Care Research Network (2003): 'Does Quality of Child Care Affect Child Outcomes at Age 4½?'. *Developmental Psychology*, Vol.39, No.3, pp.451-469.

Neves, P.A. & Almeida, V.C. (1990): *Descoberta da Historia 9.* Lisboa: Porto Editora.

Ng, Cherry S.C. (1997): *Civic Education in Hong Kong and Macau: A Comparative Analysis.* MEd dissertation, The University of Hong Kong.

Ng, F.K. (1992): *Comparing Education in Hong Kong and Macau.* Guangzhou: Zhongshan University Press. [in Chinese]

Ng, S.W. (2000): 'The Impact of Implementing Nationalistic Education on Primary School Teachers'. *Pacific-Asian Education*, Vol.12, No.1, pp.48-59.

Ng Lun, Ngai-ha (1984): *Interactions of East and West: Development of Public Education in Early Hong Kong*. Hong Kong: The Chinese University Press.

Ngai, Gary (1994): *Free Talks on Macau*. Macau: Macau Foundation.

Ngai, K.Y., Lee, C.S. & Ko, H.Y. (1987*): History of Secondary Mathematics Education in China.* Beijing: The People's Education Press. [in Chinese]

Niss, Mogens. (1996): 'Goals of Mathematics Teaching', in Bishop, A.J., Clements, K., Kilpatrick, K.J. & Laborde, C. (eds.), *International Handbook of Mathematics Education*. Dordrecht: Kluwer, pp.11-47.

Nkabinde, Zandile P. (1997): *An Analysis of Educational Challenges in the New South Africa.* Lanham, MD: University Press of America.

Noah, Harold J. (1996): 'One Best System? Lessons from Comparative Research for Assessment Policy', in Little, Angela & Wolf, Alison (eds.), *Assessment in Transition: Learning, Monitoring and Selection in International Perspective*. Oxford: Pergamon Press, pp.88-95.

Noah, Harold J. (1998 reprint [original 1984]): 'Use and Abuse of Comparative Education', in Noah, Harold J. & Eckstein, Max A., *Doing Comparative Education: Three Decades of Collaboration*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.57-67.

O'Donoghue, Tom & Dimmock, Clive (1998): *School Restructuring: International Perspectives*. London: Kogan Page.

Okoth, P.G. (1993): 'The Creation of a Dependent Culture: The Imperial School Curriculum in Uganda', in Mangan, J.A. (ed.), *The Imperial Curriculum: Racial Images and Education in the British Colonial Experience.* London: Routledge, pp.135-146.

Oldham, E. (1989): 'Is there an International Mathematics Curriculum?', in Greer, B. & Mulhern, G. (eds.), *New Directions in Mathematics Education*. London: Routledge, pp.185-224.

Oliver, D. & Heater, D. (1994): *The Foundations of Citizenship*. London: Harvester Wheatsheaf.

Oliver, Paul (1996): 'The Concept of Change Management', in Oliver, Paul (ed.), *The Management of Educational Change: A Case-Study Approach*. Aldershot: Arena, pp.1-9.

Opper, Sylvia (1993): 'Kindergarten Education: Cinderella of the Hong Kong Education System', in Tsui, Amy B.M. & Johnson, Ivor (eds.), *Teacher Education and Development*. Education Paper No.8, Hong Kong: Faculty of Education, The University of Hong Kong, pp.80-89.

Organisation for Economic Co-operation & Development [OECD] (1996): *Lifelong Learning for All: Meeting of the Education Committee at Ministerial Level.* Paris: OECD.

Organisation for Economic Co-operation & Development [OECD] (2000): *Investing in Education: Analysis of the 1999 World Education Indicators.* Paris: OECD.

Organisation for Economic Co-operation & Development [OECD] (2003): *Financing Education – Investments and Returns: Analysis of the World Education Indicators.* 2002 edition. Paris: OECD.

Paulston, Rolland G. (1997): 'Mapping Visual Culture in Comparative Education Discourse'. *Compare: A Journal of Comparative Education*, Vol.27, No.2, pp.117-152.

Paulston, Rolland G. (1999): 'Comparative Education after Postmodernity'. Occasional Papers Series, Pittsburgh: Department of Administrative & Policy Studies, University of Pittsburgh.

Pennycook, Alastair (1994): *The Cultural Politics of English as an International Language.* London: Longman.

Pennycook, Alastair (1998): *English and the Discourses of Colonialism*. London: Longman.

Phillipson, Robert (1992): *Linguistic Imperialism*. Oxford: Oxford University Press.

Pires, Benjamin Videira (1991): 'Origins and Early History of Macau', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.7-21.

Pong, Long Wah (1987): 'The Secondary School Chinese History Curriculum in Hong Kong over the Past Forty Years'. *Education Journal* [Hong Kong], Vol.15, No.2, pp.68-75. [in Chinese]

Pong, Y.W. (1997): 'Some Questions on Primary Teacher Education in Hong Kong'. *Sing Tao Daily*, 5 November. [in Chinese]

Ponte, Joao P., Matos, Joao F., Guimaraes, Henrique M., Leal, Leonor C. & Canavarro, Ana P. (1994): 'Teachers' and Students' Views and Attitudes towards a New Mathematics Curriculum: A Case Study'. *Educational Studies in Mathematics*, Vol.26, pp.347-365.

Poon, Anita Y.K. (2000): *Medium of Instruction in Hong Kong: Policy and Practice.* Lanham, Maryland: University Press of America.

POSTE Team (1996): *Preparation of Students for Tertiary Education (Final Report).* Hong Kong: Faculty of Education, The University of Hong Kong.

Postiglione, Gerard A. (1992): 'The Decolonization of Hong Kong Education', in Postiglione, Gerard A. with Leung, Julian Y.M. (eds.), *Education and Society in Hong Kong: Toward One Country and Two Systems.* Hong Kong: Hong Kong University Press, pp.3-38.

Postiglione, Gerard A. (1996a): 'The Future of the Hong Kong Academic Profession in a Period of Profound Change', in Altbach, Philip G. & Boyer, Ernest L. (eds.), *The International Academic Profession: Portraits of Fourteen Countries.* Princeton, New Jersey: The Carnegie Foundation for the Advancement of Teaching, pp.191-227.

Postiglione, Gerard A. (1996b): 'Attitudes and Attributes of Hong Kong Academics'. *Higher Education Management*, Vol.8, No.3, pp.122-140.

Postlethwaite, T. Neville & Thomas, R. Murray (1983): 'Country Comparisons and Future Prospects', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change.* Oxford: Pergamon Press, pp.308-342.

Postlethwaite, T. Neville (ed.) (1988): *The Encyclopedia of Comparative Education and National Systems of Education*. Oxford: Pergamon Press.

Postlethwaite, T. Neville (1999): *International Studies of Educational Achievement: Methodological Issues*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Priestley, Kenneth (1962): 'Changing Aims', in Harrison, Brian (ed.), *University of Hong Kong: The First 50 Years, 1911-1961.* Hong Kong: Hong Kong University Press, pp.93-102.

Psacharopoulos, George (1990): 'Comparative Education: From Theory to Practice, or Are You A:\neo.* or B:*.ist?'. *Comparative Education Review*, Vol.34, No.3, pp.369-380.

Psacharopoulos, George (1994): 'Returns to Investment in Education: A Global Update'. *World Development*, Vol.22, No.9, pp.1325-1343.

Psacharopoulos, George (1995): *Building Human Capital for Better Lives.* Washington D.C.: The World Bank.

Psacharopoulos, George & Patrinos, Harry Anthony (2002): *Returns to Investment in Education: A Further Update*. Policy Research Working Paper 2881, Washington DC: The World Bank.

Ramirez, Francisco O. (1997): 'The Nation-State, Citizenship, and Educational Change: Institutionalization and Globalization', in Cummings, William K. & McGinn, Noel F. (eds.), *International Handbook of Education and Development: Preparing Schools, Students, and Nations for the Twenty-First Century*. Oxford: Pergamon Press, pp.47-62.

Randma, Tiina (2001): *Civil Service Careers in Small and Large States: The Cases of Estonia and the United Kingdom*. Baden-Baden: Nomos Verlagsgesellschaft.

Rangel, Jorge A.H. (1989): 'Macau no Diálogo Cultural com Oriente'. *Administração: Revista de Administração Pública de Macau*, Nos.3/4, pp.7-18.

Rangel, Jorge A.H. (1991): 'Prospects and Directions for Education', in Cremer, Rolf Dieter *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.315-322.

Rao, Nirmala (2002): 'Early Childhood Education in Hong Kong: Moving Towards Child-Friendly Policies, Curricula and Practices', in Sollars, V. (ed.), *Curricula, Policies & Practices in Early Childhood Education Services*. Malta: P.E.G, pp.76-88.

Rao, N., Koong, M., Kwong, M. & Wong, M. (2003): 'Predictors of Preschool Process Quality in a Chinese Context'. *Early Childhood Research Quarterly*, Vol.18, No.3, pp.331-350.

Rao, N., McHale, J.P. & Pearson, E. (2003): 'Links between Socialization Goals and Child-rearing Practices in Chinese and Indian Mothers'. *Infant and Child Development*, Vol.12, No.5, pp.475-492.

Reich, Robert (1991): *The Works of Nations*. London: Simon & Schuster.

Reller, Theodore L. & Morphet, Edgar L. (1964): *Comparative Education Administration*. Englewood Cliffs, N.Y.: Prentice Hall.

Reynolds, Charles (1981): *Modes of Imperialism.* Oxford: Martin Robertson.

Robertson, David (1993): *The Penguin Dictionary of Politics*. London: Penguin.

Rosa, Alexandre (1990): 'Macau Education in the Period of Transition: An Overview and Prospects'. Paper presented at the UNESCO International Congress of Planning and Management of Educational Development, Mexico City.

Rosa, Alexandre (1991): 'A Situação da Educação em Macau e a Necessidade da Reforma', in Wong, Hon Keong (ed.), *Education Reform in Macau*. Macau: Centre of Macau Studies, University of East Asia, pp.31-36.

Rulcker, T. (1991): 'Curriculum Reform', in Lewy, Arieh (ed.), *The International Encyclopedia of Curriculum.* Oxford: Pergamon Press, pp.281-289.

Rust, Val D., Soumaré, A., Pescador, O. & Shibuya, M. (1999): 'Research Strategies in Comparative Education'. *Comparative Education Review*, Vol.43, No.1, pp.86-109.

Sadler, Sir Michael (1964 reprint [original 1900]): 'How Can we Learn Anything of Practical Value from the Study of Foreign Systems of Education?'. *Comparative Education Review*, Vol.7, No.3, pp.307-314.

Santos, Domingos Maurício Gomes dos (1968): *Macau: Primeira Universidade Occidental do Extremo-Oriente.* Lisboa: Academia Portuguesa da Historia.

Schleicher, Klaus (1993): *Nationalism in Education.* Frankfurt am Main: Peter Lang.

Schultze, Arthur, Sevenoak, Frank Louis & Stone, L.C. (1901): *Plane and Solid Geometry*. New York: Macmillan.

SCOLAR (2003): *Action Plan to Raise Language Standards in Hong Kong: Final Report of Language Education Review.* Hong Kong: Standing Committee on Language Education and Research (SCOLAR).

Scott, Ian (1989): *Political Change and the Crisis of Legitimacy in Hong Kong.* London: Hurst.

Scott, Peter (1995): *The Meanings of Mass Higher Education*. Buckingham: The Society for Research into Higher Education & Open University Press.

Sharpe, Leslie & Gopinathan, S. (2002): 'After Effectiveness: New Directions in the Singapore School System?'. *Journal of Educational Policy*, Vol.17, No.2, pp.151-166.

Shipp, Steve (1997): *Macau, China: A Political History of the Portuguese Colony's Transition to Chinese Rule.* Jefferson, North Carolina: McFarland & Company.

Shive, Glen (1992): 'Educational Expansion and the Labor Force', in Postiglione, Gerard A. with Leung, Julian Y.M. (eds.), *Education and Society in Hong Kong: Toward One Country and Two Systems*. Hong Kong: Hong Kong University Press, pp.215-231.

Simões, Rui Almeida (2003): 'Education and Change in Macau's Portuguese Community', in Macau Ricci Institute (ed.), *Macau on the Threshold of the Third Millennium*. Macao: Macau Ricci Institute, pp.257-272.

Sit, Victor F.S., Cremer, Rolf Dieter & Wong, S.L. (1991): *Entrepreneurs and Enterprises in Macau: A Study of Industrial Development.* Hong Kong: Hong Kong University Press.

Siu, Chi Kui (1996): 'Political Transition and Curriculum Reconstruction: The

Inclusion of Local History in the History Curriculum of Hong Kong'. MPhil thesis, Faculty of Education, The Chinese University of Hong Kong. [in Chinese]

Siu Chan, F.K., Chow, W.M. & Suen, S.N. (1997): *ES361 - Teaching Mathematics in Secondary Schools*. Hong Kong: Open Learning Institute.

Smith, Percy Franklyn & Gale, Arthur Sullivan (1912): *New Analytical Geometry*. London: Ginn.

Soares, Mário (1989): 'Address', delivered to the assembly of the University of East Asia on the occasion of the visit of His Excellency.

Sou, Chio Fai (2003): 'The Arrangement of the Educational Reform'. *Administração*, No.61, pp.791-796. [in Chinese]

Spindler, George & Spindler, Louise (1982): 'Roger Harker and Schönhausen: From Familiar to Strange and Back Again', in Spindler, George (ed.), *Doing the Ethnography of Schooling: Educational Anthropology in Action*. New York: Holt, Rinehart & Winston, pp.20-46.

Spring, Joel (1998): *Education and the Rise of the Global Economy*. Mahwah: Lawrence Erlbaum Associates.

Stanic, G.M.A. (1987a): 'A Historical Perspective on Justifying the Teaching of Mathematics', in Goodson, I.F. (ed.), *International Perspectives in Curriculum History*. London: Croom Helm, pp.209-227.

Stanic, G.M.A. (1987b): 'Mathematics Education in the United States at the Beginning of the Twentieth Century', in Popkewitz, Thomas S. (ed.), *The Formation of School Subjects: The Struggle for Creating an American Institution*. New York: Falmer Press, pp.145-175.

Steenbergen, Bart van (ed.) (1994): *The Condition of Citizenship.* London: Sage.

Stehr, Nico (1994): *Knowledge Societies*. London: Sage.

Steiner-Khamsi, G., Torney-Purta, J. & Schwille, J. (2002): *New Paradigms and Recurring Paradoxes in Education for Citizenship: An International Comparison.* Amsterdam: JAI Press.

Steiner-Khamsi, Gita & Quist, Hubert O. (2000): 'The Politics of Educational Borrowing: Reopening the Case of Achimota in British Ghana'. *Comparative Education Review*, Vol.44, No.3, pp.272-299.

Stokes, Gwenneth & Stokes, John (1975): *Europe 1870-1960.* Hong Kong: Longman.

Sullivan, Keith (ed.) (1997): *Education and Change in the Pacific Rim: Meeting the Challenges*. Wallingford, Oxfordshire: Triangle Books.

Sutherland, Stewart R. (Chair) (2002): *Higher Education in Hong Kong: Report of the University Grants Committee*. Hong Kong: University Grants Committee.

Sweeting, Anthony (1983): 'Hong Kong', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press, pp.272-297.

Sweeting, Anthony (1990): *Education in Hong Kong, Pre-1841 to 1941: Fact and Opinion.* Hong Kong: Hong Kong University Press.

Sweeting, Anthony (1991a): 'Politics and the Art of Teaching History in Hong Kong'. *Teaching History* [U.K.]*,* Vol.64, pp.30-37.

Sweeting, Anthony (1991b): 'The Medium of Instruction in Hong Kong Schools', in Crawford, Nick & Hui, Eadaoin K.P. (eds.), *The Curriculum and Behaviour*

Problems in Schools: A Response to Education Commission Report No.4. Education Paper No.11, Hong Kong: Faculty of Education, The University of Hong Kong, pp.67-78.

Sweeting, Anthony (1992): 'Hong Kong Education within Historical Processes', in Postiglione, Gerard A. with Leung, Julian Y.M. (eds.), *Education and Society in Hong Kong: Toward One Country and Two Systems.* Hong Kong: Hong Kong University Press, pp.39-81.

Sweeting, Anthony (1993): *A Phoenix Transformed: The Reconstruction of Education in Post-war Hong Kong.* Hong Kong: Oxford University Press.

Sweeting, Anthony (1995): 'Hong Kong', in Morris, Paul & Sweeting, Anthony (eds.), *Education and Development in East Asia*, New York: Garland, pp.41-77.

Sweeting, Anthony (1997): 'Education Policy and the 1997 Factor: The Art of the Possible Interacting with the Dismal Science', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty.* Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.25-39.

Sweeting, Anthony (1998a): 'Teacher Education at Hongkong University: A Brief History (Part 1: 1917-1951)'. *Curriculum Forum*, Vol.7, No.2, pp.1-44.

Sweeting, Anthony (1998b): 'Teacher Education at the University of Hong Kong: A Brief History (Part 2: 1951-circa 1976)' *Curriculum Forum*, Vol.8, No.1, pp.1-32.

Sweeting, Anthony (2001): 'Doing Comparative Historical Education Research: Problems and Issues from and about Hong Kong', in Watson, Keith (ed.), *Doing Comparative Education Research: Issues and Problems.* Oxford: Symposium Books, pp.225-243.

Sweeting, Anthony (2002): 'Education Policy, the 1997 Factor, and the Interaction of Politics and Economics: Viewed from 2002'. *CERCular*, Hong Kong: Comparative Education Research Centre, The University of Hong Kong, p.2.

Tai, Hung Chao (1989): *Confucianism and Economic Development: An Oriental Alternative?* Washington, D.C.: Washington Institute Press.

Taiwan, Director General of Budget, Accounting & Statistics (1996): *Statistical Yearbook of the Republic of China 1996.* Taipei: Director General of Budget, Accounting & Statistics. [in Chinese]

Tan, Jason (1997): 'Education and Colonial Transition in Singapore and Hong Kong: Comparisons and Contrasts', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.157-166.

Tan, John Kang (1997): 'Church, State and Education: Catholic Education in Hong Kong during the Political Transition', in Bray, Mark & Lee, Wing On (eds.), *Education and Political Transition: Implications of Hong Kong's Change of Sovereignty*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.65-86.

Tan, Zhi Qiang (1994): *Disputes Concerning Macau's Sovereignty between China and Portugal (1553-1993).* Taipei: Yong Ye Publication. [in Chinese]

Tang, Hou Chung (1995): *History of Macau (1840-1949).* Macau: Macau History Society.

Tang, James Tuck Hong (1992): *Britain's Encounter with Revolutionary China, 1949-54.* New York: St. Martin's Press.

Tang, Joan Fun Hei & Morrison, Keith (1998): 'When Marketisation does not Improve Schooling: The Case of Macau'. *Compare: A Journal of Comparative Education*, Vol.28, No.3, pp.245-262.

Tang, K.K. (1997): 'The Cultural Manner Demonstrated by the 400 Years of Education in Macau', in To, Y.O. (ed.), *Proceedings of Education, History and Culture of Macau*. Guangzhou: Academic Studies Publisher, pp.55-59. [in Chinese]

Tang, Kwok Chun (1998): 'The Development of Education in Macau', in Ramos, R., Dinis, J.R., Wilson, R. & Yuan, D.Y., *Macau and its Neighbors toward the 21st Century.* Macau: University of Macau and Macau Foundation, pp.221-238.

Tang, Kwok Chun (1999): *Stability and Change in School Mathematics: A Socio-Cultural Case Study of Secondary Mathematics in Macau.* PhD thesis, The University of Hong Kong.

Tang, Kwok Chun (2003): 'The Social Origins and Development of Macau's Decentralized Education System', in Mok Ka-ho (ed.), *Centralization and Decentralization: Educational Reforms and Changing Governance in Chinese Societies*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, pp.59-79.

Tang, Kwok Chun & Bray, Mark (2000): 'Colonial Models and the Evolution of Education Systems: Centralization and Decentralization in Hong Kong and Macau'. *Journal of Educational Administration*, Vol.38, No.5, pp.468-485.

Teichler, Ulrich (1996): 'Comparative Higher Education: Potentials and Limits'. *Higher Education*, Vol.32, No.4, pp.431-465.

Teixeira, Manuel (1969): *D. Melchior Carneiro: Fundador da Santa Casa da Misericórdia de Macau*. Macau: Comissão Executiva das Comemorações do IV Centenário da Santa Casa da Misericórdia.

Teixeira, Manuel (1982): *A Educação em Macau*. Macau: Direcção dos Serviços de Educação e Cultura.

Teixeira, Manuel (1991): 'The Church in Macau', in Cremer, Rolf Dieter (ed.), *Macau: City of Commerce and Culture – Continuity and Change.* 2nd edition. Hong Kong: API Press, pp.39-49.

Thion, Serge (1993): *Watching Cambodia: Ten Paths to Enter the Cambodian Triangle*. Bangkok: White Lotus.

Thomas, R. Murray (1983a): 'Macau', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press, pp.301-307.

Thomas, R. Murray (1983b): 'The Two Colonies – A Prologue', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press, pp.265-271.

Thomas, R. Murray (1994): personal communication to Mark Bray.

Thomas, R. Murray (1998): *Conducting Educational Research: A Comparative View*. Westport, Connecticut: Bergin & Garvey.

Thomas, R. Murray & Postlethwaite, T. Neville (eds.) (1983a): *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press.

Thomas, R. Murray & Postlethwaite, T. Neville (1983b): 'Describing Change and Estimating its Causes', in Thomas, R. Murray & Postlethwaite, T. Neville (eds.), *Schooling in East Asia: Forces of Change*. Oxford: Pergamon Press, pp.1-36.

Ticozzi, Sergio (1983): *The Anecdotes of Catholic Church in Hong Kong*. Hong Kong: Holy Spirit Study Centre, pp.1-4. [in Chinese]

Tikly, Leon (1999): 'Postcolonialism and Comparative Education'. *International Review of Education*, Vol.45, Nos.5-6, pp.603-621.

Tong Sin Tong (1992): *Centenary Anniversary of Tong Sin Tong*. Macau, Management Board of Tong Sin Tong.

Torney-Purta, J.V., Lehmann, R., Oswald, H. & Schulz, W. (2001): *Citizenship and Education in Twenty-eight Countries: Civic Knowledge and Engagement at Age Fourteen*. Amsterdam: IEA.

Trethewey, A.R. (1979): *Introducing Comparative Education*. Rushcutter's Bay, Australia: Pergamon Press.

Trow, Martin (1974): 'Problems in the Transition from Elite to Mass Higher Education', in *Policies for Higher Education*. Paris: Organisation for Economic Co-operation & Development.

Tsang, Wing Kwong (1984): 'Review and Prospect of the Political Education in Hong Kong'. *Hong Kong Economic Journal*, Vol.8, No.5, pp.34-40. [in Chinese]

Tsang, Wing Kwong (1994): 'Decolonized Citizenship Education: A Framework of Post 1997 Hong Kong Schools' Civic Education'. *Education Journal* [Hong Kong], Vol.22, No.2, pp.237-248. [in Chinese]

Tsang, Wing Kwong (1998): 'Patronage, Domestification, or Empowerment? Citizenship Development and Citizenship Education in Hong Kong', in Ichilov, Orit (ed.), *Citizenship and Citizenship Education in a Changing World*. London: Woburn Press, pp.221-252.

Tse, Kwan Choi Thomas (1997a): *The Poverty of Political Education in Hong Kong Secondary Schools*. Occasional Paper, Hong Kong: Hong Kong Institute of Asian-Pacific Studies, The Chinese University of Hong Kong.

Tse, Kwan Choi Thomas (1997b): 'Social Subjects and Civic Education in Secondary Schools'. *New Horizons in Education*, Vol.38, pp.10-14. [in Chinese]

Tse, Shek Kam (2003): 'List of Schools Using Putonghua in Hong Kong'. unpublished manuscript, Hong Kong: Faculty of Education, The University of Hong Kong.

Tsui, Po Fung (1999): 'The Modernisation of Macau Adult Education', in Yu, Charles (ed.), *Before and after Macao's Hand-over: Problems and Solutions*. Hong Kong: Notable Macao Press, pp.438-442. [in Chinese]

Tsurumi, Patricia E. (1977): *Japanese Colonial Education in Taiwan (1895-1945)*. Cambridge: Harvard University Press.

Tuijnman, Albert (2002): 'Lifelong Learning: Evolution of a Conceptual Map and Some Implications', in Cribbin, John & Kennedy, Peter (eds.), *Lifelong Learning in Action: Hong Kong Practitioners' Perspectives*. Hong Kong: Hong Kong University Press, pp.3-14.

Tuijnman, Albert & Bengtsson, J. (1994): 'Recurrent and Alternative Education', in Husén, Torsten & Postlethwaite, T. Neville (eds.), *International Encyclopedia of Education*. 2nd edition. Oxford: Pergamon Press, pp.4957-4964.

Tulviste, P. (1994): 'History Taught at School versus History Discovered at Home:

The Case of Estonia'. *European Journal of Psychology of Education,* Vol.9, No.2, pp.121-126.

Tung, Chee Hwa (1997a): *Inaugural Speech by the Chief Executive the Honourable Tung Chee Hwa, 1 July 1997*. Hong Kong: Government Printer.

Tung, Chee Hwa (1997b): *Policy Programme: The 1997 Policy Address*. Hong Kong: Government Printer.

Tung, Chee Hwa (1998): 'On the 50th Anniversary of the Universal Declaration of Human Rights Tomorrow', 10 December. www.info.gov.hk/ce/speech/cesp. htm.

Tung, Chee Hwa (2000a): 'Chief Executive's speech on "Coming of Age" Ceremony', 4 May. www.info.gov.hk/ce/speech/cesp.htm.

Tung, Chee Hwa (2000b): 'Policy Address: Serving the Community, Sharing Common Goals, 11 October. www.info.gov.hk/ce/speech/cesp.htm.

Tung, Chee Hwa (2001): 'Speech Delivered by the Chief Executive, Mr Tung Chee Hwa, at the 90th Anniversary Dinner of the University of Hong Kong', 18 December. www.info.gov.hk/ce/speech/cesp.htm.

Tung, Chee Hwa (2002): *Annual Policy Speech*. Hong Kong: Government Information Services.

Tyack, David & Cuban, Larry (1995): *Tinkering Toward Utopia: A Century of Public School Reform*. Cambridge, Massachusetts: Harvard University Press.

UNESCO (1990): *Innovations and Initiatives in Teacher Education in Asia and the Pacific Region. Vol.1: Comparative Overview of Fifteen Countries*. Bangkok: UNESCO Asia and the Pacific Programme of Educational Innovation for Development.

UNESCO (1998): *World Education Report 1998: Teachers and Teaching in a Changing World.* Paris: UNESCO.

United States, Bureau of the Census (1996): *Statistical Abstract of the U.S. 1996.* Washington: Department of Commerce, Bureau of the Census.

University Grants Committee (1996): *Higher Education in Hong Kong: A Report by the University Grants Committee of Hong Kong*. Hong Kong: Government Printer.

University Grants Committee (2003a): 'Amount of Approved Recurrent, Earmarked and Capital Grants for UGC Institutions, 1996-97 to 2002-03'. www. ugc.edu.hk/english/statistics/Expenditure_series.pdf.

University Grants Committee (2003b): 'UGC Explains Funding Mechanism to Tertiary Institutions'. News release, 26 November.

University Grants Committee (2004): *Integration Matters: Report of the Institutional Integration Working Party of the University Grants Committee*. Hong Kong: University Grants Committee.

University of Macau, Faculty of Education (1997a): *Course Description of Faculty of Education 1997/98*. Macau: Faculty of Education, University of Macau. [in Chinese]

University of Macau, Faculty of Education (1997b): *Number of Graduates (1989-1997) of the Faculty of Education*. Macau: Faculty of Education, University of Macau.

USAID (1997): *Education Decentralization in Africa: As Viewed through the Literature and USAID Projects*. Washington DC: United States Agency for

International Development.

van der Berg, O. & Buckland, P. (1982): 'History as a Subject in South African Schools'. *Teaching History* [U.K.] Vol.34, pp.22-25.

van der Blij, F., Hilding, S. & Weinzwig, A.I. (1981): 'New Goals for Old: An Analysis of Reactions to Recent Reforms in Several Countries', in Morris, Robert (ed.), *Studies in Mathematics Education*, Vol.2, Paris: UNESCO, pp.105-188.

Vickers, Edward (2002): 'The Politics of History Education in Hong Kong: The Case of Local History'. *International Journal of Educational Research*, Vol.37, Nos.6-7, pp.587-602.

Villegas-Reimers, Eleonora (2003): *Teacher Professional Development: An International Review of the Literature*. Paris: UNESCO International Institute for Educational Planning.

Walford, Geoffrey (ed.) (1989): *Private Schools in Ten Countries: Policy and Practice*. London: Routledge.

Walker, Elizabeth (2001): 'Roles of Native English-speaker Teachers (NETs) in Hong Kong Secondary Schools'. *Asia Pacific Journal of Language in Education,* Vol.4, No.2, pp.51-77.

Wan, Wai Kwan (1990): *Political Attitudes of Hong Kong Adolescents Towards the PRC: A Study of Political Socialization.* MPhil thesis, The Chinese University of Hong Kong.

Wang, Yidan (ed.) (2000): *Public-Private Partnerships in the Social Sector: Issues and Country Experiences in Asia and the Pacific*. ADBI Policy Papers No.1, Tokyo: Asian Development Bank Institute.

Wang, Ying Jie (1996): 'Faculdade de Ciências da Educação', in *Os Estudos Superiores em Macau: Seminário Internacional*. Macau: University of Macau, Macau Polytechnic and Macau Foundation, pp.45-47.

Watson, Keith (1982a): 'Colonialism and Educational Development', in Watson, Keith (ed.), *Education in the Third World*. London: Croom Helm, pp.1-46.

Watson, Keith (1982b): 'Selected Bibliography on Colonialism and Educational Development', in Watson, Keith (ed.), *Education in the Third World*. London: Croom Helm, pp.201-224.

Watson, Keith (ed.) (1982c): *Education in the Third World.* London: Croom Helm.

Watson, Keith (1996): 'Comparative Education', in Gordon, P. (ed.), *A Guide to Educational Research*. London: Woburn Press, pp.360-397.

Watson, Keith (1998): 'Memories, Models and Mapping: The Impact of Geopolitical Changes on Comparative Studies in Education'. *Compare: A Journal of Comparative Education*, Vol.28, No.1, pp.3-31.

Watson, Keith (2001): 'The Impact of Globalization on Educational Reform and Language Policy: Some Comparative Insights from Transitional Societies'. *Asia Pacific Journal of Education*, Vol.21, No.2, pp.1-18.

Weeden, P., Winter, J. & Broadfoot, P. (2002): *Assessment: What's in it for Schools?* London: RoutledgeFalmer.

Weigel, George (1987): *Tranquillitas Ordinis: The Present Failure and Future Promise of American Catholic Thought on War and Peace*. New York: Oxford University Press.

Weigel, George (1992): *The Final Revolution: The Resistance Church and the Collapse of Communism*. New York: Oxford University Press.

Whitehead, Clive (1988): 'British Colonial Educational Policy: A Synonym for Cultural Imperialism?', in Mangan, J.A. (ed.), *Benefits Bestowed? Education and British Imperialism*. Manchester: Manchester University Press, pp.211-230.

Whitty, Geoff (1985): *Sociology and School Knowledge: Curriculum Theory, Research and Politics.* London: Methuen.

Whitty, Geoff & Young, Michael (eds.) (1976): *Explorations in the Politics of School Knowledge.* Driffield: Nafferton Books.

Wiarda, Howard J. (2002): *The Legacy of Portuguese Rule in Asia: Reasserting the Influence in the Post-Colonial Era*. Lisboa: Centro Português de Estudos do Sudeste Asiático.

Williams, Gareth (1996): *Paying for Education Beyond Eighteen: An Examination of Issues and Options*. London: The Council for Industry & Higher Education.

Williams, Gareth (1999): 'State Finance of Higher Education: An Overview of Theoretical and Empirical Issues', in Henkel, Mary & Little, Brenda (eds.), *Changing Relationships Between Higher Education and the State.* London: Jessica Kingsley, pp.142-161.

Williams, Gareth (ed.) (2003): *The Enterprising University: Reform, Excellence and Equity.* Buckingham: Open University Press.

Williams, James H. (1997): 'The Diffusion of the Modern School', in Cummings, William K. & McGinn, Noel F. (eds.), *International Handbook of Education and Development: Preparing Schools, Students and Nations for the Twenty-First Century*, Oxford: Pergamon Press, pp.119-136.

Winkler, Donald R. (1989): *Decentralization in Education: An Economic Perspective*. Working Paper No.143, Washington DC: The World Bank.

Wong, C.L. (1995): 'How to Raise the Quality of Macau Teachers', in South China Normal University, *The Collection of Year 1991*. Guangzhou: Guangdong Education Press, pp.161-179. [in Chinese]

Wong, H.T. (ed.) (1993): *Hong Kong Education Handbook*. Hong Kong: The Commercial Press. [in Chinese]

Wong, Hin Wah (1988): *A Study of Hong Kong Secondary School Civic Education Curriculum Development (1984-1986).* PhD thesis, University of California, Los Angeles.

Wong, Hon Keong (ed.) (1991): *Education Reform in Macau.* Macau: Centre of Macau Studies, University of East Asia.

Wong, Hon Keong (ed.) (1992): *Civic Education in Macau.* Macau: Centre of Macau Studies, University of Macau.

Wong, Hung Chiu (1987): *History of Macau.* Hong Kong: The Commercial Press. [in Chinese]

Wong, Joseph W.P. (1997): *Policy Programme: The 1997 Policy Address*. Hong Kong: Education & Manpower Bureau.

Wong, Kam Cheung (1998): 'Organizing and Managing Schools', in Postiglione, Gerard A. & Lee, Wing On (eds.), *Schooling in Hong Kong: Organization, Teaching and Social Context*. Hong Kong: Hong Kong University Press, pp.81-94.

Wong, Ngai Chun Margaret (1997): *Pre-school Quality and Child Development in Macau.* PhD thesis, The University of Hong Kong.

Wong, Ngai Chun Margaret & Pang, Lijuan (2002): 'Early Childhood Education in China: Issues and Development', in Chan, Lorna K.S. & Mellor, Elizabeth J. (eds.), *International Developments in Early Childhood Services*. New York: Peter Lang, pp.53-70.

Wong, Ping Man (1981): *The Civic Education and the Curriculum of the Subject 'Economic and Public Affairs' in Hong Kong after World War II: A Comparative Perspective*. MA dissertation, The Chinese University of Hong Kong. [in Chinese]

Wong, Ping Man (1992): *The Evolution of the Secondary School Subject in Hong Kong: The Case of Social Studies*. PhD thesis, The University of Hong Kong.

Wong, Suk Ying (1991): 'The Evolution of Social Science Instruction,1900-86: A Cross-national Study'. *Sociology of Education*, Vol.64, No.1, pp.33-47.

Wong, Yin Li (1996): *A History of the Hong Kong Baptist University*. Hong Kong: Hong Kong Baptist University. [in Chinese]

Wong Leung, So Nga C. (1969): *A Comparative Study of Some of the Salient Features of the Curricula of Ordinary Middle Schools in Mainland China, Taiwan and Hong Kong between 1949-1966*. MA dissertation, The University of Hong Kong.

Woodhall, Maureen (1995): 'Student Fees', in Carnoy, Martin (ed.), *International Encyclopedia of Economics of Education*. 2nd edition. Oxford: Pergamon Press, pp.426-429.

World Bank, The (1994): *Higher Education: The Lessons of Experience*. Washington DC: The World Bank.

World Bank, The (2003): *World Development Report 2004: Making Services Work for Poor People*. Washington DC: The World Bank.

Wu, Gangping (2002): *School-based Curriculum Development*. Chengdu: Sichuan Education Publishing House. [in Chinese]

Wu, Guozhen & Kwo, Wai Yu Ora (2003): 'Teachers' Time on Teaching and Professional Development: A Comparison of Hong Kong, Macau, Beijing and Shanghai'. *Education Research Journal* [Hong Kong], Vol.18, No.1, pp.117-136. [in Chinese]

Wu, John B. (1989): *March Towards a Bright Decade: Pastoral Exhortation of Cardinal John B. Wu on the Pastoral Commitment of the Catholic Diocese of Hong Kong*. Hong Kong: Catholic Diocese Office.

Wu, Z.L. (1998): *The Way of Survival: On Macau's Political Institution and Political Development*. Macau: Macau Association of Adult Education. [in Chinese]

Xu, Jiatun (1995): *Xu Jiatun's Hong Kong Memoir*. Taipei: Luenjin. [in Chinese]

Yamato, Yoko (2003): *Education in the Market Place: Hong Kong's International Schools and their Mode of Operation*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong.

Yamato, Yoko & Bray, Mark (2002): 'Education and Socio-Political Change: The Continued Growth and Evolution of the International Schools Sector in Hong Kong'. *Asia Pacific Education Review*, Vol.3, No.1, pp.24-36.

Yau, S.K.R., Leung, K.L. & Chau, S.L.T. (1993): *Education in Hong Kong: Past and Present*. Hong Kong: The Urban Council.

Yee, Albert H. (1990): 'A Comparative Study of Macau's Education System: Changing Colonial Patronage and Native Self-reliance'. *Comparative*

Education, Vol.26, No.1, pp.61-71.

Yee, Herbert S. (1999a): 'The Political Role of Macau's Community Organisations in the SAR'. *Policy Studies in Macau*, No.4, pp.30-33.

Yee, Herbert S. (1999b): *The Political Culture of China's University Students: A Comparative Study of University Students in Mainland China, Hong Kong, Macau, and Taiwan*. Commack, New York: Nova Science.

Yee, Herbert S. (2001): 'Democratic Orientation of Secondary School Students in Macau: Implications on Civic Education', in Wu, Z.L. & Yang, Y.C. (eds.), *Macau 2000*. Macao: Macao Foundation, pp.273-281. [in Chinese]

Yee, H., Liu, B.L. & Ngo, T.W. (1993a): *The Political Culture of the Macau Chinese.* Macau: Macau Foundation. [in Chinese]

Yee, H., Liu, B.L. & Ngo, T.W. (1993b): 'Macau's Mass Political Culture'. *Asian Journal of Public Administration*, Vol.15, No.2, pp.177-200.

Yeung, T.L. (2003): 'Tracing the History of the CUHK Identity'. *Chinese University Bulletin*, Spring/Summer, pp.14-15.

Young, Enoch (2001): 'Review and Prospects: The Hong Kong Experiences', in Leong, Man Wai (ed.), *Contemporary Issues in Adult Education in the 21st Century: Perspectives of the PRC, Hong Kong, Macao and Taiwan*. Macao: Centre for Continuing Studies, University of Macau, and Macau Adult Education Association, pp.211-222. [in Chinese]

Young, Michael F.D. (ed.) (1971): *Knowledge and Control: New Directions for the Sociology of Education.* London: Collier-Macmillan.

Yu, Fong Ying (1987): 'Tradition and Change in Chinese Education', in Lord, Robert & Cheng, Helen N.L. (eds.), *Language Education in Hong Kong*. Hong Kong: The Chinese University Press, pp.219-230.

Yu, Shude (1990): *A Study of the Effects of Formal Curriculum on Students' Civic Consciousness in Hong Kong Secondary Schools.* MA dissertation, The Chinese University of Hong Kong. [in Chinese]

Yue, K.L. (1994): 'The Controversy on Language of Instruction in Macau'. *Yazhou Zhoukan,* 28 August, 64-65. [in Chinese]

Yuen, B.K. & Yuen, K.S. (1988): *A Brief History of Macau.* Hong Kong: Chung Liu. [in Chinese]

Yung, Man Sing (2003): *The Idea and Policies of Higher Education in Hong Kong.* Hong Kong: Joint Publishing Company. [in Chinese]

Zhang, Sijiang (1999): 'Interview of Bishop Lin Jiajin Before the Reversion of Macao to Chinese Rule'. *Religions in China*, No.18, pp.25-26. [in Chinese]

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