

Knowledge, Education and Development in Hong Kong and Shanghai

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This paper discusses the role of knowledge and education in the development of Hong Kong and Shanghai in light of the recent economic crisis in the East Asian region. The basic assumption is that education can play a facilitating role in societal development as it is rested on a strong and relevant knowledge base that can inform policies. Four major issues in educational development are illuminated in the discussion — quality and equality, relevance of education, policy-making, knowledge production and utilization. It is argued that education's role as facilitator of development is frequently undermined by the poverty of knowledge, the inability of educators to avail a broad knowledge base to policy-making, and the constraints on knowledge creation and utilization. Because of these weaknesses, structural problems in the education systems have been allowed to perpetuate, thus limiting the developmental capabilities of both cities in the new information age.

Prologue

Since Ezra Vogel published his *Japan as Number One* (1979), many scholars have joined in a widespread speculation on the developmental strengths of Asian societies (for example, Chan & Clark, 1992; Gereffi & Wyman, 1990; Johnson, 1982). The rapid economic growth of the East Asian region has yielded such metaphor as the “four little dragons,” viz., Hong Kong, Singapore, South Korea, and Taiwan, which have become

exemplars of development in the last decade. Shortly after the “four little dragons” have attracted enough world attention for their outstanding performance in the economic spheres, favorable reports on the strengths, whether real or potential, of China and such “newly industrialized economies” as Thailand, Malaysia, and Indonesia created an impression that East Asia would become the richest and most productive region of the world.

Speculations abound as to why the East Asian region has been so successful in generating wealth and effecting economic development. They have ranged from helpful government intervention to conducive investment climate, and from the patriarchal nature of the Asian states to the shared Confucian legacy among some of its “high performance economies” (Appelbaum & Henderson, 1992; Berger & Hsiao, 1988; Tsang, 1994; White, 1988). The achievements of the East Asian region were recognized as worth emulating when the World Bank published its policy research report, *The East Asian Miracle: Economic Growth and Public Policy* in 1993.

The World Bank report attempts to trace the roots of success of the so-called “high performance Asian economies” (HPAEs) of East Asia.¹ It identifies the “superior accumulation of physical and human capital,” sustained by sound development policies, as the reason for success. Upon calculation, two-thirds of the HPAEs’ growth can be attributed to a combination of high rates of investment and high endowments of human capital. From 1960 to 1990, the HPAEs’ rates of investment, which included “unusually high rates of private investment,” had exceeded 20 percent of GDP on average. Their endowments of human capital were realized through the universalization of primary and secondary education. A third critical factor in the HPAEs’ successful experience was the significant improvement in productivity. This was explained by their “unusual success at allocating capital to high-yielding investments and at catching up technologically to the industrial economies.” (World Bank, 1993, p. 8) The report attributes the HPAEs’ success to the implementation of policies of the states which have adopted a “market-friendly” approach to securing “adequate investments in people,” maintaining stable macro-economies, encouraging strong competition among private enterprises, and keeping their economies open to international trade (World Bank, 1993, p. 10). Under the guiding hands of the states, the HPAEs have grown richer and their societies have become more equal in terms of income distribution (World Bank, 1993, pp. 2–4).

It is interesting to note that soon after the World Bank had given its endorsement to the "East Asian miracle," dissenting views were presented by Paul Krugman, an economist at the Massachusetts Institute of Technology. In his well-known article on "The Myth of Asia's Miracle", published in late 1994 in *Foreign Affairs*, Krugman refuted the overly optimistic assessments of the East Asian economies by using inter alia research findings of American academics on the attributes of Asian economic growth — that the growth enjoyed by East Asia could be explained mostly by such "bread-and-butter" factors as high savings rates, popularization of schooling, and deployment of underemployed peasants in the modern sector (Krugman, 1994). The conclusion was that "Asian growth has so far been mainly a matter of perspiration rather than inspiration — of working harder, not smarter." (Krugman, 1997) Krugman's prediction was that the Asian growth would eventually slow down because there was no strong indication that the societies were doing enough to transcend the implication of the "perspiration theory" — that "you can get a lot of economic growth by increasing labor force participation, giving everyone a basic education, and tripling the investment of GDP, but these are one-time unrepeatable changes." (Krugman, 1997) As far as those sound development policies that facilitated the growth of the HPAEs are concerned, it is not so much the wisdom of governments that promoted specific industries and technologies that has inspired efficiency, but the "perspiration" of all concerned that has sustained an impressive growth thus far (Krugman, 1997).

As the East Asian economies faltered in 1997, Krugman's portrayal of their governments was a far cry from the wise paternalistic states in which many of their citizens have wanted to believe. In the face of adversity, the governments have been hapless in action, puzzled, and ready to deceive (Krugman, 1997). Indeed, accompanying the currency crisis are collapses in domestic asset markets, bank failures, firm bankruptcies, general economic hardship, and deteriorating public confidence that test the wisdom of persons at the helm of the states. It is hard to imagine that less than two years ago in 1996, South Korea, as she prepared to join the Organization for Economic Cooperation and Development, was named by the International Monetary Fund (IMF) as 1995's "most exemplary" economy for attaining a growth rate of 9.5 percent and stability (*Asiaweek*, 1996a). In the same year, Indonesia raced to build its own national car by providing preferential tariff treatment for the local auto industry (*Asiaweek*, 1996b).

On the economic front, the gospel of Asian superiority will no longer be preached. As the IMF set down rules for its rescue efforts in South Korea and other countries, economists debated on the role of poorly regulated financial intermediaries in the currency crises (Krugman, 1998). In other non-economic spheres of the East Asian region, the 1997 awakening has left much food for thought. Chief among the many policy sectors that are in need of reflection is education.

The common belief that education is a major facilitator of societal development has been substantiated time and again by the experiences of the East Asian countries. That the popularization of basic education has afforded manpower that was more ready for developmental tasks of the modern sector has been documented by various research reports, including that of the World Bank. However, for development to be sustainable, East Asian societies would have to do much more in the realm of education in order to nurture appropriate manpower for the developmental tasks of the new century. Expanding the higher education sector to produce the necessary professional manpower may be one way of satisfying the demands of the time. Further differentiation of higher secondary schooling into college-bound general education and vocational education has been used to satisfy emerging manpower needs. But are they the best way forward for East Asian education of the 21st century?

This paper discusses the role of education, and its knowledge base, in the development of Hong Kong and Shanghai, two Chinese cities that have achieved high economic growth and demonstrated strong potential for further development. They are among the HPAEs that have not fared as poorly as some of their East Asian sisters thus far. Hong Kong and Shanghai are the two most cosmopolitan cities in China. Both have come under Western influence for extended periods of time. In outlook and operation, both are known for their openness, efficiency, and ambition. In the recent past, Hong Kong and Shanghai have also made known their intention of establishing themselves as the spearhead of China's massive modernization endeavor. Shanghai claims to be "the head of a dragon [of development]" that spans the length of the Yangzi River while Hong Kong wishes to remain as China's "window to the world." Both are trying to use education as a major facilitator of development so that they can retain their competitive edge within China and to remain competitive internationally.

From a developmental perspective, have these two cities transcended the "perspiration theory"? Does the working of their education systems manifest any foresight for further development? In a discussion of four

major issues in education development, viz., quality education and equality of educational opportunities, relevance of education to developmental needs, educational policy-making, knowledge production and utilization, it is argued that there are strong constraints in the education systems, which will impede sustainable development. Structural problem such as segregation of schools and students by academic achievement, awareness problem such as the lack of understanding of the manpower requirements of the new information age, perception problem such as the trivialization of knowledge of education in policy-making, and application problem such as the constraints on the process of knowledge production and utilization combine to prevent the emergence of educational cultures that are firmly rooted in a strong knowledge base,² that can inspire vision, and that will foster relevance to the pursuance of the common good.

Rapid social and economic changes will breed new developmental needs for Hong Kong and Shanghai. Their existing knowledge bases are in need of invigoration, lest they become dated and irrelevant. For educators, especially the producers of knowledge, to contribute substantially to endeavors in educational development, an insistence on knowledge-based educational reform and on contribution to policy debates is essential. This, however, can only be achieved through the strengthening of our knowledge base and active participation.

Societal Development, Education and Knowledge

The crisis in which East Asia is embroiled is not simply a currency crisis but also a developmental crisis, for it adversely affects the citizens in ways other than financial hardship and unemployment. It consumes the spirits of societies, which are looking for immediate ways out of their predicaments and long-term planning for a brighter future. The crisis also prompts us to take a closer look at the role of education in national development: whether it should be a passive recipient of tasks assigned, or, whether it should take up a more active role in charting the developmental direction of society.

As the concept of "development" has expanded beyond the economic checklist to include a myriad of social and political concerns — equitable distribution of wealth and privileges, popular participation in decision-making, preservation of cultural identity of communities, environmental protection, provision of health care and welfare — so too has education been called upon to address these developmental concerns, through imparting knowledge, instilling values, nurturing consciousness, and so on. Since

the 1980s, "development" had become a normative rather than a descriptive concept. It had come to stipulate how things ought to be, not how they were (Fuenzalida, 1985, p. 1374). In addition to satisfying specific developmental needs and regulating the mobility of citizens, education has to mediate between the conflicting interests in society (Lo, 1994, p. 208). In whose interest and at whose behest are educational programs initiated, sustained or eliminated are common questions posed by sociological and political inquiries into the societal functions of education.

The argument that education should play an active role in charting the developmental direction of society is accompanied by the assumption that it possesses the necessary authority in its own realm of work to generate reform initiatives within and outside its system. For education, such authority can only be based on a strong knowledge base, which embodies all educational issues and the best ways of educating, as well as a proven record of success (usually measurable by the quality of graduates). Another prerequisite, which has little to do with education per se, is the participation of educators in the policy-making process at the highest level. It concerns more with power than authority. This kind of involvement is particularly important in societies with strong states, for, in such a context, the functions of education can only reflect the interests of the powers-that-be. In societies where the presence of the state weighs lighter on the public sectors, participation in policy-making is still important because of a stronger presence of special interests.

For the education enterprise, the more enduring source of authority is its knowledge base because education is an area of work that relies on the production and utilization of knowledge for its existence and operation. The perceived role of education in societal development has mainly been the creation and utilization of knowledge in the post-World War II period. Even today, the focus of education in development has not totally left this conceptual cradle, even if it is viewed in a different context. That education should be mindful of individual differences, community needs, professional development, and policy initiatives has found theoretical inspiration in a knowledge base that has been constructed with the refinement of ideas and improvement in practice. The knowledge base informs practice because it is "the difference between 'state of the art' of knowledge and its 'state of practice.'" (Galluzzo & Pankratz, 1990, in Powers, 1992, p. 9) A solid knowledge base of education affords information, insights, and relevance to policy formulation. A weak knowledge base inevitably causes the marginalization of education as a policy sector.

Knowledge is “produced essentially as a response to particular needs in particular historical-social contexts” (Harris, 1979, p. 176). Thus the creation and accumulation of knowledge in a societal context should vary through time and differ from those in other societies. Knowledge concerning education is society-bound. The knowledge base of education should also reflect the wealth of wisdom borne from inquiries in that society. Many factors influenced the production and utilization of knowledge and the content of the knowledge base. In education, needs arising from practices in society, the education enterprise, school, and classroom, as well as externally imposed interests, are reasons for knowledge production. The utilization of knowledge varies with the changing meaning of context and purpose of application. Engaging in a discourse, performing a surgery, and building a bridge all involved the utilization of knowledge, but the application of knowledge takes on different forms. In education, whatever its nature and form, knowledge has to undergo a process of legitimization before it is accepted into the knowledge base, ready to be tapped for future reference. The work of legitimizing is done by brokers of knowledge — teachers and review panels of higher institutions, journal editors, publishers, grant-giving organizations, and any other parties that choose a particular body of knowledge for decision-making purposes and for the purpose of inculcation.

When we seek to understand the nature of a knowledge base, we actually seek to understand a complex of issues intertwined by ideas, experiences, socio-historical forces, authority, power and control. In the context of societal development, the value and utility of a knowledge base of education depends very much on its relevance to the developmental needs, its ability to address crucial issues of development, and the ways brokers of knowledge shape its content. In education, two important concerns of the knowledge base are its depth and relevance of knowledge of education, and the manners in which knowledge about education is created, utilized, and legitimized.

Issues in Educational Development

Reform of any education system has to give due consideration to the dichotomy of quality and equality in education. While the strive for quality is common to education systems that have achieved the target of access to schooling, equality of educational opportunities remains to be a priority item on the developmental agenda of many societies. Quality implies

progress toward excellence. Equality connotes equity, fairness and a respect for rights. Shanghai and Hong Kong have achieved the targeted nine years of compulsory education for some time. Both systems of education are initiating measures to improve the quality of school education. The advancement of equality of educational opportunities has partially been achieved in quantitative terms.

Another important issue in educational development is the relevance of education to developmental needs. The efficacy of education in the context of societal development can only be judged by its fitness for purpose. There are items on the development agenda that aim to accomplish immediate and medium-range goals, such as satisfying manpower requirements, improving test scores, curbing juvenile delinquency, and so on. There are other important issues that need to be addressed but may not be found in development blueprints, such as outdated aims of education, structural discrimination, and social and economic costs of failed policies. The purpose of education for development may not be any of the above because it is determined by the powers-that-be. In deciding on the indicators for efficacy of education, the policy-makers also establish the scope of their interests, choose from the knowledge base those ideas and information that they deem relevant and essential, and assign meanings and purposes to education. For Shanghai and Hong Kong, the relevance of education should be judged not only in term of their immediate needs, but also in terms of the long-term developmental strategies.

A third issue in educational development is formulation and implementation of policies. Whether decisions on educational matters are made in an authoritarian, corporate, or democratic manner has much to do with their quality and the degree of support that can be anticipated. State directives that demand unquestionable support rely on sanction rather than on wisdom and persuasion to attain their goals. Policy initiatives that are informed by research findings and consulted widely with the stakeholders should find ready cooperation from the teaching profession. Decision-making for education is a very safe but boring exercise because it usually takes a long time before the effects of decisions, whether good or bad, can manifest themselves. An exception to this is when a quick decision is made to affect the mobility and life-chances of people, such as the adoption of Chinese as a medium of instruction for the majority of secondary schools in Hong Kong. In a way, people who are in the business of deciding on educational matters become brokers of knowledge. Whether it be the government or Party officials in Shanghai or government officials and

members of top advisory committees for education in Hong Kong, these people are brokers of knowledge because they decide on the sources of information to consult and the points of view to accept. In the process of doing so, they also legitimize certain forms of knowledge.

A fourth issue concerns the degree of freedom and the manner in which knowledge is produced and utilized. They affect not only the substance of the knowledge base of education, but also the quality of educational policies that are supposedly based on this knowledge base. In general, there are at least three sources of ideas and information that sustain the knowledge base in education: contribution from the disciplines in higher institutions and research institutes, contribution from educational studies as a field of inquiry, and contribution from practicing professionals in the schools, related agencies, and government. The breadth and depth of inquiries, as well as the efforts put into gathering and collating information about education will invariably influence the quality and accessibility of the knowledge base. The higher institutions in Hong Kong and Shanghai have been made aware of the necessity to contribute to scholarship and there is no dearth of scholars who are actively involved in research. Moreover, an increasing number of practitioners are engaged in educational research. Whether the knowledge base in both societies are strong and ready to inform policy-makers is a matter that affects the quality of educational policies and therefore the quality of education.

Quality and Equality and Education in Hong Kong and Shanghai

As Chinese societies, which are purportedly inclined to treasure the value of education, Hong Kong and Shanghai were late to recognize the role of education as the major facilitator of societal development. In Hong Kong, official attention given to improvement of educational provision was not evident until the 1970s when "political and economic factors helped shape attitudes which determined an updating and improvement of policy targets in the educational field." (Sweeting, 1997, p. 31). The implementation of nine years of compulsory schooling in 1978, and the significant expansion of higher education since 1990, have brought significant improvement to educational access on both the school and tertiary levels. Hong Kong now allows full access to primary school, close to 90 percent of finishers to enroll in senior secondary schools of various kinds, and 18 percent of the relevant age-cohort to receive higher education. In Shanghai, as in other

parts of China, Deng Xiaoping's insistence that education was an effective means to nurture much-needed professional manpower for development was embraced. After two decades of efforts, Shanghai has constructed an impressive education system with ambition — full access to primary school, 84 percent of finishers of junior secondary schools went on to the senior secondary level in 1994 (*CEN*, 1994, October 28), and an independent system assessment for admission to universities.

With the problems of educational access behind them, both societies are now stressing the improvement of quality of school education. From official directives and reports, a determination to raise educational quality is clearly discernible. In 1997, the Education Commission of Hong Kong, its highest advisory body in education, has devoted an entire report on improving the ways and means of inculcating a "quality culture" in the school system so as "to contribute to the personal growth of our students, to build a competent work force to promote social, economic and cultural development and to increase our competitiveness in the international market." (*ECR7*, 1997, p. 3) The Education Commission report outlines its views on "quality assurance," introduces the concept of "value-added achievement," and suggests sets of quality indicators to measure the schools' value-added performance (*ECR7*, 1997, pp. 8–13). To support the pursuance of quality education, the government was ready to invest HK\$22.2 billion in the education sector for five years, with HK\$5 billion going to the establishment of a Quality Education Development Fund to "encourage innovation, competition and self-motivated reform in primary and secondary schools." (*HKSAR*, 1997, p. 29)

Shanghai's approach to the improvement of education quality is no less ambitious. The goal was to transform Shanghai into a "first-rate" international metropolis with the best talents nurtured by a "first-rate" education system. The plan for Shanghai to become an international "economic, financial, and commercial center" embodies measures in building the necessary social infrastructure.³ In this project, education was expected to undergo rapid changes to become "first-rate" itself. In essence it is a comprehensive project, which aims to improve the quality of basic and tertiary education. Through the strengthening of selected higher institutions and academic disciplines, the recruitment of teachers of high quality, the establishment of key teaching and research units of excellence, as well as the reform of educational structure, school management, and the curriculum, the overall quality of Shanghai's education system would be raised. To finance this endeavor, its mayor had pledged to increase the

share of educational investment in Shanghai's GDP from two to three percent, and the share of educational expenditures in total government spending to 20 percent by the turn of the century (*JFRB*, 1994, September 8).

If it can be assumed that money, political will, and administrative order could buy quality, then the schools and higher institutions in Shanghai and Hong Kong should be well on their way to achieve quality. However, there are dimensions of quality education which may be hidden from the views of reformers who are looking for "better performance" that are measurable by conventional standards. For Hong Kong, the fallacy may be an insistence on securing "value-addedness" in the schooling process, a concept that is akin to the wisdom of the business sector. For Shanghai, the relentless pursuit of "perfection" in the "key" programs, schools and institutions has confined educators' ideas and operational strategies to emulating "models" of excellence. For those schools and institutions that do not enjoy the same advantages as the "key" schools, there is really little incentive to emulate.

The problem with schooling in Hong Kong and Shanghai rests not with their recent emphasis on quality education. After all, few can convincingly argue for the perpetuation of mediocrity. It is the lack of attention to equity issues that presents a glaring contrast to the promises of quality education. From major official statements in both cities, there is an absence of conviction to avail quality education to the academically low achievers because there was hardly any mention of positive discrimination measures in favor of their schools. To be sure, the Hong Kong government has made a concerted effort to help schools of low achievers by allowing for additional provision, and Shanghai has also helped these schools with additional resources with the expected duration required for improvement attached to the allocation as well (*JFRB*, 1994, September 8). However, in their recent drive toward quality education, neither Hong Kong nor Shanghai has really addressed the structural problem of segregation in academic achievement among students.

The structural segregation of student achievement in Shanghai is manifested mainly in the differences in test scores between students attending school in the metropolitan areas and in neighboring rural areas, and between those attending "key" schools and ordinary schools. In a large scale research project that tested final year students at two junctures during the 9-year compulsory education period (primary 6, $N = 1,317$, junior secondary 3, $N = 1,345$), a comparison of average passing rates between

students in urban and rural areas and between students in “key” schools and ordinary schools have yielded interesting results. A comparison of the average test scores in 4 major subjects in the primary schools, viz., language, mathematics, morals (including artistic ability) and scientific knowledge (including labor education) yield a difference of 1.84 percentage points between the urban and rural areas, but a 11.21 percentage point difference between the “key” schools and ordinary schools. The disparity on the junior secondary level is even greater. A comparison of test scores in 7 major subjects, viz., language, mathematics, English, scientific knowledge, artistic ability, morals, and skills related to labor yield a difference of 20.87 percentage points between the urban and rural areas, and a 23.44 percentage point difference between the “key” schools and ordinary schools (Xie & Tan, 1997, p. 100).

Similarly, the difference between the academic achievement of students in various types of secondary schools in Hong Kong is significant. From a large-scale research project on the effectiveness of secondary schools (school $N = 50$; student $N = 30,000$), it is found that the difference in academic achievement of students in the academically strongest and weakest schools has become larger. Moreover, ability segregation among students in the schools surveyed is significantly higher than similar accounts of segregation in such societies as the US, UK, Canada and Singapore (Lo et al., 1997, p. 247). For a school system that has accommodated compulsory schooling for two decades, the findings signal a warning that equality has only been achieved in quantitative terms. As far as its capability of offering quality education is concerned, Hong Kong has scored poorly in availing equal opportunities to all; and when inequality becomes apparent, it also failed in initiating significant positive discriminatory measures to rectify the situation.

The effectiveness of the present endeavor to raise the quality of school education in Shanghai and Hong Kong is undermined by structural segregation of student achievements between schools as well as the processes of selection inherent in both school systems. Structurally, competition for entry into higher education takes place in a public examination at the final year of secondary schooling (for Shanghai at the 12th grade, and for Hong Kong at the 13th grade). However, to get themselves through this bottleneck, students have to compete keenly to get themselves admitted into the “right” schools — “key” secondary schools in Shanghai and the “famous” secondary schools in Hong Kong, which have a history of high entry rates into the universities. To prepare their children for

admission into these secondary schools, parents seek every opportunity to send their children to the "right" primary schools. For the two education systems, which have successfully implemented nine years of compulsory education, it is ironic that the pressure of studying has not been alleviated. So long as university admission is determined solely by the outcome of an examination, students would be under pressure to position themselves for preparation of that examination.

In emphasizing quality education, Shanghai has done more, at least officially, to alleviate the pressure of studying for tests and examinations. In the seminar rooms and official statements, examination-led education is being seen as an antithesis to quality education. Emphasis on the arts and morals in the formal curriculum, experiment with direct admission to junior secondary schools that are situated closest to students' homes, reform of the examination for junior secondary school leavers to include non-academic subjects are some of the reform measures (Lai & Lo, 1999, pp. 270–272). In Hong Kong, university admission criteria, which have been based mainly on examination results, will be enriched to include performance in school and other non-academic criteria such as community service, and artistic and athletic abilities (HKSAR, 1997, p. 28). However, until it can devise a fair and reliable way to assess school-based performance, public examination results will continue to serve as the prime indicator of student readiness for higher education.

For Hong Kong and Shanghai, the formulation of policies for quality and equality in education is often undermined by the scarcity of knowledge that is relevant to the issues at hand. To be sure, there has been no dearth of articles published on the related subjects. Yet, findings of large-scale research conducted by scholars and government bureaus are few or too technical to attract the interests of publishers and the public. In both societies, it is indeed rare to find research reports — such as the investigative report edited by Xie and Tan (1997) on student achievements in compulsory education of China — to be published in their entirety. In most cases, good research reports are left on the shelves of libraries. For policy-making in Hong Kong, information is either gathered by relevant government bureaus for presentation to the decision-makers, or research on the subject will be contracted out on an *ad hoc* basis. The findings of these research projects are not released for public consumption, thus adding very little to the knowledge base. The worst scenario, of course, is when policy-makers simply rely on their personal interests or common sense to arrive at decisions.

For quality education to be effectively offered to our students, both Hong Kong and Shanghai need to construct a strong and reliable knowledge base with findings from large-scale empirical research projects that can afford generalizability and from accounts of action research that can induce experimentation. For equality in education to be addressed seriously by policy-makers, the mind-set of both societies would have to be tuned into a developmental imperative — that for Hong Kong and Shanghai to remain competitive, they have to dig deep into their pools of talents within which are potential contributors who may not have performed well academically but do have many areas of knowledge and skills to offer. Much depends on our ability to nurture those aspects of intelligence with an education that is relevant to their needs and the needs of societal development.

Developmental Needs and Relevance of Education

Developmental agenda reflects a society's response to needs that have emerged at certain junctures of development. Education's contribution to this response should be the nurturing of people who can participate effectively in developmental endeavors. How successfully can education play this facilitating role depends on its ability to remain relevant to the developmental needs of society.

At the dawn of a new century, Shanghai and Hong Kong are in a unique developmental position relative to the rest of China. In a sense, both of them can be considered as HPAs, and they should therefore view their potentiality in that light. While both cities would like to think of themselves as economic, financial, and commercial centers of international standing, Shanghai and Hong Kong also need to understand their development in the context of a new information age and as (or soon to be) information economies (Cui, 1998, p. 8).

Inquiry into the nature of information age and informational economies is beyond the scope of this paper. Yet there are several characteristics of informational economy that are relevant to a discussion on education. To begin with, economic activities are increasingly based on the production and consumption of information and information technologies. The production, acquisition, transformation, and transmission of information (information producing activities) become the major economic activities that determine competitiveness. Investment in research and development, along with capital and manpower investment, affects

economic growth. Economic growth and productivity are determined by the application of science and technology in the realms of production, consumption, distribution and exchange. Economic activities transcend national boundaries toward globalization. A world system of informational economies emerges with its information technology infrastructure (Castells, 1996; Tsang, 1997b, p. 2).

In an information society, production becomes information intensive, and workers are expected to be competent in information processing. The workplace requires adaptability, flexibility, and cooperation from its workers. Productivity is knowledge-based; and to enhance one's life chances, individuals can exploit an abundance of information available to advance their interests and to improve their competencies. The production and management of knowledge become central to economic activities.

For education to remain relevant to the needs of the information society, it has to insist on a strategy of teaching and learning that can broaden the students' intellectual horizon through an acquaintance with a broad knowledge base, an inculcation of flexible learning habits, and an invigoration of problem solving abilities (Tsang, 1997, p. 5). The nurturing of talents in the schools should not be confined to the elitist approach of old, for the development of the information society requires a much broader participation from an educated citizenry. The production, accumulation, transmission, consumption and management of knowledge are tasks too vast and diverse to be left in the hands of a selected few. When these tasks become an integral part of living, the selected few will not be able to handle their immensity anyway. The educational imperative of the information society, therefore, is to identify in students their potential strengths and nurture them accordingly. In higher education, intellectual curiosity, knowledge creation and critical thinking remain to be the prime concerns as the information society requires talents with these kinds of attributes for its advancement. Higher institutions should strengthen professional and technical manpower; but few will contest the fact that the success of knowledge creation rests essentially with advancement in the foundation disciplines. As research and development take on the dual role of knowledge production and knowledge transfer, the higher institutions, as a stronghold of research and development, need to work with other technological and commercial agencies to advance technological development (Tsang, 1997b, p. 6).

For education of Shanghai and Hong Kong to remain relevant to the developmental needs of their societies, their educators need to become

aware of the advent of the information age and its educational requirements. What kind of persons do we need to nurture for the information age? What kind of strategy can foster the nurturing of such persons? The kind of "desirable" persons that education aims to nurture are usually found in the abstract proclamation of educational aims. In Chinese societies, it is customary for educators to defer to the wisdom of past sages and list the four or five desirable human attributes (virtue, wisdom, physical well-being, aesthetic values) as educational aims; and, depending on the needs of the time, add such attributes as patriotism and civic awareness to the list. If educational aims are not to remain lofty abstraction or empty rhetoric, these value-laden concepts need further refinement because they are hard to operationalize for action.

For the purpose of seeking less lofty attributes for our "new" educated persons, perhaps a list of "competencies" proposed by Henry Levin of Stanford University may help to illuminate their attributes⁴. According to an investigation involving a range of enterprises and occupations which were deemed "high productivity workplaces," Levin and his colleagues found these competencies to be: initiative, cooperation, working in groups, peer training, evaluation, reasoning, problem-solving, decision-making, obtaining and using information, planning, learning skills, and multicultural skills. Interestingly, he also observed that while these competencies were central to the "high productivity workplaces," they "were not being developed in schools" (Levin, 1997, p. 10).

The importance of the Levin "list" is not so much the competencies per se but the observation that "they were not being developed in schools." As far as nurturing the "new" educated person is concerned, the schools have been deemed irrelevant. Levin's doubts about the role of the schools in nurturing the "relevant" competencies for work can also be applied to the context of schooling in Hong Kong and Shanghai. Rigid curricula that adhere strictly to the knowledge base of the universities breed clear demarcation between subjects. Examination-led instructional approach leaves little room for activities which may nurture creativity and test the teachers' ability to identify and develop hidden potentials of their students. Woeful tales of pressure of studying are not countered by reports on higher academic performance (SKSS, 1997, pp. 247-262). The segregation of schools by the medium of instruction in Hong Kong (situating the preferred English medium schools at the apex of the school system), and the streaming of secondary students into general and vocational tracks in Shanghai (Lai & Lo, 1999, pp. 268-269, 276-277), reflect an elitist mentality,

which assumes the adequacy of narrow participation in development by a selected few. The perpetuation of these phenomena contributes little to preparing our children for broad participation in the workplaces of an information society. When the scholars from Massachusetts Institute of Technology (MIT) suggested to Hong Kong that the capabilities of its industrial workforce must be upgraded (Berger & Lester, 1997, p. xv), and when the mayor of Shanghai proclaimed that the metropolis had to rely on its "unique manpower advantage" to develop into a "first-rate city" (*JFRB*, 1994, September 8), they did not have in mind a manpower source constituted by tired, bookish and uncreative school and university graduates. After all, those who were admitted into higher institutions with good test scores may not necessarily become successful members of our society (Levin, 1998). In helping Hong Kong to retain its competitiveness, the MIT scholars recommended the development of "new capabilities for product and process innovation and design" among its university student population (Berger & Lester, 1997, p. xv). Without the appropriate preparation in school, however, it would be difficult for any university student to suddenly become innovative. Creativity cannot be taught. It is a habit of thinking and problem-solving that needs to be developed at an early age.

Faced with the challenges of the information age, the education systems of Hong Kong and Shanghai seem out of touch with the realities of change. What is needed is more than simply strengthening our knowledge base in cognitive development, in curriculum design and implementation, in instructional approaches, and in learning difficulties. For education to remain a facilitator of societal development, there should be an overhaul of the approaches to education, from the thinking of educators to that of the policy-makers, and a concerted effort to develop an organic relationship of relevance between developmental needs and functions of schooling. The educators should understand societal change itself: where we are and the road that we shall travel. They need to stay at least one step ahead of society in terms of understanding the educational implications of societal change and be cognizant of new ideas and practices that may help them to plan and act more proactively in the context of change.

The cynicism of teachers of Hong Kong toward recent reform initiatives in teaching and learning — the implementation of the Target Oriented Curriculum and the imminent application of information technology in teaching and learning in schools — can be attributed to a lack of

understanding of the full picture of development rather than lethargy and apathy. The same can be said about policy-making in education, an arena with some participants who fail to see meaning of individual issues in the larger context of educational development or are unwilling to see that any informed decision should be based on knowledge rather than common sense. This can partially explain the simultaneous application of policies that are contradictory in nature, and the implementation of which would bring mutually exclusive effects. In Hong Kong, the emphasis on quality education as expressed in the *Education Commission Report No. 7* was intended to benefit all schools, no matter the quality of their student intake or status in the hierarchy of schooling. The segregation policy to allow selected schools, which are already the preferred schools, to continue using English (the preferred language of mobility) as a medium of instruction confines the selection of academically able students to 114 schools where quality is rooted. In Shanghai, the efforts to free children and youths from the burden of examinations on the lower grades will not be accepted by teachers and parents wholeheartedly because of the popular preference for enrollment in the key schools and for higher learning in the universities. "One set of measures (upper secondary key schools and university entrance examinations) undermines the other (de-emphasis on elitism in compulsory education)." (Mak & Lo, 1996, p. 387) When the design and implementation of policies bring confusion and hardship rather than positive changes, then it is difficult to expect support from the stakeholders. When the stakeholders are not convinced of the efficacy of policies, that also costs education its relevance.

Policy-Making for Education

Policy-making is serious business because its outcome affects so many people. This is especially true for education since it is a life-long process for all citizens. Policy-making can be conducted in an authoritarian, corporate, or democratic manner; and the implementation of policies can adopt a top-down or bottom-up approach. The approach chosen affects the degree of professional and popular support of policies. The manner in which policy decisions are made influence their quality. In educational policy-making, Hong Kong and Shanghai entrust the tasks to small groups of people whose interests are related to education. These interests may be political, social, official, or professional. For the implementation of educational policies, both societies employ a top-down approach.

To a certain extent, educational policy-making and implementation in Shanghai can be a simple exercise because of the fewer layers of people involved. The Chinese Communist Party establishes an ideological frame of reference. The government devises plans for educational development and initiates policies accordingly. The implementation of policies is left to Party and government functionaries, as well as school and university administrators. There is consultation with experts and other stakeholders in the policy-making process, but such consultation is not institutionalized.

Educational policy-making is a more complicated matter in Hong Kong because of the tradition of "rule by consultation," a trademark of British colonialism in the territory. In education, as in other areas of work of public interests, advisory committees were established to advise the government on educational matters which, could be classified into various kinds of functions and levels of education. These advisory committees consist of government officials, certain "suitable" persons from relevant sectors of interests, and prominent members of the community. The official count of these advisory bodies in the education sphere is about twenty; but if all subcommittees and working groups are included, their number could reach 100. The advisory committees usually serve as a filter for policies that the government plans to initiate and a reviewer of certain aspects of its work in education.

Until recently, many of the advisory committees have deliberated on matters presented by the government. Since the advent of the 1990s, the advisory committees have become more assertive in initiating discussions on educational matters that they deemed to be important enough to warrant deliberation. Since 1990, no less than ten major policy reports were issued by these advisory committees, and the majority of them were issued between 1995–97. As the committees can initiate discussion on any issues that fall within their scope of interests, and there are areas of educational concern that inevitably span the interests of several committees, they may be addressing the same educational issues in any given time. The varying interpretations of issues as well as the differing views on problem-solving may lead to conflicting recommendations by different committees. The source of potential conflicts is not limited to inter-committee dynamics. The growing diversity of the composition of the advisory committees, with more professionals, union interests, and parents being included, may cause discussions to become more lively.

No matter the arrangements for input of advice, the openness of the policy-making arena to expert advice may determine the quality of policy

formulation. In Shanghai, the growing tendency to involve academics and experts in the early stage of policy formulation and in the deliberation of policy papers will hopefully become a trend for a policy-making tradition, which only allows for a thin buffer between administrative orders and operation in schools. To be sure, there had been a tradition of consulting with the masses through the "mass-line" (*qunzhong luxian*) approach, in which Party and government cadres were expected to seek the opinions of the masses before making important decisions on matters of public interests. However, it is doubtful that this Maoist dictum is still being upheld today. Nevertheless, for educational policy-making in Shanghai, the engagement of experts in working groups for feasibility studies and in policy discussion sessions ensures that the inquiry into critical educational issues is not rest on ideological persuasion and bureaucratic considerations alone. In Hong Kong, the tradition of "rule by consultation" requires the government to seek the advice of respectable citizens on educational policies. While consultation can carry many meanings and take many forms, the requirement is nonetheless institutionalized. Like Shanghai, there is a growing tendency to involve experts and professionals in the process of policy formulation, such as the contracting of feasibility studies and research projects to academics and higher institutions. Yet, for educational policy-making in both Shanghai and Hong Kong, the crucial aspect of policy-making is the manner in which the advice of experts is being treated. It concerns the intellectual direction of discussions for decision-making.

The intellectual direction of discussions for educational policy-making is influenced, in a sense, by the content of discussion papers, which may take the form of feasibility studies or research reports. The most important factor in this kind of discussions is the values and quality of the participants, especially that of the chairpersons. The acceptance or rejection of recommendations for a certain course of action usually reflects the values and bias of the majority of the people in the policy-making committees, be they governmental or advisory. For policy-making in Shanghai where government officials usually chair such meetings, considerations of power and control come clearly into the picture of decision-making. For policy-making in Hong Kong where non-government professionals usually chair top advisory committees, considerations of power and influence simply cannot be ignored.

In both societies, the values, ideological persuasion, and knowledge base of the powers-that-be assert strong influence on educational

policy-making and therefore educational policies. The kinds of experts who are included in the discussions, contracted for studies, invited to give advice and to participate in deliberation, influence the intellectual direction of discussions. The inclusion of ideas and persuasions in discussion papers also has the same effects. The choice of expert advice, the attitude toward information provided for discussion, the direction of discussion toward acceptance and rejection of recommendations determine the content educational policies.

In social science related fields, and education being one of them, an interesting mixture of values and facts dominate their discourse. The framing of questions and the manners in which answers to these questions are sought are vulnerable to manipulation. Unlike the sciences, truth in education is substantiated, not proved. Unlike medicine, the results of any application of action are not readily discernible and what constitutes a desirable state is up to interpretation. Thus in educational policy-making, which should be informed by knowledge, the treatment of knowledge may not be as serious as some of us may have assumed. This has everything to do with the fact that knowledge of education can be chosen to fit ideological persuasions, it can be manipulated to suit interests, and, because it is a "soft" area of knowledge about a "soft" area of work, it can even be discarded without the process of disproving. Since the results of any course of action will not be known for a long time — who can prove immediately that the application of certain methods could alleviate the burden of learning difficulties or say for certain that school effectiveness is realized more through the improvement of classroom instruction than the strengthening of administrative leadership? — educational policy-making is a "safe" arena for speculation.

When policy-makers can pick and choose freely from among certain bodies of knowledge to justify policy action, they become brokers of knowledge in the truest sense, for they determine what kind of knowledge is important and relevant to support endeavors that touch all our children and youths. Moreover, because knowledge cannot command the stage of policy deliberation, educational policy-making is susceptible to "pedestrian knowledge"— ideas and views presented by generally well-educated persons who walk into professional discussions off the street. Due to a general underestimation of the complexity of the education enterprise and its numerous areas of work, any person who finishes secondary school or has children in school may think that he or she has an intimate knowledge of education. The trivialization of education as a field

of inquiry and understanding leads to the diminishing importance of knowledge in the eyes of the public and policy-makers. This in turn leads to the domination of views that are attached to power and influence.

The above speculation on the embarrassing status of educational knowledge can be substantiated by the recent emphasis on "cost-effectiveness" and "value-addedness" in educational discourse and related reform initiatives in Hong Kong. From the latest reports issued by the Education Commission and the University Grants Committee, a value conscious mentality prevails (ECR7, 1997; UGC, 1996). There is also a tendency to search for and to establish uniformed standards for various levels of schooling, with "quality assurance" mechanisms in place to ensure that the products (students) leaving the "lines" of education (schools) are of acceptable quality (for example, QAIR, 1998). The emphasis on value-addedness, cost-effectiveness, quality and quality assurance finds ready kinship with the business community. On the one hand, it mirrors a desperate search for euphemisms among some of our policy-makers and officials who long for an education system that operates with a high degree of efficiency, guarantees the quality of "products" that it delivers, and proves its effectiveness in easily measurable ways. On the other hand, it reflects the influence of a "business mentality" in education through the strong presence of leaders of the business community in educational policy-making. An interesting fact about the chairmanship of top advisory committees in education is that none of their chairpersons is in a field related to school education while the majority of them come from the business sector. With an oft-cited excuse for avoidance of conflict of interests, the government has indeed "let outsiders [from the business sector] lead the insiders [of education]." Given this recognizable influence, it is not surprising that the suggestion by a prominent scholar in education of a "cult of market efficiency" dominating our educational discourse has had a supportive audience among many people in the field of education (Tsang, 1997a, p. 9).

The above phenomenon in educational policy-making should prompt educators to reflect on the reasons behind the trivialization of education, which is the source of many problems in policy-making for education today. By ignoring the complexities of educating, policy-makers feel free to borrow ideas from other sectors of work that manifest only casual conceptual and operational relations to education. That educational inquiry yields no absolutely true fact lends policy-making deliberation to the free application of values, sometimes hidden behind views of "pedestrian

knowledge.” That educational research is a relatively new enterprise, and the local knowledge base of education is a vast landscape waiting to be discovered and developed, tempts policy-makers to borrow reform blueprints from overseas and reform measures from sectors that operate on the assumption of quick, tangible results. Beyond the contextual nature of knowledge in education and the limitations of the knowledge base of education, policy-making for education becomes an arena where power, influence and control prevail. In the process of formulating, contracting, manipulating and determining, the policy-makers also legitimize certain viewpoints, approaches to problem-solving, and bodies of knowledge at the exclusion of others. In doing so, they also signal their preference for certain kinds of knowledge in their frame of reference. If there be substantial incentives attached to the production of the “right” kinds of knowledge, like legitimacy, grants and honor, then it is not inconceivable that the scholarly direction of certain creators of knowledge may be swayed.

Knowledge Production and Utilization

It is commonly assumed that knowledge is produced at the universities and research institutes. It is also assumed that those who are involved in the production of knowledge at these institutions enjoy a high degree of freedom in their endeavors because of a sacred promise of academic freedom and institutional autonomy. This is especially advantageous to the construction of a knowledge base of education because, by extension of logic, the scholars who produce knowledge are free to investigate into any subject of their choice in an environment that is conducive to their pursuits. Scholars in the field of education can utilize the facilities and support from other disciplines within their own institutions to advance their interests, on the one hand, and tap the wisdom of front-line practitioners through professional connections, on the other.

Even a cursive survey of the situation in the higher institutions of Shanghai and Hong Kong will present a different picture. For scholars in education, in addition to the problems of securing funds for research, winning the cooperation of practitioners and getting recognition from their own institutions, there is also the problem of purpose and utilization: why am I doing this and what am I going to do with it when the research is completed? A combination of these problems affects the research culture in education and the orientation of educational studies in both societies.

Given the recent initiatives of the University Grants Committee (UGC) to raise the standards of institutions in Hong Kong, the problems have become more acute there.

Securing funds for research projects have never been easy for scholars in any discipline. Funding agencies always have limited resources, a concerted effort to increase funding for research and development purposes notwithstanding. Even with their limited resources, funding agencies for research in both Shanghai and Hong Kong have become brokers of knowledge. More directly than the policy-makers, the funding agencies decide on the kinds of projects they wish to support; and, by doing so, select from a host of potential knowledge producers those areas of knowledge that they deem to be important.

In educational studies, the major source of funding for research in Shanghai is the government, and contribution from other sectors of society amounts to very little. Research funds from various levels and types of government agencies are channeled to support a wide range of projects, from educational goals to manpower planning, and from solving of pedagogical problems to special education. Whatever the level and types of government agencies, the major supporter of educational research is the State Education Commission (SEC) that operates on different levels of government. The SEC considers major research endeavors in accordance with the schedules of the "five-year plans," with the latest batch of approved projects designated as "9th Five-year Plan" projects. For this major exercise, review panels with prominent scholars from all over China were convened with the purpose of selecting worthy projects for the award of grants. Depending on the availability of funds, the SEC also considers research projects as the needs arise. A common complaint heard from educational researchers in Shanghai, especially those who have more ambitious plans to conduct large-scale empirical research, is that the funds allotted to individual projects are too small to support large survey and field research projects. There are also projects that received no grant but were deemed worthy for inclusion in the list of SEC-sponsored projects on the national level. Researchers of these projects were encouraged to seek support from the city government. The city of Shanghai also supports research endeavors in education through the Municipal Academy of Educational Science, which houses several research institutes. The institutes employ full-time researchers but funding for their research endeavors depends on their ability to secure funding for projects from the municipal and national governments, as well as from international organizations.

For educational researchers in Hong Kong, the situation is relatively better than that in Shanghai because research funding is more generous and more readily available. Like Shanghai, however, the source of funding is limited mostly to the support from the Research Grants Council and the Language Fund, which expend public funds, from private donations, and from contracted research of the government. Support from public funds constitutes a much larger share of funding for research. The Research Grants Council's support for new research projects (including all disciplines) in the higher institutions amounted to HK\$245.6 million in 1994–95, while private support for research in those institutions was HK\$126.7 million in the same academic year (UGC, 1996, p. 107). Relative to awards made to other disciplines, educational research projects received a very small proportion of grants from these sources. Compared to Shanghai, the average size of grants awarded is more generous. Grants awarded can normally allow researchers to hire research assistants and to accommodate the tasks of information gathering. For smaller research projects, funding can be secured from within the institutions. Moreover, while the Language Fund supports research projects conducted outside of the higher institutions, practitioners in schools may expect support for their research endeavors (if they are developmental in nature) from the newly established Quality Education Development Fund, which aims to facilitate the development of quality cultures in schools. Given the recognition that "Hong Kong has lagged behind other Pacific territories in conducting its own research and development" (UGC, 1996, p. 168), there have been official initiatives to strengthen funding for research and to encourage a substantial growth in research in the higher institutions. Thus, while queries about rejection and complaints about the size of grants exist, educational researchers in Hong Kong can hardly argue that there is no money to support their endeavors. The question remains as to whether there is any institutionalized bias for or against any research interests.

That an educational researcher can inquire into any areas of interests still holds true in the Hong Kong academia. To a certain extent, the same can be said about scholarly inquiry in Shanghai with the qualification that such inquiry is performed in private. For grant seeking purposes, the situation may be different. Whereas an understanding of an institutionalized preference for certain research areas requires further investigation, one could venture a guess that there have yet to emerge awards for the such topics as "a social criticism of the thoughts of Deng Xiaoping" (obviously for ideological and political reasons), "the postmodern condition in the

pedagogy of key secondary schools" (probably for awareness reasons), or "an investigation into the phenomenon of sexual harassment in local universities" (possibly for social and political reasons). Thus there are research topics that touch on sensitive issues and may not be deemed appropriate for support, or certain topics are judged to be too esoteric to warrant funding.

In Hong Kong, the present understanding of institutionalized bias against certain research interests in education, if any, is so incomplete that any speculation would be unfair allegation. However, institutionalized preference for certain areas of interests exists. The official statement on this preference is that research should be linked with the interests of the community (UGC, 1996, p. 107). For educational research, an interpretation of the official stance may mean a preference for research projects that can inform crucial aspects of development in the education enterprise. These "crucial aspects" can be understood as important issues that have been brought to the attention of the community through reform initiatives. Thus language issues, school improvement, quality schooling, teacher education, finance in education, etc., may be considered relevant to "community interests" and worthy of support by substantial grants. Moreover, expectations of research are also clear spelled out by some major grant givers. For instance, the University Grants Committee (UGC), which provides funding for higher institutions, considers that research of institutions should fulfill three requirements: "participation in mainstream worldwide topics which are advancing fundamental knowledge; symbiosis in research with industry, commerce and government, and local culture and society; and collaborative work relevant to the region." (UGC, 1996, p. 168) The maxim for grant seekers, therefore, is that their research projects should best be international, applied, relevant, and collaborative.

From the lists of projects funded by the Research Grants Council through the years, the pursuance of knowledge for knowledge's sake is being respected. What has worried some scholars in the higher institutions of Hong Kong is the policy to link institutional and departmental funding to measurable research input, and the tendency to equate publications in foreign, English-medium journals with excellence.

Research, like teaching, is an integral part of work of any university teacher. After all, the main functions of the university are the nurturing of educated persons and the pursuit of truth. The aim of research is the pursuit of truth. Funding agencies of higher education should expect university teachers to perform well in both teaching and research. Their periodic

evaluation of performance in research is to ensure accountability. The linking of funding to research performance is arguably acceptable, provided the missions and strengths of institutions are taken into consideration. In both Shanghai and Hong Kong, funding agencies are mindful of the research productivity of their institutions. In the recent past, Hong Kong's institutions were told that their funding would be partially linked to research output. From 1993 onward, the research capabilities of higher institutions were placed under scrutiny in the "research assessment exercises" (Lo, 1995, pp. 50–51). This policy was quickly filtered down through the institutions to the academic departments. The departments in turn attempted to bolster research output by encouraging more publications from their teachers. Within a short period of time, a culture of "publish or perish," or, to put it in a more positive light, a culture of research has flourished within the higher institutions of Hong Kong.

The necessity to cultivate a research culture is illuminated by the recruitment and retention of staff within the institutions. Research potentiality ranks high among the criteria for staff recruitment. Proven research record in the form of grant procurement and research output is essential for tenure and contract renewal. In a period of fiscal stringency (which has taken effect from the autumn of 1998), demonstrable research capability and output of their teachers may become a survival issue for some departments. Fiscal stringency fuels the anxiety of academics as more and more institutions have eliminated tenure-track appointments for newly recruited teachers, while some institutions have professed a desire to release unproductive teachers from their posts.

For those competent researchers in education, the crucial issue is not so much the ability to secure research grants and to publish. It is the confinement of research interests through grant giving, the quantification of their research output, and the pressure to publish in foreign, English-medium journals that some of them have taken issue with. That the major grant-givers generally favor large-scale research with immediate relevance to educational issues deemed important by review panels is common knowledge among educational researchers. For research of a smaller scale that addresses non-mainstream issues — "peripheral interests" as some have called them — funding usually comes from in-house allocation within individual institutions. The continual emphasis on the connection with mainstream issues may well mean the marginalization of certain research interests that are considered to be important by some serious researchers. In a sense, the worry of these researchers is substantiated by

the fact that institutions place much more emphasis on grants procured through a competitive process that is beyond their purview. For this proves that a research project does indeed measure up to an external standard that is free from the influence of relations within an institution.

This mentality is extended to the publication of research findings as well. For the sake of ascertaining standard and for impartiality, non-local journals seem to be the favored destination of publication. Moreover, because there is a growing tendency at the UGC to favor contribution to the international discourse, and English-medium journals dominate the international discourse in education, there is an added pressure to get one's work published in those journals. For educational researchers, the above combination of participating in the international discourse and publishing in English present a dilemma in their publication of research findings.

Education is a field that is bound to culture and society. The chief purpose of educational research is to inform the education profession. However, except for those journals that are designated to transcend national and cultural boundaries, such as those devoted to comparative and international education, most journals address educational issues that are deemed important and relevant to their own societies. Such is the case for education journals of Hong Kong. Such is also the case for the best journals in other societies. For instance, a survey of articles in *Harvard Educational Review* (based at Harvard University) and *Teachers College Record* (based at Teachers College, Columbia University) will reveal that the overwhelming majority of their articles are focused on educational issues in the US. In Hong Kong, it is also natural for locally published journals, the major forums for local educational discourse, to address local educational issues. The UGC's encouragement for international engagement has bred a tendency to stress the importance of contribution to foreign journals and the concomitant relegation of the status of local journals in "research assessment exercises." For those educational researchers who takes informing the local education profession as their prime scholarly duty, an insistence on publishing in local journals may mean a less favorable research profile in the eye of review panels. The more assertive stance of the UGC on research matters has caused concern among the academics over their freedom to inquiry and to publish. There is "a general suspicion among them that their own autonomy and creative space, and that of their institutions, are being impinged upon." (Lo, 1997, p. 346) Autonomy is of vital concerns to those scholars who are serious about the pursuit of truth. The present situation in educational research should have strong

implications for knowledge production in a field of inquiry, which should aim to contribute, first and foremost, to the construction of the local knowledge base.

If knowledge production for education is a problematic matter for educational researchers, then the utilization of knowledge is even farther from their grasp. Where and how one's research findings would be shared depends on the decisions of journal editors, the desire of contracting agencies, and the researchers' will to determine the destination of publication of their findings. In the dynamic context of utilization of knowledge, the different meanings of authority are perhaps relevant (Harris, 1979, p. 178). One can be *an* authority in a certain subject and therefore should have wisdom to share with others. However, one needs to be *in* authority to publish — with consent given by related agencies — before one's efforts is formally recognized. In this kind of endeavors, the issues of power, influence and control again emerge to test our wisdom and integrity.

Concluding Remarks: The Knowledge Base and Its Utility

A review of several issues in the educational development of Hong Kong and Shanghai has revealed that the developmental direction of education of both societies is found wanting because of the absence of a clear vision of the role of education in development. Education, as an integral part of the developmental process, is far from being able to play an active role in charting the developmental direction of their societies because of its inability to transcend the influence of power and control in the policy-making.

Recent emphasis on quality education in both societies should be considered timely moves to improve the quality of school education. The aim is to help students to develop in a more balanced way without losing sight of the developmental requirement for a competent workforce. The mechanistic approaches to achieving quality education in both societies cast doubt on their prospect of success. In Hong Kong, the assumption that an application of such concepts as "value-addedness" and "quality assurance" would lead to the emergence of a "quality culture" in schools overlooks the fact that school reform is an organic process that requires a consensus of important values within individual schools. Rather than the imposition of exogenous forces, such as "quality assurance inspections," the stakeholders of the schools should be allowed ample time and room to achieve consensus on the approach to important issues to tap from the

knowledge base of education relevant bodies of knowledge that can inform planning and action. In Shanghai, the concerted effort to depart from an examination-led approach to schooling should lead to a more balanced approach to nurturing the young. Yet the existence of mutually exclusive approaches to education on different levels of schooling, as well as the long tradition of emulating the best (in this case, the best schools) will impede efforts to bring about an overall improvement of educational quality in the schools. Besides, the inability of both school systems to seriously address equity issues in schooling allows the perpetuation of segregation among schools and students, especially in academic achievement. While there have been some concrete measures to help the academically "weaker" schools to improve, these measures do not reflect a clear policy of positive discrimination. The continual segregation of schools and students will have strong adverse effects on the capabilities of the schools systems to produce competent workforces for the new century.

With the coming of the information age, the future development of both societies requires a clear vision of the kinds of information societies or information economies that they wish to become. Whether their development should go down the same road of the advanced Western societies, or should they chart their own developmental directions is an important question that demands immediate attention. Should they worship the same gods in Bill Gates and Andrew Grove, or should they create their own environments for information technology to flourish? Hong Kong has taken decided steps to embrace the information age. China is approaching it tentatively; but, for all intent and purposes, it has accepted the fact that the information "super highway" will be extended through the vast territory of that country (Ramo, 1998). Shanghai, which prides itself in being the most sophisticated of all Chinese cities, should lead in this endeavor. The information age requires a transformation of thinking and operation. The information society also requires a new kind of "educated persons" to sustain its growth. Chief among its requirements is the broadening of participation of "educated persons." Education in both societies — curricula, approaches to teaching and learning, views on intelligence — and the knowledge bases that inform its policy, design and operation has yet to show strong relevance to developmental needs in the new contexts. Both Hong Kong and Shanghai will do well to dig deep into their potential talent pools to nurture competent workforces for a new stage in their histories. The potential talent pools should consist of most of those who are studying in their schools, for the educational elitism of old has no place in the information societies.

The poverty of our knowledge bases *vis-à-vis* new challenges of the information age cannot be blamed on the short-sightedness of the producers of knowledge alone. The interplay of dynamics within the policy-making arenas, as well as the interaction between producers of knowledge and brokers of knowledge, have quietly submitted knowledge production and utilization to a realm of thinking and action where power, influence and control dominate. In educational policy-making, the intellectual direction of deliberations can be swayed by the choice of knowledge that is made available to policy-makers; and by choosing certain ideas, opinions and facts over others in arriving at decisions, the policy-makers themselves become brokers of knowledge. The truth of the matter is that knowledge of education is not essential to policy-making for, ironically, it is here that education is trivialized. The trivialization of education as a field of inquiry has allowed free borrowing and transplanted of overseas experiences as well as ideas and operational principles of the business sector. This phenomenon can be attributed the submission of educational discourse to the influence of power and control. That power, influence and control, rather than knowledge and reason, would usually prevail in policy-making may be assumed by many people. However, few would expect the same to happen in the process of knowledge production and utilization.

Production and utilization of knowledge are also under the influence of power, influence and control within the world of scholarship. The academic milieu of Hong Kong and Shanghai differ in many ways, but their scholars' freedom to pursue their interests are, in varying degrees, constrained by a host of factors, including the preference of the brokers of knowledge: funding agencies, university administrators, journal editors and publishers. The purpose of research and the venues for sharing research findings are dilemmas that scholars in education have to face in their pursuit of truth. The construction of a knowledge base of education has become an exercise in compromise.

In the past, knowledge production and utilization is not very important to the policy-making for educational reform. This perhaps is due to the inadequacies of our knowledge base, or the revitalization of education as a field of inquiry, or the ways that the production and utilization of knowledge has been compromised. The experiences of Hong Kong and Shanghai show that it has been a combination of these factors that has cast a giant shadow over the discovery, invention, and refinement of our knowledge base of education. There is a gold mine of knowledge, available through the Internet and other information technological means, out

there in the world. However, not all the knowledge available in that gigantic bank of information is directly relevant to the developmental contexts of Hong Kong and Shanghai. The same can be said about the knowledge bases of education in East Asian societies. Since we can assume that knowledge of education is culture and society bound, and that there are certain similarities among the developmental experiences of East Asian societies, then it is indeed time to contemplate the construction of a regional knowledge base of education beyond the confines of national interests in education.

A strong knowledge base coupled with active participation in policy-making may not be all that is needed for the education enterprise to influence the direction of societal development; but, in the modern context of planning and policy, their absence would surely eliminate any possibility. Given the state of affairs in East Asian, educational development is a matter under the direct control of the state. The education enterprises in these societies are recipients of state directives on educational matters. In varying degrees, professional educators are all on the periphery of policy-making. Their contribution to policy-making is peripheral and retrospective as well. The strengthening of the knowledge base will be the labor of educational researchers. Meaningful utilization of knowledge in educational reform efforts in education depends on a transformation of the *modus operandi* of policy-making in education. Such transformation can only be affected through an expansion of participation of stakeholders in policy-making. With this transformation, the East Asian societies may perhaps transcend the postulations of the "perspiration theory" in the not too distant future.

Notes

1. The World Bank policy research report refers to East Asia as the geographic region which comprises "all the low- and middle-income economies of East and Southeast Asia and the Pacific, east of and including China and Thailand." (World Bank, 1993, p. xvi).
2. In this paper, "knowledge base" refers to a codified or codifiable aggregation of knowledge and understanding of practices within the field of education.
3. Measures to build the necessary social infrastructure to facilitate the attainment of this goal are proposed in an important report put forth by a working group which consisted of high level city officials and researchers in social affairs and education. It was issued in May 1994 as a policy document (*Three*

Centers, 1994). The important role of Shanghai in China's future development was reiterated by officials of the central government and the Chinese Communist Party (for example, *CEN*, 1994, September 7).

4. In a study undertaken in the US, Levin and colleagues (1997) sought to delineate the competencies required of workers in "high-value-added industries and occupations by investigating a range of enterprises and occupations that were deemed to be high productivity workplaces. The competencies were identified and listed.

References

- Appelbaum, R. P., & Henderson, J. (1992). *States and development in the Asian Pacific Rim*. Newbury Park: Sage Publications.
- Asiaweek*. (1996a, March 15).
- Asiaweek*. (1996b, May 3).
- Berger, P. L., & Hsiao, H. H. M. (Eds.). (1988). *In search of an East Asian development model*. New Brunswick, NJ: Transaction Publishers.
- Berger, S., & Lester, R. K. (Eds.). (1997). *Made by Hong Kong*. Hong Kong: Oxford University Press.
- Castells, M. (1996). *The rise of the network society*. Cambridge: Blackwell Publishers.
- [*CEN*] *Zhongguo jiaoyubao* [China Education News]. (1994, September 7 & October 28). Beijing, China.
- Chan, S., & Clark, C. (1992). *Flexibility, foresight and fortune in Taiwan's development: Navigating between Scylla and Charybdis*. London: Routledge.
- Cui, N. (1998, September 20–26). Knowledge economy to lead China into future. *China Business Weekly*.
- [*ECR7*] Education Commission. (1997). *Education Commission report No. 7: Quality school education*. Hong Kong: Government Printer.
- Fuenzalida, E. (1985). Development and education. In T. Husen & T. N. Postlethwaite (Eds.), *The international encyclopedia of education* (Vol. 3, pp. 1374–1379). Oxford: Pergamon.
- Galluzzo, G. R., & Pankratz, R. S. (1990). Five attribute of a teacher education program knowledge base. *Journal of Teacher Education*, 41(4), 7–14.
- Gereffi, G., & Wyman, D. L. (Eds.). (1990). *Manufacturing miracles: Paths of industrialization in Latin America and East Asia*. Princeton, NJ: Princeton University Press.
- Harris, K. (1979). *Education and knowledge: The structured misrepresentation of reality*. London: Routledge & Kegan Paul.
- [*HKSAR*] The Hong Kong Special Administrative Region of the People's Republic of China. (1997, October 8). *Building Hong Kong for a new era* (Address by the Chief Executive The Honourable Tung Chee Hwa at the

- Provincial Legislative Council meeting). Hong Kong: The Hong Kong Special Administrative Region of the People's Republic of China.
- [JFRB] *Jiefang ribao* [Liberation Daily]. (1994, September 8). Shanghai, China.
- Johnson, C. A. (1982). *MITI and the Japanese miracle*. Stanford, CA: Stanford University Press.
- Krugman, P. (1994). The myth of Asia's miracle. *Foreign Affairs*, 73, 62–78.
- Krugman, P. (1997, August 18). What ever happened to the Asian miracle? *Fortune*.
- Krugman, P. (1998). What happened to Asia? Paper presented in a conference in Japan in January 1998. Retrieved from Krugman's home-page on the Internet.
- Lai, M. H., & Lo, L. N. K. (1999). Hu-Gang jiaoyu fazhan suo mianlin de tiaozhan yu xuanze [Challenges and choice in the educational development of Shanghai and Hong Kong]. [Special combined issue: Conference on Restructuring the Knowledge Base of Education in Asia, Hong Kong, February 12–14, 1998]. *Education Journal*, 26(2) & 27(1), 263–285.
- Levin, H. M. (1997). *Accelerated education for an accelerating economy*. Occasional paper No. 9, Education Policy Studies Series. Hong Kong: Hong Kong Institute of Educational Research, The Chinese University of Hong Kong.
- Levin, H. M. (1998). *Education and the ability to deal with change* (Occasional Paper No. 15, Education Policy Studies Series). Hong Kong: The Chinese University of Hong Kong, Hong Kong Institute of Educational Research.
- Lo, L. N. K. (1994). Development and education: Reflection on a contentious field of inquiry. *Education Journal*, 21(2) & 22(1), 205–216.
- Lo, L. N. K. (1995). Modernization, social progress, and the development of higher education in Hong Kong. *ACUCA Exchange*, 5(2), 41–59.
- Lo, L. N. K. (1997). Policy change and educational development in Hong Kong. *The American Asian Review*, 15(4), 325–370.
- Lo, L. N. K., Tsang, W. K., Chung, C. M., Chung, Y. P., Cheng, Y. C., Sze, M. M. P., Ho, S. C. E., & Ho, M. K. (1997). *A survey of the effectiveness of Hong Kong secondary school system*. Hong Kong: The Chinese University of Hong Kong, Faculty of Education. Mimeo.
- Mak, G. C. L., & Lo, L. N. K. (1996). Education. In Y. M. Yeung and Y. W. Sung (Eds.), *Shanghai: Transformation and modernization under China's open policy* (pp. 375–398). Hong Kong: The Chinese University Press.
- Powers, P. J. (1992). Toffler's powershift: Creating new knowledge bases in higher education. Paper presented to State of Nebraska State College's Faculty College, Creighton University, Nebraska, USA.
- [QAIR] Education Department (1998). *Quality assurance inspection: Annual summary report 1997/98*. Hong Kong: Education Department.
- Ramo, J. C. (1998, January 12). China gets wired. *Time*, 32–39.

- [SKSS] "Shanghai 'jiuwu' shehui fazhan wenti sikao" ketizu [Working group for research on the reflection of issues in Shanghai's societal development during the "9th Five-year Plan"]. (1997) *Shanghai kuashiji shehui fazhan wenti sikao* [Reflection on issues in Shanghai's societal development which straddle the centuries]. Shanghai: Shanghai Academy of Social Science Press.
- Sweeting, A. (1997). Education policy and the 1997 factor: The art of the possible interacting with the dismal science. In M. Bray & W. O. Lee (Eds.), *Education and political transition: Implications of Hong Kong's change of sovereignty* (pp. 25–39). Hong Kong: The University of Hong Kong, Comparative Education Research Centre.
- [Three Centers] "Shanghai jiancheng 'san ge zhongxin' shehui shiye fazhan guihua yanjiu" ketizu [Working group for research on developing social facilities for the construction of Shanghai to become the "Three Centers"]. (1994). *Shanghai jiben jiancheng 'san ge zhongxin' shehui shiye fazhan guihua yanjiu baogao* [Research report on a plan to develop essential social facilities for the construction of Shanghai to become the "Three Centers"]. Shanghai: Author.
- Tsang, W. K. (1994). Development, education and the state in Hong Kong: A research agenda for comparative study. *Education Journal*, 21(2) & 22(1), 5–27.
- Tsang, W. K. (1997a). *Jiaotonghui diqihao baogaoshu de shenceng yiyi: Shichang xiaoli de mobai* [The deeper meaning of the seventh report of the Education Commission: The cult of market efficiency] (Occasional Paper No. 3, Education Policy Studies Series). Hong Kong: The Chinese University of Hong Kong, Hong Kong Institute of Educational Research.
- Tsang, W. K. (1997b). Zixun jingji de laogong zhisu yu xuexiao jiaoyu zhisu [Labor quality and quality of schooling in informational economies]. Paper presented at the Conference on Educational Cooperation and Development in Shanghai and Hong Kong, East China Normal University, Shanghai, October 28–29, 1997.
- [UGC] University Grants Committee of Hong Kong. (1996). *Higher education in Hong Kong*. Hong Kong: Government Printer.
- Vogel, E. F. (1979). *Japan as number 1: Lessons for America*. Cambridge, MA: Harvard University Press.
- White, G. (Ed.). (1988). *Developmental states in East Asia*. London: Macmillan.
- [World Bank] The International Bank for Reconstruction and Development. (1993). *The East Asian miracle: Economic growth and public policy*. New York: Oxford University Press.
- Xie, A. B., & Tan, S. H. (1997). *Quanguo yiwu jiaoyu xuesheng zhiliang diaocha yu baogao* [Investigation and report on student quality in compulsory education of the country]. Shanghai: East China Normal University Press.