Quality and Equality in the Educational Development of Hong Kong and the Chinese Mainland

Leslie N.K. Lo
The Chinese University of Hong Kong

The simultaneous pursuit of excellence and equity in educational development has tested the wisdom of educators and policy-makers since the advent of mass schooling. Implementation of educational policies, which aimed to facilitate such pursuance, has often caused confusion among teachers and school administrators who are charged with the responsibilities of improving school education for our children. The balance of quality and equality in schooling, therefore, is dependent on the articulation of commonly shared values within the community and the initiation of appropriate political and social actions. In the recent past, "quality education" has become a familiar slogan in the education enterprises of both Hong Kong and the Chinese Mainland. While it carries different meanings in the two societal contexts, efforts to improve the quality of schooling have not been accom-

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Correspondence concerning this article should be addressed to Leslie N. K. Lo, Hong Kong Institute of Educational Research, The Chinese University of Hong Kong.

panied by measures to safeguard equity. This paper is an attempt to illuminate major educational issues in Hong Kong and the Chinese Mainland with reference to quality and equality in education — stratification of schools and students, methods of improving the quality of schools, and relevance of education. It is argued that the elitist approach of old can hardly satisfy the requirements of a new information age. Because of the emergence of a new set of developmental requirements in the information age, both societies have to dig deep into their own pools of talents and avail opportunities to all children and youths to develop their potentiality to the fullest. In this endeavor, the major function of schooling to nurture talents for development becomes more obvious than ever before. The advent of information age, therefore, demands a convergence of excellence and equity in education.

Key words: education; Hong Kong; China

In the recent past, issues related to quality of education has been a major concern in the education enterprises of both Hong Kong and the Chinese Mainland. In their quest to offer their children and youths more and better education in the post-compulsory era, educators and policy-makers in both societies have attempted to finds effective means to improve the conditions of schooling. "Quality education", a term which carries little epistemological meaning, has been used by policy-makers in both Hong Kong and the Chinese Mainland to denote positive changes toward excellence in their education systems. Amidst the rhetoric of the "quality education" campaign, an essential debate on "equality in education" has been conspicuously missing, thus casting doubt on the policy-makers' understanding of the meaning of educational reform.

In any society that claims to uphold justice in its governance, considerations for quality and equality of education are actually two sides of the same policy coin. Quality of education is concerned with matters that can enrich and improve the process of education. Equality of education is concerned with the fair distribution of resources and opportunities that affect the life chances of students and the general well being of society. What

factors affect the quality of what kind of education at what juncture in whose life in what societal context should be the concerns of those policy-makers who are serious about the pursuit of the common good through education development.

This paper is an attempt to illuminate major educational issues in Hong Kong and the Chinese Mainland in reference to quality and equality in education. Exploration of such issues as stratification of schools and students, methods of improving the quality of schools, and relevance of education in the information age will be used to support an argument that any formulation of policy to improve the quality of schooling should treat issues of equity as its prime concerns lest such policies become guidelines for a futile exercise in public administration.

Quality and Equality in Education

Quality of Education

Examination of the nature of "quality" as an independent concept carries little meaning outside of context. In the context of education, "quality" denotes discernible marks and indications by means of which the state of educating can be identified. Education offered in a society or by a school can therefore be of high or low quality. Moreover, "quality" is a relative concept that may mean different things to different people at different times.

As in other societies, educators in Hong Kong and the Chinese Mainland have associated "quality" with that which is good and worthwhile (Harvey & Green, 1993, p. 11). In Hong Kong, the campaign for "quality education" is a concerted effort to encourage schools to strive for something better, to prove their worth, and to nurture citizens who can contribute to societal development and allow her to remain economically competitive in the post-colonial era. In the Chinese Mainland, "quality education" has been used as an antithesis to "examination-led education". While its social and economic utility is mentioned, the focus of debate on "quality education" has been on the broadening of concerns in school education to reflect the all-round development of students (for example, Qi & Jin, 1996, pp. 23-26).

In both societies, "quality education" was proposed to address inadequacies in the existing systems of schooling. In Hong Kong, concerns over the quality of the teaching profession (ECR5, 1992), language proficiency of students (ECR6, 1996), consequences of compulsory education (BoE3, 1997), underdevelopment of early childhood education (BoE1, 1994), special needs education (BoE2, 1996), and the performance of schools (ECR7, 1996) have led to the emergence of a plethora of reform proposals that challenge the education profession to set clear priorities and strategies for implementation (Lo, 1997a, pp.331-5). In its latest policy report, the Education Commission, its highest advisory body in education, outlines its views on "quality assurance", introduces the concept of "value-added achievement", and suggests sets of quality indicators to measure the schools' performance (ECR7, 1996, pp.8-13). In the Chinese Mainland, concerns over regional disparity, scarcity of resources for education, narrowly focused curricula, and salient problems of compulsory education have also led to important policy changes (for example, FZGY, 1993; Lo, 1993; Pepper, 1995; Mok, 1997).

No matter how policy-makers and educators in both societies perceived "quality education" and its utility, they would eventually have to show that the implementation of strategies for "quality education" would bear fruit for something that is good and worthwhile. In stressing a more balanced approach to education, they will also have to provide evidence of student development that can transcend the most conventional of measures of educational quality — academic achievement of students. After all, the government of Hong Kong has invested hundreds of million dollars of her tax-payers' money into the "quality education" campaign. The Chinese government has also invested heavily in the quest for "quality education" by lending political legitimacy to the movement.

Observations gathered from schooling in Hong Kong and the Chinese Mainland yield a general impression that the education enterprise has become much more conscious of efficiency, choice, competition, and outcome. The following depiction should not be novel to educators in the two societies: Competition based on inequity is the new dynamic. Students are expected to compete with each other, and so is school as organizations. This dynamism of competition is expected to produce qualitative individual achievements and an increased level of quality of the schools in general...the new foci, seem to be: individual choice, competition, quality, effectiveness, and efficiency. (Tjeldvoll, 1997, pp. 328-9)

Sounds familiar? It is actually a description of the state of affairs in Scandinavian education. "Quality education", as understood in the neo-conservative ideology of Reagan and Thatcher (Nation at Risk, 1983, and 1988 Educational Reform Act, respectively), has won the ready attention of an international audience in education which was concerned over the effects of mass education. As a former British colony, it is understandable that Hong Kong's educational policies have been heavily influenced by the dominant ideology of the colonizer. The trend toward efficiency, competition, and choice are characteristic of a massive effort to wrestle power and control away from the teaching profession and deposit it into the hand of a state desperate for support from the local populace. A parallel development in the Chinese Mainland manifests similar trends but for different political reasons. It has stemmed from a concerted effort to alleviate the burden of the central government in educational finance without costing it the control of education.

In their endeavor to improve the quality of education, policy-makers and educators in both societies should benefit from a thorough consultation with the many different ways through which "quality education" can be understood and achieved. Whether "quality education" implies a strive toward excellence or passing a set of required standards, equates with problem-free processes or value for money products, indicates fitness for purpose outcomes, or effects transformation of participants through their empowerment (Harvey and Green, 1993, pp. 11-27), are but several of the many dimensions of "quality education" (for example, Tam, 1998; Fuller, 1994). The realization of "quality education", therefore, does not necessitate the singular application of benchmarking of teachers' ability, quality

assurance inspection of schools, or assessment of performance by students, teachers, and schools.

Equality in Education

Equality in education has long been considered along with the principle of equality of educational opportunity that stipulates that "so long as individuals are afforded equal opportunities to obtain an education, inequalities in educational results are morally permissible" (Howe, 1994, p.2001). For proponents of equality of educational opportunity, support can be readily found in the philosophies of utilitarianism and liberal egalitarianism. To the utilitarianists, if equality of educational opportunity can maximize the common good, then it should be morally acceptable. To the liberal egalitarianists, equality of opportunity in education is required so that an individual is allowed to have a fair chance to enjoy a reasonable amount education, which is a form of society's goods. Both schools advocate state intervention in education so that equality of educational opportunity can be ensured (Howe, 1994, pp.2002-3; Rawls, 1972). To an liberal egalitarianist like John Rawls (Rawls, 1972, p.60), for example, inequalities in the distribution of goods in society can be justified if they benefit the least advantaged:

...resources for education are not to be allotted solely or necessarily mainly according to their return as estimated in productive trained abilities, but also according to their worth in enriching the personal and social life of citizens, including here the less favored (Rawls, 1972, p.107).

...greater resources might be spent on the education of the less rather than the more intelligent, at least over a certain time of life, say the earlier years of school (Rawls, 1972, p.101).

In arguing for a fair opportunity for every individual to receive a reasonable amount of education, and with a view to ensure that the least advantaged would have this opportunity, Rawls' views on equal opportunity provide further justification for the practice of "positive discrimination" in education.

Equality in education can be understood from many perspectives. If schooling can be viewed as a continual process that operates as a mechanism for selection, then equality in education can be viewed from the perspectives of access, survival, output, and outcome (Farrell, 1997). Equality of access refers to the probabilities of being admitted into school. Equality of survival refers to the probabilities of staying in school to some defined level. Equality of output refers to the probabilities of learning the same thing at the same level. Equality of outcome refers to the probabilities of living similar lives as a result of schooling (Farrell, 1997, p. 475).

In Hong Kong and the Chinese Mainland, equality of educational opportunity has been generally ignored in recent campaigns for "quality education". While "quality education" and "equality of educational opportunity" are not mutually exclusive concepts, discussions on the latter has been excluded from policy reports on educational reform in both societies. Among the many documented discussions on Hong Kong's educational reform, equality of educational opportunity has hardly been addressed. Vague and indirect reference to equality in education was made in very few policy reports, notably the reports on special education (BoE2, 1996) and on the review of compulsory education (BoE3, 1997). In the Chinese Mainland, the Maoist egalitarianism of old (for example, Hu, 1974; Chen, 1974) which was shunned as exemplars of excellence in education were lauded as models for emulation. As they rush to initiate their "quality education" campaigns, neither society seems to have remembered the educational needs of their less favored members.

To be sure, issues in equality of access and equality of survival are no longer major concerns in the education systems of Hong Kong and the majority of major cities in the Chinese Mainland. Both societies can claim impressive access rates to schooling at the primary level and junior secondary level. Official figures suggest that the survival rates during the nine-year period of compulsory education also are acceptable. For the Chinese Mainland, the more salient equality issues are regional disparity in educational development, urban-rural differences, disparity in the quality of edu-

cation received ("equality of output" referred), and disparity in educational outcome, referred here as academic achievement as well as life chances of graduates. For Hong Kong, the more crucial equality issues are disparity in the quality of education received and disparity in educational outcome.

In both societies, disparities in education are tolerated quietly for the enhancement of "quality education". In Hong Kong, the search for performance indicators, the establishment of checklists for assessment, the recruitment of officials and professionals into "quality assurance inspection" teams, and the mass shipment of computers into schools for technologyaided instruction have been new phenomena in its school system. In the Chinese Mainland, the frequent use of slogans for "quality education" in academic books, journals, and the press, the issuance of administrative orders decreeing all-round development of students, the construction of tests aiming to tag value to students' moral aptitude and civic competence, and the establishment of model programs and model schools for emulation have signaled a departure from examination-led schooling. In the campaigns for "quality education", policy-makers and the education professions in both societies seem to have forgotten about the pursuance of equality in education and the needs of the disadvantaged. For example, both systems have tremendous problems with academic under-achievers; but, aside from sporadic remedial efforts, there has been no comprehensive approach to meeting the challenges of learning difficulties in schools. In Hong Kong, most of the recommendations of a Board of Education subcommittee on special education have been shelved without any reasons given for government inaction. In the Chinese Mainland, considerations for meeting the special learning needs of students have been mostly excluded from the mainstream of schooling because they were viewed as being under the exclusive purview of the special schools and special education programs.

The tension between quality and equality is often compounded by the aspiration of staying ahead of competitors in international affairs. This kind of tension is not confined to the educational enterprises of Hong Kong and the Chinese Mainland alone. As a matter of fact, the tension between competition and equality has been a long-standing issue in educational planning and policy for close to a century:

The tension between, on the one hand, the need for competition, and on the other, the concern for equality of opportunity: this is a classic issue, which has been facing both economic and social policy-makers and educational policy-makers since the beginning of the century. Solutions have sometimes been proposed but they have never stood the test of time...the pressures of competition have caused many of those in positions of authority to lose sight of their mission, which is to give each human being the means to take full advantage of every opportunity (Delors et al., 1996, pp.17-18).

Disparity and Segregation in the School Systems

It has often been assumed that money can buy "good education". This assumption is true to the extent that money can pay for school buildings, purchase necessary equipment and learning materials, and secure the service of teachers. Beyond that, the impetus for achieving "good education" is more wisdom and will than money. Money is therefore a necessary but not an adequate measure of educational resources. A good mix of competent teachers, cooperative students, supportive parents, and support for special educational needs in school affords a favorable condition for schooling. They constitute the non-material resources for schooling. Whether all schools can have a fair share of these material and non-material resources is not only an equality issue but a quality issue as well. Well-endowed schools and "under-nourished" schools do not blend well into a calculation of quality.

Educational Disparities in Hong Kong

In Hong Kong, allocation of material resources to the schools is not an issue, especially when the mainstream subsidized schools are the focus of discussion. Concern over the uneven distribution of educational opportunities is related to the non-material aspects of resources, which are especially evident in the structural segregation by achievement and family background, two intimately related factors in the calculation of school performance. The calculation of operational costs for the subsidized schools refers to the same formula. Thus the amount of public money allocated for the maintenance of school operation varies only according to its size of student population.

Disparity among Hong Kong's schools should be understood in terms of their geographic locations (what kind of neighborhood are they situated in?), socio-economic status of parents, prestige of school, and perceived educational outcome (life chances of graduates as influenced by peers and alumni network). By choice, parents send their children to a school because of its good reputation. By official design, parents have to send their children to a school that is situated close to their residence, if they do not have the wherewithal to get their children admitted to the top schools which may have discretionary places for admission. The truth of the matter is that most desirable schools are situated in desirable neighborhoods. The least desirable schools are situated in the poor neighborhoods of the city and in newly constructed towns where public housing projects are built.²

Another source of inequality in education is the clear demarcation between secondary schools which use Chinese (Cantonese or putonghua) as the medium of instruction, on the one hand, and English as the medium of instruction, on the other. As the preferred language, English is not only valued in the business and official circles, but is also a reflection of the academic strengths of schools which are allowed to retain it as the medium of instruction. The 1997 policy that required the majority of subsidized secondary schools to use Cantonese as a medium of instruction naturally led to an outburst of criticisms. In retrospect, problems in the medium of instruction policy rested not with its nature but with its clumsy execution. By allowing 114 of Hong Kong's better secondary schools to retain English as a medium of instruction, the government was actually implementing a policy that would cause further segregation of the school system. Objections to the policy stemmed not so much from pedagogical arguments as few could argue that instruction through the mother tongue could not benefit teaching and learning. Rather, considerations for equality of status and life-chances formed the basis of criticisms. From the perspective of those schools that were not amongst the 114 schools that were allowed to retain English as a medium of instruction, the immediate relegation of status was inevitable. In a society where English is a language of mobility, academic

high achievers will naturally seek entrance into the 114 schools. Students are keenly aware of the utility of English. They know that their life chances are dependent on it. It is not surprising, therefore, that many parents viewed Cantonese as a medium of instruction more suitable for others' children in other schools. A public opinion survey conducted in the spring of 1997 revealed that while over one-half of those parents surveyed accepted Cantonese as a medium of instruction, over 60 percent hoped that their children could study in English-speaking schools (YZZK, 1997, p.10). Moreover, an analysis of opportunities of enrollment in schools which adopts English as a medium of instruction reveals that there are significant disparities among school districts, and the farther away one lives from the "old school districts" (where some of Hong Kong's best schools are situated), the lesser is one's chance of enrolling in the so-called "famous schools" (Tsang, 1998, pp.14-15).

From the perspective of equality in education, an argument can be put forth that the uneven distribution of educational opportunities, especially in the varying kinds of education that students received in schools, has exacerbated existing problems of inequality that traced their origins to: structural segregation by types of secondary schools (grammar=422, technical=19, prevocational=27, practical=3, and skills opportunity=4 schools); unfair allocation of smaller share of public funds to low academic achievers who were assigned to fill government "bought quota" in private secondary schools (Tsang, 1997, pp.13-14); growing disparity in family income and thereby causing further uneven distribution of wealth in society;³ and an absence of positive discrimination measures in favor of low academic achievers and their schools.

Educational Disparities in the Chinese Mainland

Shortage of resources has been the major impediment of educational development in the Chinese Mainland. Thus the material aspects of resources (what money can buy) have occupied a central place in major debates on education. In an education system which experiences acute financial

difficulties, but one which can provide handsome provision and allows great exceptions for its best schools, equality in education can best be understood in context of financial investment in schooling.

That the Chinese Mainland is a society of disparities is not a novel proposition. Economic and social disparities, as well as disparities in education, have been well documented (for example, Hu, Wang, and Kang, 1995; Lo, 1993). Regional disparities and urban-rural disparities within region are commonly used to portray the developmental gaps that exist within that vast country. In terms of the growth rate of higher education, educational expenditure *per capita* for compulsory schooling, and student dropout rate during the compulsory years of schooling, the provinces and major cities along the rich eastern seaboard have accumulated a clear advantage over the rest of the country. If educational finance is a zero-sum game in the Chinese Mainland, then it can be assumed that the development of education in the coastal provinces is advanced at the expense of poorer inland and western provinces.

Since 1984, higher education in the eastern region of the Chinese Mainland has consistently registered higher growth rates in number of institutions, student enrollment, and average size of institutions than the rest of the country (Table 1). Disparities are more apparent when the provinces of Hubei, Sichuan and Shaanxi (generally considered as educationally "stronger" provinces) are excluded from the calculation for the rest of China.

Table 1 Number of Institutions, Student Enrollment, and Average Size of Institutions by Region, 1984,1989, 1994, and 1996

Regions	1984	1989	1994	1996		
Eastern region						
Number of institution	s 491	579	566	531		
Student enrollment	764,000	1,149,934	1,530,370	1,663,704		
Size of student						
population per						
institution	1,556	1,986	2,703.8	3,133.2		
Growth in size	+4	30	+717.8	+429.4		
Growth rate	+	27.6%	+36.1%	+15.9%		
Rest of China	, , , , , , , , , , , , , , , , , , , ,					
Number of institution	s 411	500	514	501		
Student enrollment	632,000	932,177	1,268,269	1,357,375		
Size of student						
population per						
institution	1,537.7	1,864.4	2467.4	2,709.3		
Growth in size	+3	26.7	+603	+241.9		
Growth rate	+	21.2%	+32.3%	+9.8%		
Rest of China, excluding Hubei,						
Sichuan and Shaanxi						
Number of institution	s 266	338	344	339		
Student enrollment	383,000	562,783	772,862	824,163		
Size of student						
population per						
institution	1,439.8	1,665	2,246.7	2,431.2		
Growth in size	+2	25.2	+581.7	+184.5		
Growth rate	+	15.6%	+34.9%	+8.2%		

Sources: 1984 figures of number of institutions and student enrollment extracted from People's Republic of China, State Statistical Bureau compl. Zhongguo tongji nianjian 1985 ['Statistical Year-book of China, 1985'] (Hong Kong: Economic Information & Agency, and Beijing: China Statistical Information and Consultancy Service Centre, 1985), p. 584; 1989 figures in Statistical Year-book of China, 1990, pp. 703, 729; 1994 figures in Statistical Year-book of China, 1995, pp. 599, 604. 1996 figures in Statistical Year-book of China, 1997, pp. 649, 654.

As far as educational expenditure *per capita* is concerned, the size of financial investment in the education of children and youths in the compulsory years has varied significantly from rich to poor provinces. By taking the rich province of Guangdong, medium-income province of Hubei, and poor

province of Guizhou as examples, the contrast in educational investment is obvious from the 1995 figures provided in Table 2 below. For the urban areas, the average cost per student in Guangdong's primary schools was 214.6% of that in Hubei and 396.8% of that in Guizhou. On the junior secondary level, the average cost per urban student in Guangdong was 170. 7% of that in Hubei and 354.2% of that in Guizhou.

Table 2 Average Educational Expenditure Per Student in 1995

		Junior secondary school	Primary school
Total		918.50	476.25
Guangdong	urban area	1536.63	857.33
	rural area	1074.47(69.9%)	707.46(82.5%)
Hubei	urban area	900.31	399.50
	rural area	612.65(68%)	352.67(88.2%)
Guizhou	urban area	433.83	216.06
	rural area	303.08(69.8%)	192.33(89%)

Sources: 1995 figures of rural and urban areas extracted from People's Republic of China, Education Bureau, and State Statistical Bureau compl. Zhongguo jiaoyu jingfei tongji nianjian 1996 ['Statistical Year-book of Chinese educational expenditure, 1996'] (Beijing: China Statistical Publisher, 1996), pp.278-281, 284-287.

Urban-rural disparity can be found in the development of senior secondary education within a province. Again taking Guangdong, Hubei, and Guizhou as examples, figures in Table 3 below shows that cities, counties and towns have a much higher percentage of senior secondary schools and higher enrollment percentage on this level of schooling than the rural areas. With the exception of the province of Hubei, urban schools in rich Guangdong and poor Guizhou enjoyed much more favorable teacher-student ratio than their rural counterparts.

Table 3 Urban-rural Disparities within Province

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		Percentage of	Student	Student-				
		upper secondary	enrollment	teacher				
		schools in the		ratio				
		regular secondary						
		school sector						
Guangdong	Total	21.8%	12.1%	19.8:1				
	urban areas	51.4%	24.7%	16.4:1				
	counties and towns	25.1%	16.2%	19.8:1				
	rural areas	12.2%	5.6%	21.2:1				
Hubei	Total	15.7%	15.6%	15 :1				
	urban areas	32.3%	27.4%	13.5:1				
	counties and towns	36.6%	39.3%	14.2:1				
	rural areas	5.5%	4.6%	16.1:1				
Guizhou	Total	18.3%	11.9%	17:1				
	urban areas	34.6%	26.3%	12.3:1				
	counties and towns	43.9%	30.8%	15.4:1				
	rural areas	8.3%	2.4%	19.2:1				

Sources: 1996 figures of number of schools, student enrollment, and teacher student ratio extracted from People's Republic of China, State Statistical Bureau compl. Zhongguo tongji nianjian 1997 ['Statistical Year-book of China, 1997'] (Beijing: China Statistical Information and Consultancy Service Centre), pp.655, 656, 660.

From the above depiction of disparities in the education system of the Chinese Mainland, it can be expected that the dropout rates in poor provinces would be higher. Indeed, a survey of dropout rates in 8 counties in Yunnan and Guangxi (both poor provinces) has yielded alarming results. For example, the combined dropout rate on the secondary level is 4.69 percent in 1995, with 6.6 percent of secondary students dropping out of school in that year (Ai, Mong, & Postiglione, 1995).

If the present trend toward "quality education", as understood in the Chinese context, is allowed to developed without significant adjustment, then educational inequality will be further exacerbated. The status quo in educational inequality within region is reflected by urban-rural disparity,

favorable treatment of key schools, contextual disparity in the quality of schooling offered, disparity in academic achievement, and inequality of educational opportunity as determined by the ability to pay extra for school fees.

The new development in devolution of responsibility in educational investment has posed a serious challenge to local educational authorities. Through devolution, local authorities have been expected to bear an increasingly larger share of expenditure for schools. As the percentage share of state appropriated funds for education continues to decline, local authorities are hard pressed to come up with necessary funds to sustain operation of their schools. Under such circumstances, localities with more means to raise funds for education should do much better than the poorer ones (Lo, 1993). Moreover, as figures in Table 4 below suggest, school fees are claiming an increasingly larger percentage share of non-state appropriate expenditure (from 4.21% in 1990 to 10.72% in 1995). This signals a growing tendency that favors those who can pay for their schooling.

Table 4 The Structure of Non-State Appropriate Expenditure in 1990-1995

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				(unit: percentage)
	Donations	Tuition fees	Private schools	Others
1990	7.98	4.21		2.28
1991	8.59	4.42		2.53
1992	8.03	5.07		2.85
1993	6.62	8.22	0.31	2.98
1994	6.65	9.87	0.72	3.95
1995	8.67	10.72	1.08	4.37

Source: Financial Department, Education Bureau, and Shanghai Institute of Human Resources Development (1997). Zhongguo jiaoyu jingfei niandu fazhan baogao 1996 ['Report on the development of annual educational expenditure in China, 1996']. Guaodeng jiaoyu chubanshe ['Higher Education Publisher'], pp. 5-6.

As schooling in the poorest regions continues to rely on funds raised by a variety of philanthrophic organizations for maintenance, the key schools and luxurious private schools provide a glaring contrast to the "under-nourished" schools in the educational landscape of the Chinese Mainland. The

key schools are characterized by high academic achievement, numerous prizes won in top competitions of all kinds, and near perfect entry rate to preferred schools on a higher level. The luxurious private schools are characterized by their marbled reception halls, superior facilities, and promises of success. The uneven distribution of opportunities is phenomenal if one focuses on the quality of education offered by the well-endowed and "under-nourished" schools.

Segregation

In their recent drive toward "quality education", neither Hong Kong nor the Chinese Mainland has really addressed the structural problem of segregation in academic achievement among students and schools. For ease of illustration, the city of Shanghai, arguably the most developed metropolis in the Chinese Mainland, will be used to depict this structural problem (Lo, 1999, pp. 65-67).

The structural segregation of academic achievement in Hong Kong is evident in the findings of a research project on the effectiveness of secondary schools (school N = 50, and student N = 30,000). By comparing the test scores of students in schools belonging to different achievement groupings, researchers found significant differences in the academic achievement of students in different groupings. Moreover, research findings also suggest that the difference in academic achievement of students in the academically strongest and weakest schools has become larger.⁴ In comparison with available data for societies of similar stage of economic development, ability segregation among students in the Hong Kong sample is significantly higher than similar accounts of segregation in such societies as the US, UK, Canada, and Singapore (Lo et al., 1997b, p. 247; Tsang, 1997, pp. 22-23; Ho and Willms, 1996). It is apparent that after two decades of compulsory schooling, educational equality has only been achieved in quantitative terms. In terms of quality, Hong Kong has yet to avail schooling of high quality to all. Thus far, positive discriminatory measures to rectify inequality have only been introduced sporadically and their effects are not discernible.⁵

In Shanghai, the structural segregation of academic achievement is reflected mainly by the differences in test scores between students in the metropolitan area and in neighboring rural areas. The same disparities are found in the test scores of students attending "key" schools and ordinary schools. When the achievement of final year students at two junctures during the 9year period of compulsory education was measured (primary 6, N = 1317, and junior secondary 3, N = 1345), the difference between the test scores of students in urban and rural areas, and that between students in "key" schools and ordinary schools was significant. In an achievement test that embodied four major subjects in the primary schools, viz., language, mathematics, morals (including artistic ability) and scientific knowledge (including labor education), students in the urban areas only scored 1.84 percentage points higher than those in the rural areas. In the same test, however, students in the "key" schools maintained 11.21 percentage points over those in the ordinary schools. On the junior secondary level, the average test scores of urban students in seven major subjects (language, mathematics, English, scientific knowledge, artistic ability, morals, and skills related to labor) were 20.87 percentage points higher than the average scores of students in the rural areas. Test scores of students in "key" schools had a 23.44 percentage point advantage over that of students in ordinary schools (Xie and Tan, 1997, p. 100).

The process of selection inherent in both school systems also undermines the effectiveness of the present endeavor to raise the quality of education. Students in both societies have to prepare themselves early for the keen competition into higher education. To get themselves into universities, students attempt to gain entry into the "right" schools in order to enhance their chances — "famous" secondary schools in Hong Kong and "key" secondary schools in the Chinese Mainland, both of which have a history of high entry rates into higher institutions. To prepare their children for these prestigious schools, parents seek every opportunity to send their children to the "right" primary schools by preparing their children for entrance tests and using personal connections. So long as university admission is determined solely by examination results, students would be under

pressure to prepare for tests. It is little wonder that, like so many other examination-led systems of education, private tutoring and tutorial schools in Hong Kong and certain major cities of the Chinese Mainland have begun to develop into an alternative system of learning. The difference between an ordinary school and a tutorial school is that, for a fee, the latter provides a more focused training for the ordeals of examinations.

Methods of Improving the Quality of Schools

Improvement of school quality is sought in every society. As it is pointed out earlier, "quality education" carries with it different contextual meanings, and even within the same context, it may mean different things to different stakeholders. The schools, as a major laboratory for the experimentation of ideas and practices of quality education, are being seen as the major vehicle for the realization of "quality education". Improvement of school quality can be approached from a variety of ways: set clear goals and monitor accomplishment, initiate careful planning and implementation through smooth and efficient process, ensure cost-efficiency, stress problem-solving, meet the needs and expectations of stake-holders, effect participatory decision-making, improve teaching and learning, guarantee fair appraisal and assessment, develop mechanisms for self-evaluation, organize and sustain staff development, and promote image of school. The crucial factor for success is congruence between the means for improvement and the culture of the school.

In the Chinese Mainland, means to improve school quality have attracted much official and professional attention. In her major cities and rich provinces, where enrollment and dropout rates are no longer major issues, emphasis has been placed on the improvement of teaching and learning as well as reform of school management. In the countryside and poorer provinces, challenges posed by non-enrollment, high repetition and attrition rates, and scarcity of material resources and qualified teachers have confined the imagination and energy of educators and officials to solving problems of provision and fund-raising.

The most obvious move toward the reform of school management is the clearer differentiation of roles between the teaching professionals and party functionaries in school, and between the schools and the government's education bureaus. Under the "principal responsibility system" (xiaozhang zerenzhi), the school principal, at least in theory, is to be fully responsible for all aspects of work in the school. The role of party functionaries is to strengthen the role of the Chinese Communist Party and to engage in ideological and political work in school. As a grass-roots political organization, the party cell of the school "is not an organization in the school's structure of authority" (Li, Feng, & Hua, 1998, p. 5). Moreover, rather than treating schools as an integral part of the administrative structure of government, the role of government bureaus in education should be confined to planning, coordination, supervision, and service (Li, Feng, & Hua, 1998, p. 18). The success of school-based reform is actually dependent upon how clearly the roles of the school, government and party are differentiated in practice. The feasibility of many suggestions for improvement of the principal's leadership, decision-making on personnel matters, supervision of staff, assessment of performance, and school-community relations hinges on the degree of freedom that the schools may have in managing themselves. However, in a culture where school administration has been based on the principles of centralized control, it should take some time before a system of authority, responsibility and accountability could prove its efficacy in the management of schools in the Chinese Mainland.

The large number of publications on the reform of teaching and learning suggests that much have been done in this area of work. This is especially true for schools in the major cities (for example, SZJS, 1997). For example, the re-designing of subject curricula, writing of new instructional materials, new approaches to the learning of English and social studies, etc., are some of many achievements in the schools of Shanghai (SZJS, 1997, pp. 15-18). School principals are urged to become research-oriented, so that they can better understand their students and teaching and learning in their schools. (Wang & Chen, 1997, pp. 10-12) There is an on-going

debate on curricular reform and on alleviating the heavy academic burden on students. There is also a continual search for new patterns of teaching and learning to allow more flexibility for teachers and greater student participation in the classroom. However, the effects of these reform efforts seem to have their obvious limits:

Teaching reforms do not seem to have spread as rapidly through the school system and higher education as had been hoped in the early 1980s. Tried and tested methods which emphasize formal learning methods and the acquisition of factual knowledge are widely retained. This can be attributed partly to the conservatism of parents and teachers comfortable with familiar practices, and to deeply held and culturally based beliefs about the role of the teacher and the appropriate nature of teaching and learning. (Lewin, et al., 1994, p. 215)

The prevailing conservatism among teachers and parents may be traced to a hidden suspicion of the true efficacy of new or unconventional methods. In an examination-led system, it is much "safer" for teachers to adhere to methods that have been proven effective in preparing students for examinations. For the parents, who are more concerned with their offspring's chances for success, quality of education is often seen in terms of upward mobility along the educational ladder. An equally serious constraint on reform in curriculum and instruction is the deeply rooted tradition of centralized control by the government. When officials are not completely receptive to new ideas for change, and when innovative methods in school management or in teaching and learning lack official support, the dynamics of conservatism will take over to confront professional wisdom.

"Control" is also the keyword in Hong Kong's endeavor to improve the quality of schools. From the implementation of School Management Initiative in 1991, through the introduction of Target Oriented Curriculum, to the adoption of Cantonese as the medium of instruction for the majority of schools (1997) and the initiation of the on-going "quality education" campaign (1997), control mechanisms were gradually put in place to ensure compliance.

The strategy of introducing an important policy for educational change is simple. Before the establishment of the Education Commission in 1984, the government simply submitted policy paper to top advisory committees for discussion, got them endorsed, sought consent from relevant bodies for necessary financial support, and announced it to schools and public for implementation. During the initial years of the Education Commission, the role of the advisory bodies (including the Board of Education and the Curriculum Development Council) was reactive. Even when these advisory bodies took on a more active role in the 1990s by initiating discussions on educational matters which they deemed to be important, policy formulation and implementation has followed more or less the same pattern as before (Lo, 1997a, pp.336-341). Control is a strong element in the process of policy implementation. The adoption of Cantonese as the medium of instruction, for example, has been a long and arduous process of educational change. However, the chain of events that led to the promulgation of official policy suggests that the government had never relented her control over policy implementation. From the adoption of policy report (ECR4, 1990), to the offer of official advice to schools (1994), to the issuance of "firm guidance" to schools (1994), to the endorsement of yet another policy report on the subject (1996), to the promulgation of policy (1997), official control over the medium of instruction campaign has been maintained (MOIG, 1997). Moreover, a rider for official-led "quality assurance inspection" of schools was included in the most important policy report on the enhancement of quality of education to date (ECR7, 1997, pp. 21, 43, App.E).

Official control aside, other methods are used to improve the quality of schools. School-based management that allowed for more funding flexibility and wider participation in school management was introduced through the School Management Initiative. More flexible methods of meeting the diverse learning needs of students are being attempted through the Target Oriented Curriculum. The overall upgrading of teacher qualifications has begun with new provision for the education of pre-school and primary school teachers. An ambitious project to encourage innovative "bottom-up initia-

tives" from the schools and community was endowed with HK\$ 5 billion and is entitled the Quality Education Development Fund (QEF).

The founding of the OEF was a significant departure from the conventional mode of initiating educational change (ECR7, 1996, pp.31-34). It represents a concerted effort to tap the innovative energy of stakeholders with substantial financial support from the public purse. The QEF, managed by a steering committee consisting of educators, practitioners, and lay persons from the community, have funded projected of varying sizes. These projects ran the gamut from a comprehensive school reform program to the purchase of ball-serving machines for table-tennis practice, and from efforts to enhance the application of information technology in teaching to school principals' visits to the Chinese Mainland. While the QEF has made awards which combined to cost hundreds of millions of dollars, queries concerning its criteria of assessment, transparency of the vetting process, and a lack of constructive feedback to failed projects have been raised in public. In new rounds of selection, the QEF would have to project and maintain its image as a fair judge of quality and a responsible distributor of public funds. For the QEF and the recipients of its funds, the funded projects would have to provide evidence of efficacy that is being referred to as "valueaddedness" in today's policy-making circles.

If the QEF is being viewed as a viable plan of capturing the ideas and insights in a decentralized manner, then the working of the "quality assurance inspection" in schools provides an interesting contrast. "Quality assurance inspection" (QAI) is an idea endorsed by the Education Commission with the understanding that the inspections should be "open and transparent, with a view to identifying the strengths and weaknesses of individual schools, recommending improvement measures and taking appropriate action to assist those under-performing ones." (ECR7, 1996, p.21) The QAI adopted a whole-school approach and recruited a large number of officials, professionals, and practitioners in schools, and laypersons from the community to help in the implementation of the scheme. In the academic year of 1997-98, 26 schools (8 secondary schools, 15 primary schools,

and 3 special schools) were inspected. The scope of inspection was broad, covering such aspects as planning and administration, personnel management, monitoring and evaluation, and teaching and learning. In its first annual summary report release in the autumn of 1998, it was reported that the performance of those schools, which have undergone inspection (by no means a representative sample), was generally acceptable. Among the many performance indicators, school leadership was highlighted as being the strongest area and self-evaluation being the weakest. (QAIR, 1998, p. 4)

The OAI is definitely a mechanism of control. The long inspection process that each of the participating schools had to endure was justified on the promise of post-inspection support from the government. The effectiveness of the QAI, then, will rest with school acceptance of the exercise, which in turn will depend on the government's ability to dispel the suspicion of ill intents. It will also have to defend the choice of performance indicators, to ensure fairness of inspections, to recruit highly competent people into the inspection teams, and to provide timely professional support for the improvement of quality. Given the Herculean tasks ahead, how the QAI could efficiently complete the first cycle of the exercise — to pay inspection visits to all of Hong Kong's schools — boggles one's imagination. At the present speed of operation (26 schools per year), it would require, according to the provisional figures for the number of schools in 1997, over half a century for the teams to visit primary, secondary, and special schools of all types (26/1420 = 54.6). Ours would be a very different world by mid-21st century.

If it can be assumed that money and administrative order can buy or order for quality, then the schools of Hong Kong should be well on their way to achieving good quality. Indeed, the post-colonial government of Hong Kong has invested a huge amount of its taxpayers' money into large projects to enhance the quality of the schools — HK\$ 5 billion for the establishment of the QEF, HK\$2.6 billion for information technology in schools, HK\$1.2 billion for language enhancement, and so on. According

to official estimation, the total investment in education will continue to increase (HK\$ 44 billion in 1999-2000) despite an economic recession (HKSAR, 1998, p.25). Its hefty educational investment notwithstanding, schooling of Hong Kong will continue to be plagued by the structural problem of segregation of students' academic achievement. When it was observed by teachers from overseas that some of our weakest students, rather than practicing their conversational English, "would do better to hone their survival skills and manners so that they can at least hold down a job upon leaving [school]," (SCMP, 8 November 1998, Ag p.1) we should know that the same may be said about these students in other classes with information technology assisted instruction.

How can Hong Kong and the Chinese Mainland help low achievers to regain their confidence and competence is the crucial equality issue that will affect the competitiveness of the two societies in the information age. By addressing this issue in the context of the information society, we also address issues of relevance of education.

Relevance of Education in the Information Age

At the dawn of a new century, it has become apparent to some educators in Hong Kong and the Chinese Mainland that their societies must by conversant with the developmental needs of an information society. (For example, Tsang, 1997b; Min, 1998, pp.7-10) In the information age, economic activities transcend national boundaries toward globalization as a world system of informational economies emerges with its information technology infrastructure. (Tsang, 1997b, p.2; Castells, 1996) In the information society, economic activities are increasingly based in the production and consumption of information and information technologies. The production, acquisition, transformation, and transmission of information become the major economic activities that determine competitiveness. Economic growth and productivity are determined by the application of science and technology in the realms of production, consumption, distribution and exchange (Lo, 1999, p. 69).

The emergence of the information society changes the traditional work patterns and affects people's life chances in a new way. Production becomes information-intensive, and productivity is knowledge-based. Increasingly, the workplace relies on the adaptability, flexibility, and cooperativeness of its workers to operate efficiently. The workers not only need to be competent in information processing, they also need to be able to 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.

As the landscape of the economy and workplace changes in the age of information, education has to respond to this change to remain relevant to the needs of the information society. The nurturing of talents for the information society can no longer rely on an approach that aims to educate a small ruling elite, for 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 (Lo, 1999, p.69). The competitiveness of a society, especially its competitiveness in the global economy, is dependent on the competence and depth of a workforce that can support a great variety of its pursuits. All aspects of societal development will depend on the broad participation of an educated citizenry. Given these requisites, what kind of persons do we need to nurture for the information age? What kind of strategy can foster the nurturing of such persons?

For the purpose of illuminating the attributes of the "new" educated persons for the information age, we can refer to a list of "competencies" proposed by Henry Levin — initiative, cooperation, working in groups, peer training, evaluation, reasoning, problem-solving, decision-making, obtaining and using information, planning, learning skills, and multi-cultural skills. The above list of "competencies" was developed after an examination of attributes that were considered to be critical to the operation of enterprises and occupations that were "high productivity workplaces." To Levin, however, these competencies "were not being developed in schools" (Levin, 1997, p.10).

Levin's doubt about the role of the schools in nurturing the "relevant" competencies for work is applicable to the schooling of Hong Kong and the Chinese Mainland as well. School curricula that are being dominated by the compartmentalized knowledge base of higher institutions set up unnecessarily boundaries between academic subjects. Rather than seeing the subjects as an organic whole that reflects important aspects of human knowledge to be discovered, they are being broken into small pockets of truncated information to be memorized and to be regurgitated in examinations. Instructional approach that is preoccupied with tests and examinations leaves little room for activities, which may nurture creativity. Teachers' efforts to identify and develop hidden potentials of their students are often impeded by tight schedules and an abundance of information to impart. Under these circumstances, it is doubtful that the schools of Hong Kong and the Chinese Mainland are preparing their children for work and citizenship in an information society.

In the new information age, a workforce who can enhance the competitiveness of a society will not be constituted by tired, bookish, and uncreative school and university graduates. In a sense, the examination-led systems of Hong Kong and the Chinese Mainland have excluded from higher education many people with great intelligence and potentiality. This affects the quality of the workforce as well. When the correlation between test scores and later success in life is weak (Levin, 1998), the use of examination results as the sole criterion for university admission should be seriously challenged.

In response to the challenges of the new information age, schools and higher institutions in Hong Kong and the Chinese Mainland will do well to devise a strategy of teaching and learning that can broaden students' intellectual horizon through an association with the vast knowledge base that human-kind has created. Moreover, they should also inculcate flexible learning habits so that their students can renew their knowledge and be able to respond effectively to changing requirements of the workplace. Furthermore, the students' problem-solving abilities should be invigorated so that they

can contribute to a variety of work situations. From the perspective of human capital development, this adjustment of strategy is especially urgent for the schools, for they nurture the future workforce of the society, with or without higher education. If our future workforce were to be constituted by adaptable, flexible, creative, and cooperative people, then their nurturing has to begin now, in the kindergartens and schools.

The challenges of the new information age also require educators and policy-makers in Hong Kong and the Chinese Mainland to reflect deeply into the developmental needs of their societies. In order to foster broader participation of their citizens in developmental endeavors, both Hong Kong and major cities in the Chinese Mainland should dig deep into their pool of potential talents which is, in fact, the sum of all of those children and youths who are studying in their schools. It follows that if, as potential talents of the society, some students need extra help from the community, then it is entirely justifiable to invest a little more in their education. In order to guarantee the competence and depth of their workforces, therefore, both Hong Kong and certain developed areas in the Chinese Mainland can justly adopt positive discrimination measures in education. Only through this can they avail opportunity to all children and youths so that they can develop their potential to the fullest. This is an important equality issue in education that has long been ignored by educators and policy-makers in both societies.

Concluding Remarks

As Hong Kong and parts of the Chinese Mainland approach the new information age, the education system in both societies has to ponder the best approach to nurture new generations of citizens who can contribute competently to societal development. To engage education in the simultaneous pursuit of excellence and equity can be confusing to some educators and policy-makers as the two concepts appear, at least on the surface, not to be in congruence with one another. A survey of educational policies and practices shows that the two societies are actively engaged in the pursuit of "quality education", which amounts to an euphemistic expression of dissat-

isfaction with the status quo. In Hong Kong, "quality education" is seen as an instrument to enhance her competitiveness in international affairs. The search for "quality education" is backed by a policy, lots of money, and bureaucratic support. In the Chinese Mainland, "quality education" is used as an antithesis to "examination-led education" and an embodiment of ideas and practices that may afford an all-round development of students. The pursuit of "quality education" is backed by rhetoric, administrative orders, and professional goodwill of some scholars and educators.

In their search for "quality education", educators and policy-makers in both societies have shown a certain degree of willingness to adopt a more balanced approach to educating. However, the element of control remains strong in endeavors toward "quality education". In Hong Kong, the tendency to measure "value-addedness" of schooling through performance indicators and to study school performance through "quality assurance inspections" is justified in the name of accountability. In the Chinese Mainland, the habit of relying on official direction and control for initiating educational change dies hard. Official definition and directives notwithstanding, the interpretation of what constitute "quality education" is the labor of educational reformers and practitioners who are engaged in the process of change.

The problem with schooling in Hong Kong and the Chinese Mainland rests not with their recent emphasis on quality education. After all, few can argue convincingly 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". Among the many manifestations of inequality, the most prevalent one is the neglect of academically low achievers. Structural segregation in the two education systems has caused an uneven distribution of educational opportunities, which in turn affected students' chances in mobility. The segregation of students by academic achievement in Hong Kong and the assignment of students into the "general' and "vocational" streams of schooling in the Chinese Mainland (Lai & Lo, 1998) are but two of the many examples of inequality in education. The lack of additional

support for low achiever indicates the extent to which policy-makers and stakeholders in both societies are unwilling to address equity issues in education. "How many people are fully aware of the daily realities in Hong Kong's 'blackboard jungles'?" asked a native English-speaking teacher who was recently recruited and assigned to teach in one of Hong Kong's secondary schools for academically low achievers. "Indeed, how many education decision-makers are aware of their role in the very creation of tomorrow's social 'underclasses'?" (Bunce, 1998, p. 9) Perhaps unbeknown to both the policy-makers and stakeholders, it is a society's ability to avail "quality education" to all that will eventually determine its competitiveness in international affairs.

Despite official rhetoric, the present emphasis on "quality education" has not freed the schools in either society from the domination of tests and public examinations. The fallacies of "examination-led" education are familiar to most educators. Suffice to say it here that "examination-led" education does not breed creativity, nor can it help broaden students' intellectual horizon. Examinations have been used as a tool for selection. In the elitist approach to education, they have been used to select a small group of people for further education so that they could become leaders of the community. In the age of mass education, this elitist approach seems dated. In the age of information, it becomes irrelevant. The irony of educational reform for "quality education" rests with the fact that both societies seem ready to seek an alternative approach to "examination-led" education but are too afraid to do so. Faced with the challenges of the information age, the education systems of Hong Kong and the Chinese Mainland seem out of touch with the realities of change.

If "quality education" is seen as an instrument to enhance a society's competitiveness, then policy-makers should address issues of equality in education more expeditiously. As is clearly discernible from the developmental experience of societies where education has been transformed to meet the needs of a global economy, competition in the global village can no longer be won by the wisdom of a selected few. International competi-

tion in the new information age tests not so much the strength of a nation's elite as it does on the competence of its masses. Quality and equality, therefore, are not necessarily mutually exclusive concepts as "quality education" and equality of educational opportunity do not necessarily yield contradictory outcomes.

Note

- 1. In 1997, the net enrollment rate of primary education was 98.9% and the gross enrollment rate of junior secondary education was 87.1% in the Chinese Mainland. In major and medium sized cities, junior secondary education has been "basically universalized". In Hong Kong, nine years of compulsory education for all has been accomplished (Ministry of Education, 1998, p. 5; Howlett, 1998, pp. 141-2, 446).
- From the latest report on school dropouts in Hong Kong, a high percentage of dropouts occurred in schools situated in the newly constructed town. The 1997-98 figure of 1,999 dropouts represents an 8% increase from the previous academic year (Ming Pao Daily, 12 November 1998, B14).
- 3. Between 1997 and 1998, the number of people in the lowest salary bracket (earning HK\$3,000 5,000 per month) have increased significantly. The rates of increase are, 28.7% for those earning HK\$3,000 per month, 10% for those earning HK\$4, 000 per month, and 8.5% for those earning HK\$5,000 per month. The above figures reportedly confirm the growing disparity in family income. (Ming Pao Daily, 9 November 1998, A4)
- 4. In this research project, tests in Chinese, English and Mathematics were administered to Form 2 (8th grade) and Form 3 (9th grade) students of the sampled schools in 2 consecutive academic years (1993, 1994). Scores in the two consecutive tests were compared. The same was done for Form 4 (10th grade) students of the sampled schools. Their public examination (HKCEE) results were secured a year later, and scores were used for comparison. (Lo et al., 1997)
- 5. Before the change of sovereignty in 1997, the government of Hong Kong had attempted to help secondary schools with low achievers by allowing for additional provision. A program to streamline the content of school curriculum for low achievers has also been introduced. However, such efforts are dwarfed by the problems of structural segregation. When it has become increasingly clear

that students experience learning difficulties in very early years of schooling, usually from primary 3 and 4 onward, the present lack of professional support in special needs education in the primary and secondary schools has rendered piecemeal remedial efforts ineffective. (For example, Wong, et al., 1996, pp. 5-8, 5-37)

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