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Trilingual education in Hong Kong primary schools: an overview

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Abstract

Hong Kong is linguistically complex and diverse with three principal languages: Cantonese, English and Putonghua. A substantial debate on the language policies governing the three principal languages has continued for more than two decades among policy-makers and educators. The political transition in 1997 has greatly affected Hong Kong society, including language education. Since then, the HKSAR government has made a series of language policy reforms trying to create a reasonable balance among the three languages in Hong Kong. The policies of 'biliteracy and trilingualism' and 'mother-tongue teaching' are two of the most significant in terms of controversy and impact. They are now guiding the curriculum design in Hong Kong language education. The goal of the former policy is to train Hong Kong people to be truly biliterate (written English and Chinese) and trilingual (spoken English, Cantonese and Putonghua). However, Hong Kong primary schools presently do not have an agreed method for the implementation of trilingual education. After a comprehensive historical review of the development of language education in Hong Kong schools, this study aims to find out how the 'biliterate' and 'trilingual' language policy is currently implemented in Hong Kong primary schools. 155 Hong Kong primary schools participated in a questionnaire survey on how trilingual education is implemented in the schools. The findings suggest that the implementation of trilingual education varied significantly from school to school, and the effectiveness of the trilingual education models varied as well. It is hoped that the findings will help us to gain a better understanding of trilingual education in Hong Kong, and the study could lead to some insightful and theoretical contributions to multilingual education in general.

Keywords: Trilingual education; English; Cantonese; Putonghua; Primary schools; Hong Kong

Introduction

Hong Kong is endowed with a rich linguistic culture because of its geographical location and political history. Since the local population speaks mainly Cantonese (the *lingua franca* in Guangdong Province of China and some neighbouring areas, such as the eastern part of Guangxi province, Hong Kong and Macau) as their first language, and under the British colonial rule English was the prominent language in government, business and education domains, the two languages used in the mainstream of the school system in Hong Kong are Chinese and English. While the written form of Chinese is modern standard Chinese (MSC) written in traditional (unsimplified) script, the spoken form used by students in virtually all schools is Cantonese, the principal language of local Hongkongers.

In addition to being included as distinct subjects in the normal curriculum, the two languages are also used as the media of instruction for other subjects. Before the 1990's, virtually all kindergartens used Chinese (Cantonese) as the language of instruction and taught a rudimentary form of English, largely in response to parental expectations but against the advice of the Education Department ((Government Secretariat 1981), 16). In the primary sector, Chinese was used in all schools with English taught as a foreign language. However, there were a few long-established missionary schools which used English as the language of instruction. The official policy for secondary schools was that the medium of instruction (MoI) should not be rigidly determined by the type of school (e.g. Anglo-Chinese Schools and Chinese Middle Schools), and individual schools were free to use whichever medium of instruction they considered their pupils could cope with; moreover, they might use Chinese and English for different subjects and at different class levels. However, the teaching of Putonghua (or Mandarin), the national language of the People's Republic of China, and its use as a medium of instruction was very restricted before the 1990s (Adamson and Lai 1997; Zhang and Yang 2004).

In preparation for and since the handover in 1997, Putonghua has been promoted in Hong Kong (Adamson and Lai 1997; Zhang and Yang 2004; Kan et al. 2011). In September 1995, the Report of the working group on the use of Chinese in the civil service was published, which stated: 'It is already the Government's ultimate objective to develop a civil service which is biliterate (in English and Chinese) and trilingual (in English, Cantonese and Putonghua)' ((Civil Service Branch 1995), 5). This is the initial Government's declaration of 'biliterate and trilingual' policy (BTP) (兩文三語) which is the combination of the three languages and this has also become the de facto language policy for schools and Civil Service (Education Department 1997; Tung 1999).

One of the Government's policy objectives in primary education (Hong Kong Education Bureau 2013a) and secondary education (Hong Kong Education Bureau 2013b) is to enhance students' biliterate and trilingual abilities. However, on one hand, primary schools were and are predominately Chinese medium (So 1992; Johnson 1998; Luk 2000; Poon 2000; Kan et al. 2011). On the other hand, if we study the official documents in relation to the medium of instruction policies in Hong Kong, one phenomenon is that the language policies recommended and guidance on language policies in schools are mainly applicable to secondary schools. As no clear policy on Medium of Instruction in primary schools has been made by the government, and Hong Kong primary schools do not have an agreed approach or method for implementing trilingual education (Wang and Kirkpatrick 2013), it remains unclear how the "biliterate and trilingual" policy is implemented in Hong Kong primary schools. Thus, the research questions of our study are: what is the current situation with regards trilingual education in Hong Kong primary schools, and what are the potential implications?

Background

School types in Hong Kong

There are three main types of local schools in Hong Kong – government schools, aided schools and private schools (Information Services Department 2014). Government schools are operated and funded by the Government, they enroll local students, use the standard design school buildings, follow the local curriculum recommended by the

Education Bureau (EDB) and prepare students for the local examinations. Aided schools are fully subsidized by the Government but operated by non-profit-making voluntary bodies such as local charitable and religious organizations. They are administered in accordance with the Code of Aid and have to observe the conditions laid down in the service agreement signed with the EDB ((Yung 2006), 99). These schools develop a school-based curriculum on the basis of the local curriculum prescribed by the EDB and prepare students for the local examinations as well. Aided secondary schools need to follow “The Medium of Instruction Guidance for Secondary School” to select a suitable MoI (Yung 2006). Only children who are Hong Kong residents are accepted in government schools and aided schools which provide them with free primary and secondary education. The major difference between government schools and aided schools is financial autonomy, which in many ways also affects decision making and policy outcomes in individual schools (Yung 2006; Information Services Department 2014). Teachers of government schools are public service employees and therefore possess a relatively smaller degree of freedom in deciding how money is spent. Though aided schools also receive funding from the government, they enjoy more freedom and flexibility. For example, they are allowed to appoint their own staff, including the principals and teachers and administrators according to the sponsoring body’s own preferences, including academic and religious orientation and community needs, as long as they abide by the requirements of the government regulations (Yung 2006).

All schools receiving government subsidies have been required to participate in the Territory-wide System Assessment (TSA) at Primary 3, Primary 6 (implemented in alternate years starting from 2011) and Secondary 3 since 2004. The TSA facilitates assessment for learning by providing schools with objective data on students’ performances in the three subjects of Chinese Language, English Language and Mathematics at the end of the three key stages. The TSA is a low-stakes assessment and is not a tool for ranking and selection (http://www.info.gov.hk/gia/general/201404/11/P201404110467_print.htm). The TSA reports and school reports provide information about students’ strengths and weaknesses against specific Basic Competencies at various key learning stages which help schools and teachers to identify students’ learning difficulties.

Private schools are operated and funded in two ways. First, the Private Independent (primary and secondary) Schools (PIS) do not receive any subsidy from the government but are solely funded by individual providers/investors or education trust foundations. Second, the Direct Subsidy Scheme schools (DSS schools) are financed by their individual providers/investors or education trust foundations but at the same time are subsidized or assisted by the government under the Direct Subsidy Scheme (DSS), in the form of capital grants based on enrolment. They need to observe the conditions laid down for admission to the DSS scheme and in the service agreement signed with the EMB ((Yung 2006), 99). However, they are allowed complete freedom with regard to curricula, fees and entrance requirements that is consistent with basic educational standard (Education Commission 1988; Yung 2006; British Council 2007). Also they need not adhere to government’s centralized policies on school finance, curriculum design, and students’ allocation (Education Commission 1988; Yung 2006; Chan and Tan 2008). They can choose their own students without district or regional constraints and set up their own admission examination ((Yung 2006), 107). They mainly follow the local curriculum but are free to design their own curriculum targeting local students and prepare students to sit for the local

examinations and non-local examinations. Moreover, they should choose a MoI suitable for the ability of the students (Education Commission 1988; Yung 2006). Most significantly, they can charge fees, with the additional income being invested in additional staff and superior facilities ((British Council 2007), 4).

Apart from the three main types of schools mentioned above, there are 15 schools operated by the English Schools Foundation (ESF) offering education to English-speaking children. There are also some international schools which offer non-local curricula and serve primarily non-Chinese speaking students and foreign nationals (Information Services Department 2014).

In this study, we only surveyed government schools, aided schools and DSS schools. The private independent schools (PIS), ESF schools and international schools, whose curriculum and language policies are independent from the Government, were excluded from our survey.

Language policies in Hong Kong

Bilingualism in colonial days

In the early decades of the British colonial rule, Hong Kong had adopted a *laissez-faire* approach to language policy in school education (Ng-Lun 1984; Sweeting 1991; Luk 2000; Pan 2000; Lai and Byram 2003; Bolton 2011; Poon et al. 2013). Two linguistically and culturally distinguished streams emerged in Hong Kong's educational system in the first 100 years under the British rule (1842–1941): an Anglo-Chinese stream which offered Western-style primary and secondary education through the medium of English, and a Chinese-medium stream which offered primary/elementary education which, in terms of content and method, was similar to that in Mainland China (So 1992). Before the Second Sino-Japanese War (1937–1945), Chinese language (i.e. oral Cantonese and written MSC) received much more attention in the privately-run Chinese schools and missionary schools that catered for the majority of the population than in the government-run elite schools ((Adamson and Lai 1997), 89). In the 1950s, with the reconstruction of the education system marked by its bilinguality, the two streams were balanced in terms of numbers ((Johnson 1998), 266). According to Pan (2000), the Hong Kong Government took a more flexible attitude to the issue of medium of instruction. Under the *laissez-faire* policy, by the 1960s, Hong Kong schools had the liberty to choose their own medium of instruction.

During the period of expansion in the 1970s and 1980s, primary education was dominated by Chinese where everything was taught in Chinese except the English subject (Sweeting 1991; Poon 2000; Lai and Byram 2003; Kan et al. 2011), while secondary education was dominated by English where all subjects except Chinese Language and Chinese History and Chinese Literature were supposed to be taught in English (Lee 1997; Johnson 1998; Bray and Koo 2004). In the 1980s, 90 percent of primary schools were CMI (Pan 2000; Kan and Adamson 2010), while the English-medium secondary schools had become increasingly dominant in the same period (Bolton 2011). The English-medium schools comprised only 57.9 percent of all the secondary schools in 1960, but the proportion rose to 87.7 percent in 1980 ((Lee 1997), 166). More students began to seek opportunities in the Anglo-Chinese Schools rather than flood into Chinese Middle Schools because the medium of instruction was English ((Sweeting

1991), 74–75). The Anglo-Chinese Schools were in an increasingly favourable environment for three reasons: the development of Hong Kong into an international manufacturing and financial centre; the emergence of English as the predominant medium of trade and in academic discourse; and the tremendous advance made in science and technology ((So 1992), 76–77). In the context of academic discourse, it is important to point out that six of the eight government-funded tertiary institutions are English medium and even the Chinese University of Hong Kong has recently significantly expanded its English medium classes (Kirkpatrick 2014). This gradual shift to English-medium schools chiefly reflected “the aspirations of parents who perceived English-medium education to confer stronger benefits in the labour market” ((Bray and Koo 2004), 144). As a result, children from higher class backgrounds got “a head-start in one of the few local, exclusive English-medium primary schools. Other people try to get into the Anglo-Chinese Secondary Schools, places where traditionally ‘good English’ was learnt ((So 1992), 78)” and where perceived to provide the best conditions in which to acquire the ‘language of success’ in colonial Hong Kong ((Lai and Byram 2003), 98).

The Green Paper in 1973: Report of the Board of Education on the Proposed Expansion of Secondary Education recommended “Chinese should become the usual medium of instruction in lower forms of secondary schools; every effort should be made to develop good textbooks for all subjects written in Chinese, to train teachers capable of instructing through the medium of Chinese and to” ((Government Secretariat 1981), 146). The publication of the 1973 Green Paper is the very first time that the Hong Kong government formally proposed using Chinese as the medium of instruction in junior secondary schools (Poon 2010). However, the government changed its position from hard to soft because of the public pressure (Sweeting 1991; Poon 2010) in the 1974 White Paper: Secondary Education in Hong Kong over the Next Decade. The government stated that “individual school authorities should decide themselves whether the medium of instruction should be English or Chinese for any subject in junior secondary forms.....” ((Government Secretariat 1981), 150). This flexibility reflected the government’s *laissez-faire* and bilingual language policy on the medium of instruction in secondary education but no such provision was recommended to the primary education, where teachers had long been using Cantonese as the medium of instruction.

With the proclamation of the Sino-British Joint Declaration in 1984, there emerged major changes in language policy and the subsequent process of localization in the Government ((Bray and Koo 2004), 144). The Education Commission (EC) was set up in 1984 as a non-statutory body to advise the Government on the overall development of education in the light of the community’s needs (http://www.e-c.edu.hk/eng/overview/index_e.html). The EC published its first report in 1984, the ECR 1, and addressed the issue of “Medium of instruction in schools”. They proposed that the use of Chinese as the medium of instruction in primary schools remained unchanged and English in primary schools be taught as a second or first foreign language ((Education Commission 1984), 39). Meanwhile it recommended that individual secondary school authorities should be encouraged to adopt Chinese as the medium of teaching ((Education Commission 1984), 43). Moreover, the Report of the Working Group set up to Review Language Improvement Measures was published in 1989, recommending that within the existing medium of instruction policy, two of the aims of the educational system were to ensure that: (1). “English or Chinese can be equally effectively used as a medium of instruction up to

A level for students studying in the one language or the other” and (2). “English and Chinese are taught as subjects as effectively as possible, bearing in mind their roles as actual or future mediums of instruction for different groups of students” (Hong Kong (Education Department 1989), 73–74). However, according to Lai and Byram (2003), 316, “Bilingual schools, formally known as Anglo-Chinese schools were five times more than the Chinese Middle schools” and before 1997 about 90% of secondary school students were receiving their schooling officially through the medium of English (Sweeting 1991; So 1992). This implies that more and more Chinese medium schools had in fact been making considerable moves to change to English medium before 1997 as a successful English-medium secondary education had become the major determinant of upward and outward mobility for Hong Kong people ((So 1992), 78). Before the handover in 1997 the Government allowed the choice of medium of instruction to be left to secondary schools while primary schools were predominately Chinese medium, despite different efforts highlighting the need to strengthen mother tongue education (Kan and Adamson, 2010; Kan et al. 2011).

Trilingualism and mother-tongue policy in the postcolonial period

After the signing of the Sino-British joint-declaration in 1984, Hong Kong’s language patterns have changed from biglossia to triglossia with the incorporation of Putonghua (Adamson and Lai 1997; Lai 2001; Poon 2010). Due to the forthcoming transition of sovereignty and the mainland’s economy growing under the modernisation reforms, Putonghua has become more important and been increasingly used, complicating the linguistic ecology of Hong Kong. Hong Kong now has to find a new balance among Cantonese, English and Putonghua (Zhang and Yang 2004; Kan and Adamson 2010). Since then, the post-colonial government has made a series of language policy measures to create this. Among these measures, the policy of “biliteracy and trilingualism” is key. Moreover, the publication of the Education Commission Report Number Four (ECR 4) in 1990 is considered by Evans et al. ((1998), 393) to be “a break from the policy of ‘positive non-intervention’ which had characterized the government’s approach to education in the post-war years”. The ECR 4 built a ‘coherent framework’ to make language policy ‘clear’ by streaming students into English- or Chinese-medium schools based on an assessment conducted in primary 6 and requiring schools to be consistent in their MoI and to eliminate mixed-code teaching (ibid). The ECR 4 stipulated that “the use of mixed-code in schools should be reduced in favour of the clear and consistent use in each class of Chinese or English in respect of teaching, textbooks and examinations” ((Education Commission 1990), 99, 6.4.1 (iii)). The Education Commission believed students can learn better in their mother-tongue, as the use of mixed-code, “can lead to time being wasted on translation of English texts in class and, worse still, learning being reduced to rote memorisation of facts in English” ((Education Commission 1990), 100).

After the handover in 1997, the Hong Kong government adopted the “biliterate and trilingual” (兩文三語) policy. Under this policy, both Chinese and English are acknowledged as official languages, with Cantonese being acknowledged as the *de facto* official spoken variety of Chinese in Hong Kong, while also accepting Putonghua. The ultimate language goal of the new policy is to achieve trilingualism to facilitate exchange and communication with the Mainland and the outside world (Pan 2000; Zhang and Yang 2004). In the 1997 Policy Address, Tung Chee Hwa, the First Chief Executive of the

HKSAR, reaffirmed the framework laid down by the ECR 6 in 1996, which was “to achieve our goal for secondary school graduates to be proficient in writing English and Chinese and able to communicate confidently in Cantonese, English and Putonghua” (Tung 1997), para. 84. Moreover in 1999, Tung noted that “It is the SAR Government’s goal to train our people to be truly biliterate and trilingual” (Tung 1999), para. 69. This aimed at establishing a ‘biliterate and trilingual’ society through the interplay between Cantonese, English and Putonghua. The school curriculum was revised in 1998 to make Putonghua a compulsory subject in all primary and secondary schools, while Cantonese is used as the medium of instruction for teaching content subjects in Chinese-as-Medium-of-Instruction (CMI) primary and secondary schools. In 2000 Putonghua was made an elective subject in the public examination of the Hong Kong Certificate of Education Examination (HKCEE). Starting from 2001, Putonghua teachers, like English teachers, are required to take the Benchmark Test. Since then, Cantonese has been associated with enhanced student learning, and has taken the place of English as the regular and formal language in government and in the public sector; Putonghua has been given increased attention in the school curriculum, and has a role to play in government, law and social activities; while English has remained a powerful force and an active medium of communication in many sectors of the society (Lai and Byram 2003; Kan and Adamson 2010).

In 1997, the Education Department (ED) issued a policy guidance ‘The Medium of Instruction Guidance for Secondary Schools’ (Education Department 1997) requiring all local public sector secondary schools, starting with the Secondary 1 intake of the 1998/99 school year, to use Chinese as the basic MoI. Any school wishing to adopt English as the MoI must provide sufficient information and justification to ED to support such a choice. Prior to this, the ECR 4 asserted that the practice of mixed code was detrimental to the learning of both English and Chinese, and declared that Chinese needed to be strengthened ((Education Commission 1990), 96). The above measures resulted in the ‘mother-tongue teaching’ policy and schools had to use Chinese as the basic medium of instruction. However, there was significant resistance to the policy among schools and parents. Accordingly, ‘firm guidance’ from the government ((So 1996), 45) was given to all schools in 1998 regarding the appropriate medium for them, based on information about the language proficiency of their Secondary One intakes obtained through the Medium of Instruction Assessment exercise. To Bolton (2011), 57, this “new ‘firm’ policy in promoting Chinese was the most visible change of language policy at the end of the colonial period”. With the mandatory change of MOI, 307 schools, or 70% of government and government-subsidized secondary schools were converted from English-medium to Chinese-medium (Zeng 2007).

Hong Kong has now witnessed the transformation of the development of MOI policies from stage 1: the colonial government’s *laissez faire* policy (1947–1997) into stage 2: the compulsory mother tongue streaming policy after the handover (1998–2009), which only allowed 114 (30%) government and government-subsidized secondary schools to adopt EMI in content-area subjects (Chan 2014).

However, the clear-cut CMI/EMI distinction has caused a storm of controversy (Evans 2000) and has led many parents and students feel that “the creation of an ‘elite’ English-medium stream and an apparently ‘inferior’ Chinese-medium streams is high-handed, discriminatory and socially divisive” ((Evans 2002), 98). Moreover, the compulsory

Chinese medium-of-instruction policy during 1998–2010 has led to the criticism that there is a decline of English standards and a lack of students' motivation to learn English (Poon et al. 2013). In view of this, the Education Bureau (2010) decided to 'fine-tune' the language policy by removing the 'labels' of CMI and EMI schools (Chan 2014). Most importantly, the fine-tuning MOI policy allows individual schools to have flexibility and greater autonomy to offer English-medium classes, partial-English-medium classes and/or Chinese-medium classes based on certain criteria regarding their students' and teachers' language abilities as well as the support measures at the schools. To Chan (2014), there emerge three MOI arrangements: (1) mother tongue teaching complemented with various modes of extended learning activities (ELA) in English, (2) Chinese or English as MOI in specific subjects and (3) Chinese or English as their MOI for all non-English subjects. Poon et al. (2013), 964 consider the fine-tuning medium of instruction policy is "an innovative idea that provides a break-through from the tradition mode of English-medium school vs Chinese-medium schools and this brings a close to the age-long debate on the heated topic of medium of instruction in Hong Kong".

The fine-tuning policy is not directed at primary schools. However, this might affect their MOI practices given that they are now preparing students for a different language environment under the fine-tuned language policy. In the study of "Fine-tuning Hong Kong's Medium of Instruction Policy" conducted by Kan et al., it was reported that there was a significant increase in number of EMI classes in Mathematics and Science in secondary schools and a corresponding decrease in CMI classes (2011, 12). This might have a washback effect on the MoI policies of Hong Kong primary schools.

The socioeconomic, historical and sociolinguistic situations in Hong Kong

Hong Kong, a Special Administrative Region (SAR) of the People's Republic of China, is a city of 1104.3 km² located on the south coast of China, bordering the mainland city of Shenzhen in Guangdong province to its north, and surrounded by the South China Sea on its east, south and west. Hong Kong city is composed of three main areas: Hong Kong Island (the second largest and the most populated island), the Kowloon Peninsula, and the New Territories (new towns on the outskirts of the Kowloon Peninsula). Hong Kong is one of the most densely populated areas in the world. Its population reached 7.07 million in 2011 (Census and Statistics Department 2012). About 94% of the population are of Chinese ethnicity. The largest non-Chinese ethnic groups in Hong Kong are Indonesians and Filipinos, both constituting 1.9% of the population (ibid). The other non-Chinese ethnic groups include some permanent residents originating from India, Pakistan and Nepal, while others are British, continental Europeans, North Americans, Australians, Japanese or Koreans, largely employed in the commercial, financial and education sectors (Poon 2010).

Cantonese, English and Putonghua are the majority languages spoken in Hong Kong both as the usual languages of interpersonal communication and as additional languages/dialects. According to the statistics in the Hong Kong 2011 population census, the proportion of the population aged 5 and over able to speak Cantonese is 95.5%, Putonghua 47.8% and English 46.1%, respectively (Census and Statistics Department 2012), 40.

In the study, 'Hong Kong people' refers to all people holding a Hong Kong identity card regardless of their ethnic origin, and 'local Hongkongers' refers to native inhabitants of

Hong Kong who speak Cantonese as the mother tongue, while the Mainlanders refer to those people coming from Mainland China who normally speak Putonghua as their mother tongue.

Methodology

A questionnaire was sent to 474 primary schools in Hong Kong. These included all the 34 government schools (7.2%), all the 420 aided schools (88.6%) and all the 20 DSS schools (4.2%). The Principal of each surveyed school was invited to complete the questionnaire. The questionnaire was designed to find out how the 'biliterate' and 'trilingual' language policy was implemented in Hong Kong primary schools and demographical information was also gathered. Various types of questions were included in the questionnaire, for instance, contingency questions, matrix questions, closed ended questions such as yes/no questions and multiple choice questions, and open ended questions. An example of a matrix question is that five aspects of students' proficiency level in Cantonese, Putonghua, Spoken English, Written Chinese and Written English are compared across five levels: Well above average, Slightly above average, About average, Slightly below average and Much below average. Altogether 155 schools responded to the survey, representing a response rate of 32.7%.

Results

Demographics of schools surveyed

Of the 155 schools surveyed (Table 1), 145 are aided schools (34.52% return rate), 6 are DSS schools (30% return rate), and 4 are government schools (11.76% return rate). Of the 145 aided schools, 18 (31.03%) are on Hong Kong Island, 40 (33.61%) in Kowloon, and 87 (35.8%) in the New Territories. Of the six DSS schools, three (75%) are on Hong Kong Island, two (28.57%) in Kowloon, and one (11.11%) in the New Territories. Of the 4 government schools, one (9.09%) is on Hong Kong Island, one (7.69%) in Kowloon, and two (20%) in the New Territories.

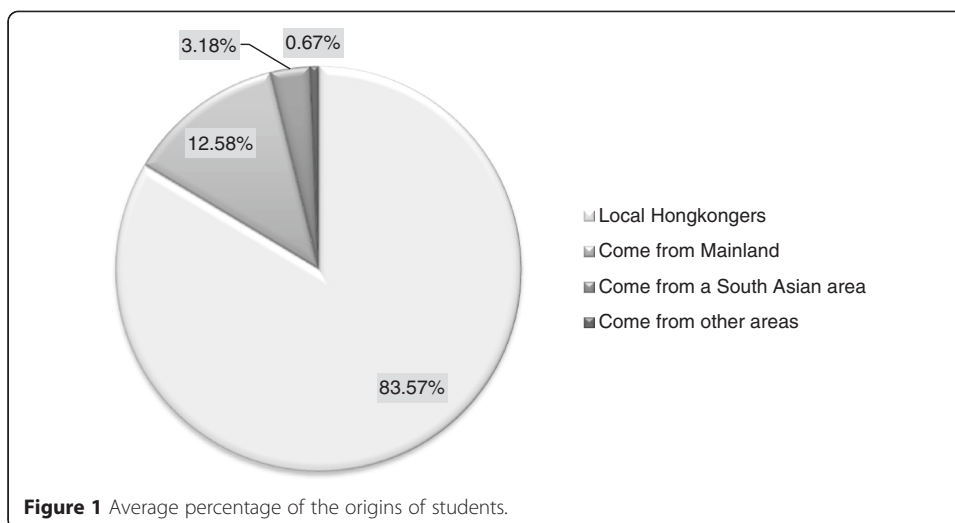
Of the 155 surveyed schools, the highest return rate (75%) is the DSS schools on Hong Kong Island, while the lowest return rate is the Government schools, one on Hong Kong Island and one in Kowloon.

Origins of the students in the responding schools

Figure 1 shows that, in the 155 surveyed schools, the majority of students are local Hongkongers with an average of 83.57%, while an average of 12.58% of the students

Table 1 Distribution (out) and collection (in) of the questionnaires in each category (return rates)

School type	HK Island		Kowloon		New territories		Total	
	Out	In (%)	Out	In (%)	Out	In (%)	Out	In (%)
Aided School	58	18 (31.03%)	119	40 (33.61%)	243	87 (35.8%)	420	145 (34.52%)
DSS School	4	3 (75%)	7	2 (28.57%)	9	1 (11.11%)	20	6 (30%)
Government School	11	1 (9.09%)	13	1 (7.69%)	10	2 (20%)	34	4 (11.76%)
Total	73	22 (30.14%)	139	43 (30.94%)	262	90 (34.35%)	474	155 (32.7%)



come from Mainland China, 3.18% come from a South Asian area and only 0.67% of the students come from other areas such as Britain.

We can see from Table 2 that:

- (i) although the majority of schools have local Hongkongers, very few (fifteen schools, 9.68%) have 100% local Hongkongers, and their distribution across areas is shown in Table 3;
- (ii) other than local Hongkongers, seven schools (4.52%) are dominated by students from Mainland China, while three schools (1.94%) by students from a South Asian area;
- (iii) among the 144 schools, in one school, 50% of the students are local Hongkongers and the other 50% are from Mainland China; and
- (iv) there are two schools in the New Territories that have less than 50% of students of each origin (Table 4).

The Medium of Instruction (MoI) policies

Table 5 shows the school policies regarding the use of different Medium of Instruction (MoI) in different subjects in all surveyed schools and each type of school:

Table 2 Origin of student percentage and distribution across schools

Origin of students percentage	Local Hongkongers		Students from Mainland China		Students from a South Asian area		Students from other areas	
	No of schools	%	No of schools	%	No of schools	%	No of schools	%
50%-59%	5	3.23	2	1.29	0	0	0	0
60%-69%	13	8.39	1	0.65	1	0.65	0	0
70%-79%	9	5.81	1	0.65	0	0	0	0
80%-89%	22	14.19	2	1.29	1	0.65	0	0
90%-99%	80	51.61	1	0.65	1	0.65	0	0
100%	15	9.68	0	0	0	0	0	0
Total	144	92.90	7	4.52	3	1.94	0	0

Table 3 The distribution of schools with 100% local Hongkongers across areas

School type	HK Island	Kowloon	New territories	Total
Aided School	2 (13.33%)	5 (33.33%)	6 (40%)	13 (86.67%)
DSS School	1 (6.67%)	1 (6.67%)	0	2 (13.33%)
Government School	0	0	0	0
Total	3 (20%)	6 (40%)	6 (40%)	15 (100%)

Of the 155 schools surveyed, we find that:

- (i) Putonghua is commonly used as the MoI in the Chinese subject (a subject which develops learners' Chinese language proficiency in reading, writing, listening and speaking). 65 schools (41.94%) use almost 100% Putonghua in teaching this subject, 6.45% of schools use Putonghua only in senior grades, 34.84% use Putonghua in some classes in the same grade and 14.84% of schools allow the use of mixed code of Cantonese and Putonghua in the subject.
- (ii) Six schools (3.87%) do not offer the Putonghua subject (a subject focusing purely on the pronunciation of Putonghua) as they use Putonghua as the MoI in teaching the Chinese subject.
- (iii) 63.87% of schools use almost 100% of English as MoI in the English subject and about 40% of them allow the use of mixed code of English and Cantonese in the subject.
- (iv) The majority of schools (87.74%) use almost 100% of Putonghua as the MoI in the Putonghua subject, while 12 schools (4.52%) use mainly Putonghua, supplemented by Cantonese in this subject; the use of mixed code of Putonghua and Cantonese is not commonly adopted, as only 7.74% of schools allow this.
- (v) Cantonese is the predominant language used as the MoI in other subjects, such as Mathematics, General Studies, Visual Arts, Music, Physical Education and Information Technology/Computer in most surveyed schools. However, 20 schools (13%) adopt English and Putonghua as the MoI in these subjects, as shown in Table 6.

From Table 6, we can identify the following points:

- (1) Four schools (A – D, 2.58%) use mainly Cantonese supplemented by English in IT, and use Cantonese in the remaining subjects.
- (2) E school uses English in all other subjects.
- (3) F school uses Cantonese or English in GS, depending on the topics, and uses English in the remaining subjects.
- (4) G school uses English in all other subjects, but PE is also taught in Cantonese, subject to which language subject the teacher is teaching.

Table 4 Schools with less than 50% of students of each origin

Origin of students	Local Hongkongers	Come from Mainland China	Come from a South Asian area	Come from other areas	Total
School 1	40%	10%	45%	5%	100%
School 2	20%	45%	35%	0%	100%

Table 5 The use of different Mol(s) in different subjects across schools

Subject	Language(s) used as Mol(s)	All (155)	Aided (145)	Gov't (4)	DSS (6)
Chinese	Cantonese (almost 100%)	89(57.42%)	83(57.24%)	3(75%)	3(50%)
	Putonghua (almost 100%)	65(41.94%)	63(43.45%)	0	2(33.33%)
	In junior grades, Cantonese is used as Mol; in senior grades, Putonghua is used	10 (6.45%)	8 (5.52%)	0	2(33.33%)
	In the same grade, some classes use Cantonese as Mol, others use Putonghua	54(34.84%)	53(36.55%)	1(25%)	0
	Teachers may switch between the two languages in class	23(14.84%)	22(15.17%)	0	1(16.67%)
English	English (almost 100%)	99(63.87%)	93(64.14%)	0	6(100%)
	Other than English, teachers may use Cantonese subject to teaching and learning needs	53(34.19%)	50(34.48%)	3 (75%)	0
	In junior grades, both English and Cantonese can be used as Mols; in senior grades, only English can be used as Mol	12(7.74%)	11(7.59%)	1(25%)	0
Putonghua	Putonghua (almost 100%)	136(87.74%)	128 (8.28%)	3(75%)	5(83.33%)
	Putonghua mainly, supplemented by Cantonese	12(7.74%)	11(7.59%)	1(25%)	0
	In junior grades, both Putonghua and Cantonese can be used as Mols; in senior grades, only Putonghua can be used as Mol	7(4.52%)	7(4.83%)	0	0
Mathematics	Cantonese (almost 100%)	145(93.55%)	137 94.48%)	4(100%)	4(66.67%)
	Putonghua (almost 100%)	1(0.65%)	1(0.69%)	0	0
	English (almost 100%)	7(4.52%)	4(2.76%)	0	3(50%)
	Cantonese mainly, supplemented by English	6(3.87%)	6(4.14%)	0	0
	English mainly, supplemented by Cantonese	2(1.29%)	2(1.38%)	0	0
General Studies	Cantonese (almost 100%)	145(93.55%)	136(93.79%)	4(100%)	5(83.33%)
	Putonghua (almost 100%)	1(0.65%)	1(0.69%)	0	0
	English (almost 100%)	8(5.16%)	4(2.76%)	0	4(66.67%)
	Cantonese mainly, supplemented by English	6(3.87%)	6 (4.14%)	0	0
	English mainly, supplemented by Cantonese	2(1.29%)	2(1.38%)	0	0
Visual Arts	Cantonese (almost 100%)	147 94.84%)	139(95.86%)	4(100%)	4(94.84%)
	English (almost 100%)	4(2.58%)	3(2.07%)	0	1(16.67%)
	Cantonese mainly, supplemented by English	2(1.29%)	2(1.38%)	0	0
	Putonghua mainly, supplemented by Cantonese	1(0.65%)	1(0.69%)	0	0
	English mainly, supplemented by Cantonese	3(1.94%)	2(1.38%)	0	1(16.67%)
Music	Cantonese (almost 100%)	143(92.26%)	135(93.1%)	4(100%)	4(66.67%)
	English (almost 100%)	6(3.87%)	3(2.07%)	0	3(50%)
	Cantonese mainly, supplemented by Putonghua	1(0.65%)	1(0.69%)	0	0
	Cantonese mainly, supplemented by English	5(3.23%)	5(3.45%)	0	0
	Putonghua mainly, supplemented by Cantonese	2(1.29%)	2(1.38%)	0	0

Table 5 The use of different Mol(s) in different subjects across schools (Continued)

	English mainly, supplemented by Cantonese	2(1.29%)	2(1.38%)	0	0
Physical Education	Cantonese (almost 100%)	149(96.13%)	140(96.55%)	4(100%)	5(83.33%)
	English (almost 100%)	4(2.58%)	3(2.07%)	0	1(16.67%)
	Cantonese mainly, supplemented by Putonghua	1(0.65%)	1(0.69%)	0	0
	Cantonese mainly, supplemented by English	2(1.29%)	2(1.38%)	0	0
	English mainly, supplemented by Cantonese	1(0.65%)	1(0.69%)	0	0
IT/ Computer	Cantonese (almost 100%)	141(90.97%)	134(92.41%)	3(75%)	4(66.67%)
	English (almost 100%)	5(3.23%)	3(2.07%)	0	2(33.33%)
	Cantonese mainly, supplemented by English	8(5.16%)	7(4.83%)	1(25%)	0
	Putonghua mainly, supplemented by Cantonese	1(0.65%)	1(0.69%)	0	0
	English mainly, supplemented by Cantonese	3(1.94%)	3(2.07%)	0	0

- (5)H school uses English in Math and GS, while the remaining subjects are mainly taught in English, supplemented by Cantonese.
- (6)I school uses English in Math, GS, Music and IT, Cantonese in PE, while VA is mainly taught in English, supplemented by Cantonese.
- (7)In J school, GS is taught either in Cantonese or English, Music is taught in Cantonese for P1 to P5, while in English for P6. The remaining subjects are taught in Cantonese.
- (8)In K school, Music and IT are taught mainly in Cantonese, supplemented by English; while the remaining subjects are taught in Cantonese.
- (9)In L school, Math and Music are mainly taught in Cantonese, supplemented by English; while the remaining subjects are taught in Cantonese.
- (10)In M school, GS is mainly taught in Cantonese, supplemented by English and the remaining subjects in this school are taught in Cantonese.
- (11)N school uses Cantonese in Math and GS for P1 to P5, but in English for P6 in both subjects; while the remaining subjects are taught in Cantonese.
- (12)O school uses Cantonese mainly, supplemented by English in Math and GS only for P6 while the remaining subjects are taught in Cantonese.
- (13)In P school, all other subjects are taught in Cantonese, except that Music is supplemented either by Putonghua or English.
- (14)Only PE is taught in Cantonese in Q school. As for the remaining subjects, they are mainly taught in Cantonese, supplemented by English for senior grades, whereas they are mainly taught in English, supplemented by Cantonese for junior grades.
- (15)In R school, Math and GS are taught either in Putonghua or English, Music, VA and IT are taught either in English, or mainly in Putonghua, supplemented by Cantonese, while PE is taught either in English, or mainly in Cantonese, supplemented by Putonghua.
- (16)In S school, all other subjects are taught mainly in Cantonese, supplemented by English.

Table 6 The Medium of Instruction in other subjects in 20 schools

School	Medium of Instruction (MoI) in other subjects									
	CAN	PTH	ENG	C-P	C-E	P-C	P-E	E-C	E-P	
A-D	Math, GS, VA, Music, PE,				IT					
E			Math, GS, VA, Music, PE, IT							
F	GS		Math, GS, VA, Music, PE, IT							
G	PE		Math, GS, VA, Music, PE, IT							
H			Math, GS					VA, Music, PE, IT		
I	PE		Math, GS, Music, IT					VA		
J	GS Music (P1-P5) Math, VA, PE, IT		GS Music (P6)							
K	Math, GS, VA, PE,				Music, IT					
L	GS, VA, PE, IT				Math, Music					
M	Math, VA, Music, PE, IT				GS					
N	Math (P1-P5), GS (P1-P5), VA, Music, PE, IT		Math (P6), GS (P6)							
O	Math (P1-P5), GS (P1-P5), VA, Music, PE, IT				Math (P6), GS (P6)					
P	Math, GS, VA, PE, IT			Music	Music					
Q					Math, GS, VA, Music, IT (P4 – P6) PE			Math, GS, VA, Music, IT (P1 – P3)		
R		Math, GS	Math, GS, PE, Music, VA, IT	PE			Music, VA, IT			
S					Math, GS, VA, Music, PE, IT					
T	VA, PE				Math, GS, IT	Music		Math, GS, IT		

CAN: Cantonese (almost 100%).
 PTH: Putonghua (almost 100%).
 ENG: English (almost 100%).
 C-P: Cantonese mainly, supplemented by Putonghua.
 C-E: Cantonese mainly, supplemented by English.
 P-C: Putonghua mainly, supplemented by Cantonese.
 P-E: Putonghua mainly, supplemented by English.
 E-C: English mainly, supplemented by Cantonese.
 E-P: English mainly, supplemented by Putonghua.

(17) In T school, Math, GS and IT are mainly taught in Cantonese, supplemented by English or vice versa, Music is mainly taught in Putonghua, supplemented by Cantonese and only PE and VA are taught in Cantonese.

The four government schools are all CMI schools, using Cantonese as the Medium of Instruction in all subjects other than the English subject. Their MoI policies are comparable. However, some classes in the same grade in one school use Putonghua as the MoI in teaching the Chinese subject, and one school uses mainly Cantonese,

supplemented by English in teaching IT. As for the English subjects, three schools allow teachers to use Cantonese subject to teaching and learning needs, while one school allows teachers to use both English and Cantonese in junior grades, but only English in senior grades. Three schools use almost 100% Putonghua in teaching the Putonghua subject, whereas one school uses mainly Putonghua, supplemented by Cantonese in this subject.

The following features can be found in the six DSS schools. (1). English is the main medium of instruction in all subjects except the Chinese and Putonghua subjects. (2). All these schools use Putonghua as MoI in the Chinese subject, but to different degrees. (3). One school does not offer the Putonghua subject, as this school uses Putonghua as MoI in teaching the Chinese subject. (4). They use both English and Cantonese as the medium of instruction for other subjects at different grades, except that one school uses mainly English, supplemented by Cantonese in Visual Arts.

Only 3 of the 145 Aided schools are EMI schools with these schools using almost 100% of English in teaching the English subject and other subjects. The majority of the Aided schools (about 90%) are CMI schools which use almost 100% Cantonese in teaching other subjects. A small percentage of them (about 7%) use mixed code in Cantonese and English or Cantonese and Putonghua in teaching other subjects. Only one school uses almost 100% Putonghua in teaching Mathematics and General Studies. Using Putonghua as MoI in teaching the Chinese subject is quite common in the surveyed aided schools as 63 schools (43.45%) use almost 100% Putonghua, 8 schools (5.52%) use Putonghua in senior grades, 53 schools (36.55%) use Putonghua in some classes in the same grade whereas 22 schools (15.17%) allow code switching in teaching this subject. Meanwhile, 50 schools (34.48%) allow code switching between English and Cantonese in teaching the English subject, but 11 schools (7.59%) only allow code switching in junior grades. In addition, 7 schools (4.83%) allow code switching between Putonghua and Cantonese in junior grades in teaching the Putonghua subject. However, the majority of 93 schools (64.14%) and 128 schools (88.28%) report they use almost 100% English and almost 100% Putonghua in teaching the English and Putonghua subjects respectively.

Teaching allocation

Language subjects, Chinese and English, are the most important subjects in Hong Kong primary schools as all the surveyed schools allocate the most teaching time to these two subjects, with an average of 9 periods for each subject. 61 schools (39.35%) have allocated 9 periods for the Chinese subject, while 57 schools (36.77%) have allocated 9 periods as well for the English subject. At the extreme, one school allocated 13 periods to the Chinese subject while another allocated 12 periods to the English subject. In some schools, the number of teaching periods allocated for some subjects may differ across different grades. For example, one school allocated 10 periods for the Chinese subject for P1-P2, while 9 periods have been allocated for P3-P6. Another school has allocated 5 periods for Mathematics for P1-P2 and P4-P6; but 6 periods for P3. Table 7 shows the average percentage of time allocation for each Key Learning Area (KLA) of the 155 surveyed schools and of each type of school. When comparing the average percentage of time allocation of the three types of schools, the DSS schools have allocated

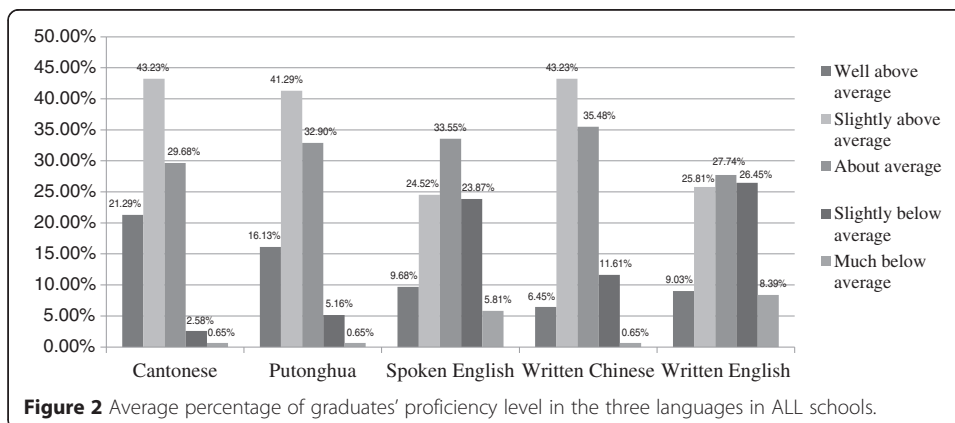
Table 7 The average percentage of time allocation for each KLA

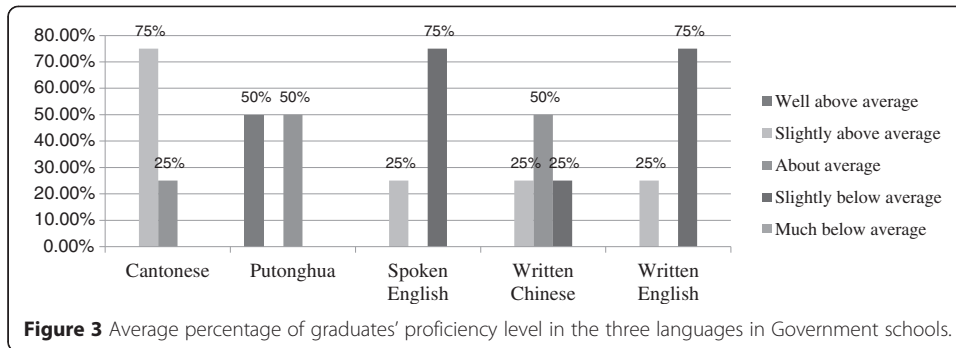
Key Learning Areas (KLAs)	Average percentage of time allocation for each KLA			
	All schools (155)	Aided schools (145)	Gov't schools (4)	DSS schools (6)
Chinese Language Education	27.64%	27.69%	27.99%	26.61%
English Language Education	23.21%	23.22%	23.31%	22.81%
Mathematics Education	17.80%	17.82%	17.34%	17.57%
Science & Technology Education	15.14%	15.08%	15.29%	16.46%
Arts Education	10.79%	10.79%	10.72%	11.04%
Physical Education	5.41%	5.40%	5.36%	5.91%

slightly less time to Chinese Language Education and English Language Education, and slightly more time to Science & Technology Education, Arts Education and Physical Education. The aided schools and government schools have allocated similar percentage of teaching time to each KLA.

Graduates’ proficiency level in the three languages

In the survey, when asked about the graduates’ proficiency level in the three languages based on their language benchmark test results before graduation, four schools did not provide information and two further schools did not report their views on their graduates’ proficiency level in Putonghua. Figure 2 shows the average percentage of the graduates’ proficiency level in the three languages in all surveyed schools: (1) about sixty percent of the responding schools were confident of their graduates’ proficiency level in Cantonese and Putonghua, as the schools considered that their students were well above or slightly above average when compared with other Hong Kong primary schools; (2) about fifty percent of the schools were quite confident of their graduates’ proficiency level in written Chinese; (3) about one-third of them thought their graduates’ proficiency level of Spoken English and written English were about average; and (4) a further one-third thought their graduates were quite weak in both spoken and written English as their proficiency level was below average. Figures 3, 4 and 5 show the average percentage of reported graduates’ proficiency level in the three languages in aided schools, DSS schools and government schools respectively.





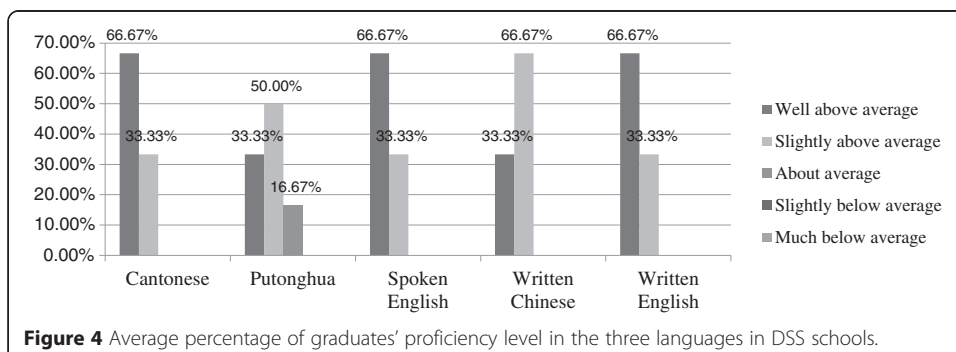
We can tell from Figures 3, 4 and 5 that the DSS schools are the most confident of their graduates' proficiency in the three languages with 100% above average, except that 16.67% of them think the Putonghua of their graduates is about average. The perception of the graduates' proficiency level in both spoken and written English from aided schools and government schools is far less positive. First, an average of about 7% of aided schools think their graduates' proficiency level in both spoken and written English is well below average. Second, about 25% of aided schools think their graduates' proficiency level in both written and spoken English is slightly below average, while 75% of the government schools think their graduates' proficiency level in these two aspects is slightly below average.

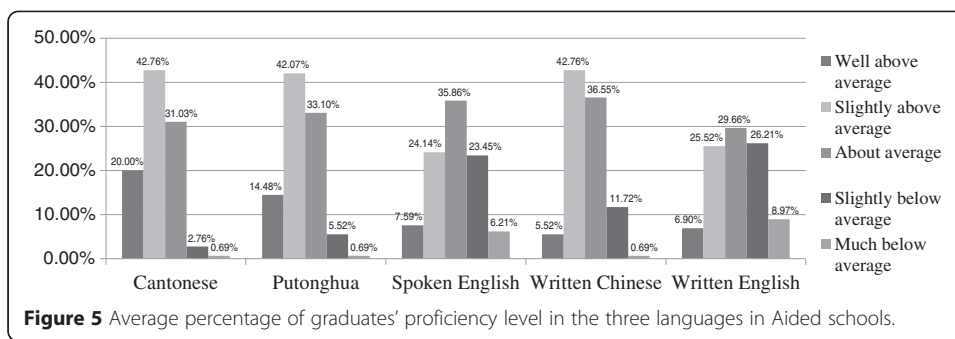
Collaboration between different subject teachers

a) Collaboration between different subject teachers using English as the MoI

Sixty schools (38.71%) reported that there was collaboration between different teachers using English as the MoI. For example, English was used in the introduction of English terms for different subjects, e.g. Mathematics, General Studies (G.S.) and Computer Science. The Native-speaking English teacher (NET) will record the pronunciation of these terms so that students can practice these at home (the NET Scheme has been implemented in Hong Kong primary schools to enhance the teaching of English Language and increase exposure of students to English since the school year 2002/03 (Hong Kong Education Bureau, n.d.)).

Other examples of collaboration over the use of English as an MoI include scientific





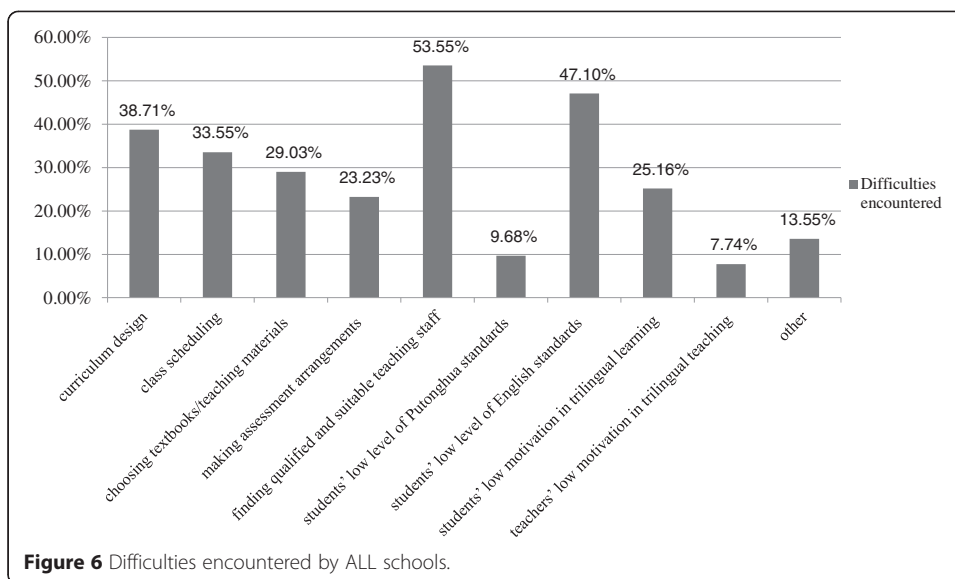
topics in General Studies being explained in English, the English teachers collaborating with the G.S. teachers while working on a “History of Hong Kong” project, Mathematics teachers providing students with worksheets in English and explanations in English, the English teachers working with Visual Arts teachers and Computer teachers and helping students to produce English animation.

- b) Collaboration between different subject teachers using Putonghua as the MoI
 One-fourth of the schools reported collaboration between different subject teachers using Putonghua as the MoI. For example, the Chinese teachers and the Putonghua teachers collaborate to teach students the pronunciation of and reading in Putonghua, the Putonghua teachers assist the Chinese teachers to train the students’ speaking and listening skills, students recite the Multiplier Table in Putonghua, students write scripts under the supervision of the Chinese teachers and then put on a Putonghua play. Schools also reported Putonghua song competitions, story-telling competition in Cantonese and Putonghua, and verse speaking competitions in Cantonese and Putonghua.
- c) Collaboration between different subject teachers using Cantonese as the MoI
 Eighty percent of the surveyed schools agreed there was collaboration between different subject teachers using Cantonese as the MoI: for example, the Chinese teachers and the General Studies teachers work together on discussions of current affairs and write reports after visiting exhibitions, Mathematics teachers and Visual Arts teachers organize competitions on the production of three-dimensional graphics, the Chinese teachers and Visual Arts teachers collaborate to teach students Chinese calligraphy and appreciation along with a wide range of cross subject quizzes.

Reported difficulties encountered by the surveyed schools

Figure 6 shows the overall results of all the responding schools. More than half (53.55%) of the surveyed schools considered finding qualified and suitable teaching staff as the greatest difficulty they encountered, and they ranked students’ low level of English standards the second greatest difficulty (47.1%). Curriculum design was the third greatest difficulty (38.71%). Teachers’ low motivation in trilingual teaching was thought to present the smallest difficulty with a percentage of only 7.74 of schools reporting this.

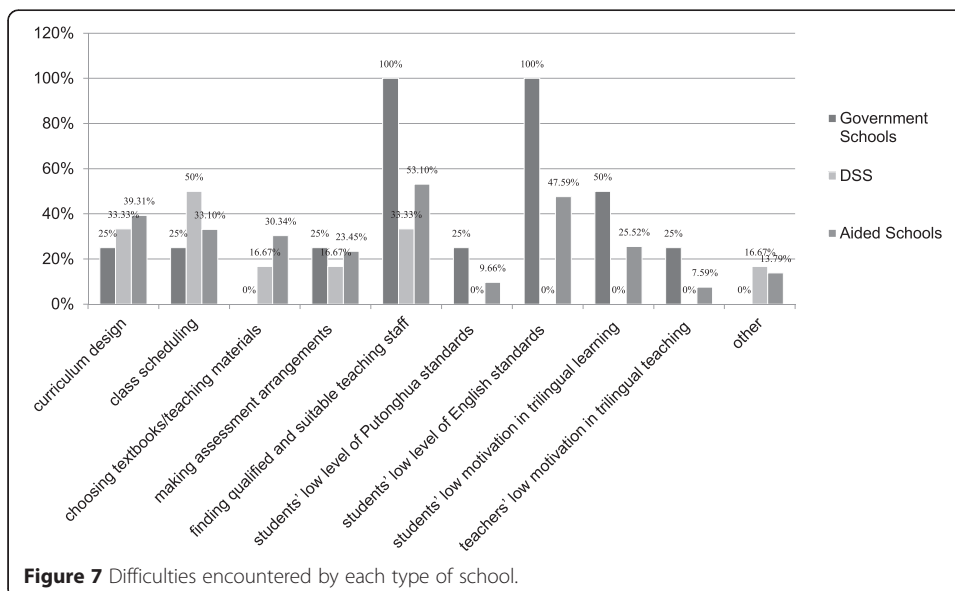
The two greatest difficulties (100%) encountered by government schools were finding qualified and suitable teaching staff and students’ low level of English, while they found



no difficulty in choosing textbook/teaching materials. DSS schools found no difficulty in four areas, namely: students' low level of Putonghua, students' low level of English, students' low motivation in trilingual learning and teachers' low motivation in trilingual teaching, whereas their greatest difficulty was class scheduling (50%). Finding qualified and suitable teaching staff was also the greatest difficulty (53.1%) faced by the aided schools, whereas teachers' low motivation in trilingual teaching (7.59%) and students' low level of Putonghua standards were the two least difficulties faced by them (Figure 7).

Other difficulties suggested by the surveyed schools are as follows:

- Need extra resources for buying teaching aids, small gifts, reference books.
- Not all the students have the capacity for and/or are motivated in trilingual learning.



- Students may be burdened with trilingual learning as they have to make a lot of effort which is time consuming.
- Need to provide students with authentic language environments and students may not need to communicate in English or Putonghua in workplace after graduation.
- Social and family support is insufficient for trilingual learning.
- Learning diversity, especially in students' proficiency in the three languages.
- There are many students with Special Education Needs (SEN) in school who need special care.

Discussion

The Direct Subsidy Scheme (DSS) schools are predominately EMI schools

As mentioned above, Hong Kong primary schools traditionally use Cantonese as the medium of instruction and the survey confirms this situation as the majority of the surveyed schools (about 90%) are CMI schools. The majority used almost 100% Cantonese in teaching Mathematics, General Studies, Visual Arts, Music, physical Education and Computer/Information Technology. A minority, however, including 6 DSS schools and 3 aided schools, used almost 100% English in teaching all the subjects, except the Chinese and the Putonghua subjects. The DSS schools have the freedom to exercise better control over the standard of the incoming students. Moreover, DSS schools are allowed to fix the amount of tuition fees to be collected. However, critics have accused the schools of only catering for the needs of the affluent families ((Yung 2006), 105). They attract “some of Hong Kong’s top students as well as families who have the financial means and often the desire to send their children overseas for school or university” ((British Council 2007), 3). All this explains firstly why they were more confident of their graduates’ language proficiency in the survey, since most students enrolled are likely to be from high status family backgrounds and with high academic standards, as entry is competitive. Secondly, the DSS schools may adopt English as the MoI in some subjects because they enjoy more flexibility in the choice of the medium of instruction so that “they can adopt English-medium instruction on a class-by-class basis” ((Chan and Tan 2008), 476).

Code switching in Hong Kong primary schools

Hong Kong is essentially a monolingual Cantonese-speaking society where a large number of students are brought up in Cantonese-speaking environment. The majority of secondary schools claimed to be EMI schools under the laissez-faire MoI policy prior to 1997; however, many of which actually used mixed code (Pan 2000; Lai and Byram 2003; Poon 2010; Poon et al. 2013). Poon (2000), 149–150 also states that the majority of teachers resorted to the use of mixed code, mixing both English and Chinese.

As mentioned earlier in the Background section, the Education Commission Report Number Four (ECR 4) proposed by the Education Commission is believed to have dealt with the increasing use of mixed code in secondary schools. However, no special attention has been paid to the use of mixed code in primary schools. In the survey, the Chinese subject teachers in 23 schools (14.84%) switched between Cantonese and Putonghua in teaching the subject. For the English subject, teachers in 53 schools (34.19%) might use Cantonese in teaching English, depending on teaching and learning needs. Teachers teaching Putonghua in 7 schools (4.52%) used both Putonghua and Cantonese in junior

grades only. Among the three language subjects, a majority of the schools (87.74%) used almost 100% Putonghua in teaching the Putonghua subject, while about 50%-60% used almost 100% Cantonese in teaching the Chinese subject, and almost 100% English in teaching the English subject. We are aware that the survey data may not fully reflect the reality about the use of mixed code in teaching the three languages in primary schools, given the official policy is to avoid the use of mixed codes. We therefore plan to carry out case studies in a number of sample schools, the results of which will be reported in future articles.

Language subjects dominate school curricula

The Guide to the Primary Curriculum ((Curriculum Development Council 1993), 11) specifies that the following areas of learning and experience should be made available to pupils in all schools: physical, human, and social, moral, linguistic, mathematical, scientific and technological and aesthetic and creative. This curriculum, in theory, orients towards the all-round development of individual students. However, in practice, both the primary and secondary school curricula are “dominated by attention to the linguistic area” ((Adamson and Lai 1997), 88). Chinese language and English language are two of the three key subjects (the other is mathematics) in the primary and secondary curricula. They are key elements in assessment for placement in secondary education and entry to tertiary education (ibid). Table 8 shows the comparison between the recommended time allocation for each Key Learning Area (KLA) by the Curriculum Development Council (CDC) and the average percentage of time allocated in the 155 surveyed schools.

The 155 surveyed schools allocated the most teaching time to Chinese language and English language, with an average of 27.64% and 23.21% respectively. There are no major differences in the time allocation for each KLA between the CDC’s recommendations and the surveyed schools, except that an average of 17.8% of teaching time was allocated to Mathematics which is 2.8% more than that recommended by the CDC (Table 8). However, there are schools which allocated more teaching time than recommended to Chinese Language Education and English Language Education. Nine schools (5.81%) allocated more than 30% of teaching time to the Chinese Language Education, with the highest

Table 8 A comparison of the time allocation for each KLA between the CDC’s recommendations and the 155 surveyed schools (Source: Curriculum Development Council 2002, 66–67)

Key Learning Area	CDC recommendation		The 155 surveyed schools
	Lesson Time (over 3 years)		
	P1 – P3 (KS 1)	P4 – P6 (KS 2)	The average percentage of time allocation for each KLA
Chinese Language Education (Chinese & PTH)	594-713 hours (25-30%)	594-713 hours (25-30%)	27.64%
English Language Education	404-499 hours (17-21%)	404-499 hours (17-21%)	23.21%
Mathematics Education	285-356 hours (12-15%)	285-356 hours (12-15%)	17.80%
Science & Technology Education (G.S. & I.T.)	285-356 hours (12-15%)	285-356 hours (12-15%)	15.14%
Arts Education (Visual Arts & Music)	238-356 hours (10-15%)	238-356 hours (10-15%)	10.79%
Physical Education	119-190 hours (5-8%)	119-190 hours (5-8%)	5.41%

time allocation of 32.35%, and only ten schools (6.45%) allocated less than the recommended 25% teaching time in this KLA, with the least allocating 22.86%. As for the English Language Education, 146 schools (94.19%) allocated the most percentage of teaching time for this with the highest allocation being 27.27%, 6.27% above the CDC recommendation. The least teaching time allocated to English is 17.24% which is the basic requirement recommended. This may, to a certain extent, reflect what Adamson and Lai (1997), 94 have said, “.....there was a strong bias in the curriculum towards languages, an allocation of nearly half of the primary timetable.....”.

The surveyed school graduates’ proficiency level in the three languages

In the survey, the schools were asked to compare their graduates’ proficiency level in the three languages based on the graduates’ language benchmark test results before graduation with other primary schools in Hong Kong. The schools made reference to the Territory-wide System Assessment (TSA) reports and school reports when filling in this part of the survey.

Only 4 of all the 155 survey schools did not provide information for this part and this may be due to the reason that they did not want to broadcast their graduates’ perceived proficiency level in the three languages to others. Apart from these four schools, two more schools did not show their graduates’ proficiency level in Putonghua. In fact, it is difficult for schools to tell their graduates’ proficiency level in Putonghua before graduation since the TSA provides assessment only for speaking skills in English and Cantonese but not in Putonghua. Putonghua materials are only provided when assessing students’ listening skill in Chinese. Therefore, the schools might have to guess their graduates’ proficiency level in Putonghua and the Putonghua proficiency data we collected may not be reliable.

Collaboration between different subject teachers using different media of instruction

Collaboration implies working together with people of varying opinions and backgrounds for the purpose of achieving a common or a shared goal. Collaboration in teaching “involves educators planning and working together in schools, working with students at all stages of schooling and across all learning areas” (ESL Team 2004) with an aim to maximize learning by reducing learner/teacher ratio to more effectively meet learner needs. Hughes and Murawski (2001), 196 state that collaboration is “a style for interaction, which includes dialogue, planning, shared and creative decision-making and follow-up between at least two coequal professionals with diverse expertise, in which the goal of interaction is to provide appropriate services to students”. Therefore, the interaction may include a variety of behaviors, for example, communication, information sharing, cooperation, problem solving and negotiation.

In the survey, the subject teachers using the same medium of instruction reported that they collaborated in many ways. For example, the collaboration among teachers using English as MoI figured out ways to help struggling students. English terms were included in Mathematics and General Studies in senior grades and the Native-speaking teacher (NET) recorded the pronunciation of the terms so that students could practice these at home.

The Chinese teachers and Putonghua teachers collaborated in different ways. They co-planned meetings to develop the common aims of the two subjects and to ensure

that lessons were aligned across grade levels. They used their respective insights to select targets for instructional improvement, shared among themselves effective teaching strategies, reviewed students' work against standards and received regular support from one another.

Collaboration among different subject teachers using Cantonese as MoI mainly focused on cross-curricula units, lessons and projects. The Chinese teachers and the General Studies teachers arranged discussions of current affairs, Mathematics teachers and Visual Arts teachers organized competitions on the production of three-dimensional graphics, and the Chinese teachers and Visual Arts teachers collaborated to teach Chinese calligraphy and appreciation etc.

However, no evidence of formal team teaching was reported in the survey.

Difficulties in the implementation of trilingual education encountered by the surveyed schools

The greatest difficulty reported by the 155 surveyed schools when implementing trilingual education in schools was 'finding qualified and suitable teaching staff' (53.55%). All four government schools agreed to this. Some 50% of the surveyed aided schools and 33.33% of the DSS schools also agreed. One reason for the lack of qualified teachers may be due to the government's language proficiency requirement requiring all the serving and new English teachers and Putonghua teachers to meet the language benchmark requirements such as the Language Proficiency Assessment for Teachers (LPAT).

According to the survey, the least difficulty is presented by 'teachers' low motivation in trilingual teaching' (7.74%), while 47.1% of the schools considered 'students' low level of English standards' as the second greatest difficulty. This seems to suggest that students' low motivation and low language levels were to be blamed for any failure in implementing trilingual education rather than the teachers' motivation. Again, the survey data may not fully reflect the reality, as the survey form was completed either by the principal or a representative from the school's senior management.

The surveyed government schools and aided schools found the students' low level of English standard to be the second greatest difficulty. However, the six DSS schools found no difficulty at all in this aspect because they can have control over admitting students and these students are believed to have higher motivation in trilingual learning.

Relationship between origin of students and the MoIs chosen by the surveyed schools

Research conducted in Hong Kong and world-wide has agreed that students learn more effectively when taught through their mother tongue (Ho 1992). In the study, four schools (one in Kowloon and three in the New Territories) out of the 155 surveyed schools comprise over 70% of Mainlanders, however, only two of them use Putonghua as the MoI in teaching the Chinese subject in some grades, but not in other subjects. The one with the highest percentage of Mainlanders (90%) actually uses only Cantonese as the MoI in teaching the Chinese subject and other subjects. Putonghua, the mother tongue of the Mainlanders, is not adopted as the MoI in teaching other subjects in these schools. A school on Hong Kong Island which constitutes 37% of students from other

areas of the world uses Cantonese mainly supplemented by English or vice versa in teaching other subjects. One school in Kowloon and another in the New Territories have the highest percentage of students coming from a South Asian area, comprising 98% and 60% respectively. They are non-Chinese ethnics and it is impossible to adopt their mother tongues as the MoI as Cantonese, English and Putonghua are the three languages used as MoIs in Hong Kong. We can say that there is no distinct relationship between the origins of students and the MoIs chosen by the surveyed schools.

Conclusion

It is clear from the survey that, without government guidelines, individual primary schools have adopted their own policies regarding the use of medium of instruction in teaching different subjects, even across the same type of schools, i.e., government schools, aided schools and Direct Subsidy Scheme (DSS) schools. The findings of this study have provided a rough picture of the current situation of trilingual education implementation in Hong Kong primary schools. Some patterns have been identified: the majority of the schools use Cantonese as the major MoI in most subjects except the English subject and Putonghua subject, but the DSS schools are predominately EMI schools. Many schools do not encourage code switching in the classroom, but some allow a certain amount of code switching, but mainly in junior grades. The language subjects dominate school curricula. The DSS schools seem to be more confident than the aided schools and government schools regarding their graduates' proficiency level in the three languages, and the aided schools and government schools have rather low confidence in their graduates' English language proficiency (both spoken and written). Regarding Putonghua, currently the TSA only has oral assessments on English and Cantonese but not on Putonghua, and therefore it is difficult for primary schools to know their graduates' proficiency level in Putonghua. The EDB and the HKEAA should consider modifying the existing TSA or develop new mechanism so that students' proficiency of the three languages can be assessed properly. Regarding the collaboration between different subject teachers using different medium of instruction, although it is not a common practice in Hong Kong primary schools, a range of collaboration examples have been reported by the surveyed schools, showing that efforts have been made in this area in recent years. When asked about difficulties encountered in the implementation of trilingual education, the surveyed schools found that finding qualified and suitable teaching staff was the biggest challenge. Around half of the schools also found that students' low level of English standards has hindered the implementation of trilingual education. Although the current survey covered 155 primary schools, it has its limitations, and follow-up case studies in selected primary schools are needed to answer some of the unanswered questions. For example: what is the rationale behind adopting different MoIs in teaching different subjects? Do the origins of students affect the MoI policies in schools? Are there conflicts between the school's language policies and teachers' real practices in the classroom? What is the real picture of code-switching between different languages in real classrooms? What are teachers', students' and parents' views towards trilingual education? How confident are students themselves in achieving good proficiency in the three languages when they graduate? Findings from the

planned case studies should allow us to propose a trilingual education model that would suit most schools.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

LW and AK developed the research idea together. LW collected and analysed the data, and LW and AK drafted the manuscript. Both authors read and approved the final manuscript.

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