For discussion on 12 June 2006

Panel on Education

Class Restructuring of Secondary Schools

Purpose

This paper informs Members of the principles and approach to be adopted in determining the class structure of secondary schools to support the new academic structure for senior secondary education (the 334 reform).

Background

- 2. Following extensive consultation and given widespread community support, the Administration has decided to implement a new three-year senior secondary education structure (NSS) with effect from the 2009/10 school year. One of the critical success factors of the new academic structure is to provide a more flexible, coherent and diversified senior secondary curriculum to suit the varied needs, interests and abilities of students, so that all students will benefit from six years of secondary education.
- 3. Implementation of the NSS will increase the provision of Secondary 6 classes and improve the teacher-to-class ratio, thereby help to alleviate the impact of a declining student population which will start in secondary schools from the 2009/10 school year. A projection of the school-age population for Secondary one (S1) between 2006/07 and 2010/11 is given in Annex A.

Breadth, depth and accessibility of curriculum

4. The NSS curriculum framework¹ provides flexibility for students to

-

¹ The four core subjects are Chinese Language, English Language, Mathematics and Liberal Studies. In addition, there are 20 elective subjects and a range of career-oriented studies. The 20 elective subjects include Chinese Literature, English Literature, Chinese History, Economics, Ethics and Religious Studies, Geography, History, Tourism and Hospitality

choose from 20 elective subjects and a range of career-oriented studies, breaking down the existing barrier among arts, science and commerce streams. The aim is to provide a broad curriculum to suit individual interests and aptitudes. However, to assure accessibility of the elective subjects to students, schools must offer multiple classes for the same subject at different times so as to increase students' chances of enrolling in their preferred combination of subjects.

- 5. For example, a 24-class school could offer about 11 electives covering five Key Learning Areas (KLAs). By comparison, a 12-class school could probably offer about 6 electives from three KLAs, thereby restricting both the breadth and depth of the curriculum. Furthermore, small schools are likely to focus on the more popular subjects only, thereby endangering subjects that have less demand, e.g. literature, visual arts, music, and history, as well as compromising the Other Learning Experiences² in the student programme. At staff level, teachers in a small school would have to shoulder a bigger share of central administration and co-curricular activities and hence have less capacity for effective team building, joint curriculum planning, collaborative lesson preparation and professional growth. For illustration, a comparison of subjects offered by a 24-class school and a 12-class school and the sustainability of professional teaching resources is given in Annex B.
- 6. From a professional standpoint, taking student interests as the primary consideration, we therefore reckon that the desirable school size is 24 or 30 classes, the latter being the more common school size we have.

Constraints

7. Throughout the public consultation on the 334 reform and in the final report published in May 2005, it has been pointed out that³ "we have been

Studies, Biology, Chemistry, Physics, Science, Business Accounting and Financial Studies, Design and Applied Technology, Health Management and Social Care, Home Economics, Information and Communication Technology, Music, Visual Arts and Physical Education.

² The Other Learning Experiences make up 15 to 35% of the curriculum and include moral and civic education, social services, physical and aesthetic education, and work-related experience.

³ Paragraph 12.15 of the report on "The New Academic Structure for Senior Secondary Education and Higher Education – Action Plan for Investing in the Future of Hong Kong".

planning on the basis of redeploying recurrent savings arising from the projected decline in secondary student enrolment and reduction in the number of classes to finance a number of new initiatives⁴ to support and sustain the NSS". This was acknowledged and accepted by the school sector and the community.

8. Coupled with the introduction of an Early Retirement Scheme⁵, and injection of additional cash grants for teacher preparation and capacity enhancement⁶ in the run-up to 2009, we anticipate balanced teacher supply and demand in the short-term. However, by 2011/12, i.e. the double cohort year⁷, we expect a shortfall of more than 1200 teachers. Any change in policy which would have the effect of increasing the demand for teachers inevitably will exacerbate the shortfall in 2011/12. In the consultation on the 334 reform, the Administration undertook to review the class size after the double cohort year so as to alleviate the problem of teacher redundancy.

Guiding Principles for Class Restructuring

- 9. Against this background, we propose the following guiding principles in determining the class structure of secondary schools under the NSS academic structure:
 - (a) under normal circumstances, students should be able to complete six years of secondary education in the same school;
 - (b) schools should operate at a scale that allows for a broad and

⁴ These include additional provision of teaching staff to facilitate flexible student groupings, in particular for the learning and teaching of Liberal Studies; the diversity learning grant; additional funding to cater for student diversity, including students with special educational needs; and improvement o the teacher-to-class ratio for senior secondary levels after the double cohort year.

⁵ The Early Retirement Scheme addresses the problems of redundancy as well as subject mismatch in some schools.

⁶ The approved commitments for Teacher Professional Preparation Grant is \$906 million and the additional cash grants for secondary schools' enhanced Capacity Enhancement Grant for the three school years starting from the 2005/06 school year amount to \$858 million. About 920 teaching posts are thus created.

⁷ In this year, the last cohort of S7 under the existing 322 academic structure, and the first cohort of SS3 under the new 334 structure will co-exist, with a net increase in senior

- balanced curriculum to be offered and students should be provided with accessibility to combinations of subject electives of their preference;
- (c) reasonable stability in the class structure should be in place to facilitate forward planning on the part of the school.

These principles and their implications are elaborated in paragraphs 10 to 19 below.

Implications for Class Re-structuring

(a) Six years of secondary education in the same school

10. To ensure continuity, we wish all students could complete six years of secondary education in the same school. On this basis, the Junior Secondary Education Assessment (JSEA) at the end of S3 will no longer be required and will be abolished. We will consider providing a limited student placement service for students who need to change schools when proceeding from S3 to SS1, for example, to enroll in elective subjects of their preference.

(b) Curriculum choice and accessibility

11. We consider a school with 18 classes (i.e. three classes per level) to be marginally viable in providing a broad and balanced senior secondary curriculum. Schools with less than three S1 classes in a school year may continue to operate if they can assure the breadth and accessibility of curriculum choice for students through other means, e.g. inject additional resources, merge or collaborate with another school etc. By September each year, schools will know the number of S1 students who turn up and, if they can only fill up one or two S1 classes, the schools concerned will be required to submit a proposal by the next January on how they would adequately provide for students' choice in the senior secondary curriculum. If the proposal is approved, they will continue to participate in the Secondary School Places Allocation (SSPA) in the following year.

- 12. In assessing the proposals of schools with less than three S1 classes, we shall take into account the following considerations:
 - (a) The curriculum plan must provide a reasonably broad and balanced choice of elective subjects, and safeguard student accessibility to various combinations of subjects. The school must also demonstrate that it has sufficient teacher expertise and provide a deployment plan.
 - (b) The proposal will include, in addition to (a) above, a resource deployment plan that addresses both funding and staffing issues, and, in the case of collaboration, the institutional arrangements for student support and monitoring of learning outcome. In the case of a merger, there should be a revamped governance structure that encompasses stakeholders from both schools.
 - (c) There should be prior consultation and broad agreement with the key stakeholders of the schools concerned, including the school sponsoring body, school managers, teachers and parents.
 - (d) Given the time lag between submission of the plan and its delivery at the senior secondary level three years later, there has to be financial or other form of guarantee by the relevant authority, e.g. the school sponsoring body, that the proposal will be implemented as agreed.
- 13. Schools that fail to come up with an acceptable plan will not be included in the next round of SSPA and students having been admitted will complete their junior secondary education there. As it will become increasingly difficult for the school to maintain sufficient subject expertise when the number of classes and teachers declines over time, students will be placed to other schools if they so wish.
- 14. To provide relief for schools which have a sound professional standing and a good track record of student achievement, but nonetheless have failed to recruit three classes of S1 students, they may apply for a special quality assurance review (SR). If the SR confirms that a school provides good quality education, the school may continue to participate in the SSPA for three

consecutive years and three classes of S1 students will be allocated with the provision of corresponding resources for the actual number of operating classes throughout this period. This is to signify to parents the Administration's endorsement of the school and to allow time and a stable environment for the school to demonstrate results, with a view to increasing their competitiveness in student recruitment.

(c) Reasonable stability in the class structure

- 15. At present, the number of S1 to S3 classes for each school is reviewed annually based on the student enrolment in early September. This is to take account of student movement in the interim. To reduce uncertainty and facilitate better curriculum and staff planning, we propose to revise the class approval procedures by taking stock of the number of S1 students in early December, and thereafter maintaining the same number of S2 and S3 classes. In other words, we shall disregard any student movement after the stock taking exercise in S1.
- 16. Another stock-taking will be carried out at SS1 in early December, as some students may change school for reasons of curriculum choice and accessibility or go overseas after completing S3. Once the number of SS1 classes is finalized, the number of SS2 and SS3 classes for the same cohort of students will remain the same. In other words, in future, approval of classes will only be conducted at S1 and SS1.
- 17. In determining the number of S1 and SS1 classes, if a school will have redundant teachers as a result, 35 students per class will be adopted as a working basis. In other words, a school with 71 S1 students will be provided with three classes throughout the three junior secondary years for that particular cohort of S1 students. The same principle applies to senior secondary levels. In all other circumstances, the planning parameter is 40 students per class.
- 18. For existing DSS schools (i.e. DSS schools in operation, or allocated with school premises, in or before the 2005/06 school year), they will continue to have the option of assigning a number of S1 places for SSPA. Besides, since most students will complete six years of secondary education in the same school in future, existing senior secondary schools will be allowed to be mainstreamed

if they so wish. Each case will be examined on individual merits.

19. The former skills opportunity schools and practical schools have fewer classes by design. Since they have only completed mainstreaming for one to two years, their future class structure will be considered on an individual basis, having regard to the student background and the nature of the curriculum.

Consultation

- 20. We have conducted a series of consultation sessions with secondary schools councils, school sponsoring bodies, all secondary school heads and representatives, and parents. Their views have been taken into account in formulating the proposed way forward. In the process, we have carefully weighed the pros and cons of all suggestions, balancing the interests of students, parents and schools in various situations.
- 21. The Subsidized Secondary Schools Council has put forward two suggestions which we are unable to accept, namely to standardize school size at 24 classes and class size at 35 students. There are divergent views among schools and parents whether all secondary schools should move towards 24 classes as the norm, i.e. with four classes at each level. Parents do not wish to see a reduction in S1 classes in the popular schools. Principals of fully enrolled 30-class schools also find it unnecessarily disruptive to have to cut six classes, thereby creating problems of teacher redundancy, upsetting teamwork and staff morale, and reducing curriculum choice and accessibility for students. At present, about 300 secondary schools have five S1 classes or 30 classes in total. To adopt 24 classes across the board will create more instability than what the proposal purports to avoid. Even in districts where student population is declining, it has proven difficult to reach consensus among schools to take collective action to reduce school size.
- 22. It has also been suggested that the class size should be reduced from 40 to 35 across the board. The fact of the matter is, although 40 students per class is adopted as the planning parameter, we have exercised flexibility in determining the class size for schools with under-enrolment and teacher redundancy problem. This is a preferred and more targeted approach, without affecting the provision of student places in the more popular schools. For

example, schools operating three S1 classes with 71 students have a class size of only 24. In the 2005/06 school year, about 1100 junior secondary classes in 210 secondary schools have a class size of 35 or below. Among the schools concerned, about 50 have junior secondary classes with 20 or less students.

- 23. Furthermore, under the recently announced initiative for supporting low academic achievers, starting from the 2006/07 school year, we will provide additional teachers to schools with large intakes of the academically weakest 10% and Band 3 students. For the weakest 10% students, the effective class-to-teacher ratio will be raised from 1:1.3 to 1:2. For the remaining Band 3 students, the ratio will be improved to 1:1.6. The enhanced class-to-teacher ratio will facilitate schools to adopt small group teaching or flexible grouping of students based on student ability and the nature of the learning activities.
- 24. As stated in paragraph 8 above, we shall review the class size after the double cohort year in the 2011/12 school year.
- 25. Nonetheless, we do recognize the problem of over-enrolment in some popular schools which currently may recruit up to 45 students per class, even though the stated policy is 40 students per class. We have critically assessed the enrolment of schools and noted that in the 2005/06 school year, there are about 2600 junior secondary classes with over 40 students each. The aggregate over-enrolment in the classes concerned is about 5400 students. In view of the declining student population, we propose to cap the maximum number of students per class at 40. We believe that the abolition of the JSEA also helps to reduce the incentive for schools to over-enroll at the junior secondary levels. Having regard to the supply and demand of school places in each district, we shall enforce the cap starting in districts which experience a continual decline in student population.

Way Forward

26. We have been under pressure from schools to announce the nominal class structure under the NSS academic structure, so as to facilitate forward planning. We appreciate the urgency of the matter and shall inform schools, before the end of the current school year, their nominal class structure from the 2007/08 school year onwards. The actual operating classes will be subject to

adjustment in the light of the SSPA outcome each year and the enrolment as at December in respective years.

Advice Sought

27. Members are welcome to comment on the proposals in paragraphs 9 to 19 above.

Education and Manpower Bureau June 2006

Projection of the school-age population for Secondary One (aged 12) between 2006/07 and 2010/11

	2006/07	2007/08	2008/09	2009/10	2010/11
Secondary					
One (Aged					
12)	84 800	84 800	81 300	76 500	68 900

Note: Figures refer to the position as in September of the respective years. They are compiled on the basis of the 2003-based territorial population projections released by the Census and Statistics Department in June 2004. They include estimates for cross boundary students but exclude mobile residents. The actual number of students may deviate from the projected figures due to parental choices as well as under-aged and over-aged students.

Diagrammatic Representation of Dimensions of Curriculum Provision

1. Breadth & Depth of the Curriculum in Schools with 12 or 24 Classes:

a. School A with 12 classes offers 6 elective subjects across 3 Key Learning Areas (KLA)

KLA	PSHE	Science Education	TE	Arts Education	CLE
Subjects offered	Chinese History Economics Geography	Science Physics	ICT	nil elective offered	nil elective offered

b. School B (24 classes) offers 11 elective subjects across 5 Key Learning Areas (KLA) – a deeper and wider curriculum than that in School A

KLA	PSHE	Science Education	TE	Arts Education	CLE
Subjects offered	Chinese History Economics Geography	Science Physics Chemistry Biology	ICT/ BAFS	VA	Chinese Literature

Note:

The existing subjects of a school are grouped into the following eight KLAs:

Chinese Language Education, English Language Education, Mathematics Education, Personal, Social and Humanities Education, Science Education, Technology Education, Arts Education and Physical Education.

Abbreviations: PSHE: Personal, Social & Humanities

TE: Technology Education

ICT: Information & Communication Technology BAFS: Business, Accounting & Financial Studies

VA: Visual Arts

CLE: Chinese Language Education

2. Students' accessibility to subjects:

		Group 1	Group 2	Group 3
a.	12-class school (School A)	Physics, Economics	Science, Chinese History	Geography, ICT
b.	24-class school	Science, Physics,	ICT, Chinese History,	Geography,
	(School B)	Chemistry,	Biology, VA,	Economics,
		Economics	Chinese Literature	BAFS,
				Physics

If students are to choose one elective subject from each group,

- A student in School A with 12 classes cannot combine choices of Physics and Economics,
 Science and Chinese History or Geography and ICT.
- A student in School B with 24 classes can combine choices of Physics and Economics,
 Science and Chinese History or Geography and ICT as Physics and Economics can be offered in more than one group.

3. What will happen in a 12-class school?

A 12-class school will likely to have:

- no librarian teacher sufficiently freed from teaching activities
- no deputy head reasonably freed from teaching activities to take care of administrative matters
- compromise between teacher specialization and the need to meet wider programme demands
- diminished teacher expertise for collaborative planning and school professional growth
- less elective subjects offered
- less breadth in curriculum (electives across KLAs)
- less depth in curriculum (electives within KLAs)
- less student accessibility to preferred subject combinations

Diagrammatic representation of the improved mechanism of packing of classes

(a) Class structure for schools without redundant teachers (i.e. 40 students per class)

		S1 Allocated	S1 Turn-up					
	Enrolment	152	150					
Year 1	Approved	4	4	S2				
	Cla7sses		(40x 3+30)					
	Enrolment			140		_		
Year 2	Approved			4	S3			
	Classes			(40x3+20)				
	Enrolment				140			
Year 3	Approved				4	SS1		
	Classes				(40x3+20)			
	Enrolment					125		-
Year 4	Approved					4	SS2	
	Classes					(40x3+5)		<u> </u>
	Enrolment						111	
Year 5	Approved						4	SS3
	Classes						(average 28 per	
							class)	
	Enrolment							100
Year 6	Approved							4
	Classes							(25 per class)

(b) Class structure for schools with redundant teachers (i.e. taking 35 students per class)

		S1	S1					
		Allocated	Turn-up					
	Enrolment	152	110					
Year 1	Approved	4	4	S2				
	Classes		(35x3+5)					
	Enrolment			81		_		
Year 2	Approved			4	S3			
	Classes			(average 20 per class)				
	Enrolment			Class)	80	-		
Year 3	Approved				4	SS1		
	Classes				(average 20 per class)			
	Enrolment					72		_
Year 4	Approved					3	SS2	
	Classes					(35x2+2)		
	Enrolment						60	
Year 5	Approved						3	SS3
	Classes						(20 per	
							class)	
	Enrolment							60
Year 6	Approved							3
	Classes							(20 per
								class)