

# 立法會 *Legislative Council*

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## **Panel on Education**

**Updated background brief prepared by the Legislative Council Secretariat  
for the meeting on 20 April 2012**

### **Implementation of the new academic structure**

#### **Purpose**

This paper summarizes the issues of concern raised by the Panel on Education ("the Panel") concerning the implementation of the New Academic Structure for Senior Secondary Education and Higher Education ("NAS").

#### **Background**

2. In 2000, the Education Commission recommended the adoption of a three-year senior secondary academic system to facilitate the implementation of a more flexible, coherent and diversified senior secondary curriculum. In his 2004 Policy Address, the Chief Executive confirmed the policy direction of developing NAS, i.e. three-year junior secondary, three-year senior secondary and four-year undergraduate education. The NAS has been implemented in all secondary schools at Secondary ("S") 4 with effect from September 2009.

3. Under the new senior secondary ("NSS") curriculum, there are four core subjects, namely, Chinese Language, English Language, Mathematics and Liberal Studies ("LS"). The Hong Kong Diploma of Secondary Education ("HKDSE") Examination takes place for the first time in 2012. A standards-referenced reporting ("SRR") system is used in reporting student results in the HKDSE Examination. Instead of using grades A to F as in the current reporting system, the results of the NSS subject are reported in five levels, i.e. 1 to 5, with Level 5 being the highest. Candidates with top performance are represented by Level 5\*\* and next top performance by 5\*. Achievement below Level 1 will be designated as "unclassified". Under SRR, the standards are held constant with no fixed proportion of students for each

level. Contrary to the previous reporting system under which Grade E is a passing grade, there is no official passing level under SRR.

### **Deliberations of the Panel**

4. Over the past few years, the Panel held a number of meetings to discuss progress on the implementation of NAS. At the meeting on 12 March 2012, members discussed the mechanism for rechecking/remarking the results of HKDSE Examination. The major issues of concern raised by members are set out in the following paragraphs.

#### Liberal Studies

##### *Assessment of LS*

5. Members were concerned about the fairness and reliability of the public examination of LS. As the assessment of LS was based on the judgment of the markers and in the absence of uniform and transparent assessment criteria, teachers and parents were concerned about how LS examination papers would be marked and possible disputes on the assessment results. Members considered it important to put in place a fair appeal mechanism to handle disputes on the assessment results.

6. Some members commented that as the objective of LS was to develop students' critical thinking and analytical skills, merits should be given to innovative answers and personal contributions of students. Teachers should change their mentality and be more open-minded in LS assessment in order not to dampen students' creativity and interest in learning.

7. The Administration explained that students' performance in the LS examination would be judged by their understanding and application of relevant knowledge and concepts to solve problems or make a suitable judgment, application of enquiry skills such as analytical and critical thinking and their construction of arguments with direct evidence. Sample examination questions and students' responses over a range of different levels of performance would be made available for teachers to have an idea of the standards of responses expected from students and how the questions would be marked.

8. The Administration further explained that examination scripts would be marked by two markers and when there were significant differences in the markers' opinions, a third or even a fourth marker would be called in to resolve the discrepancies. In case of a request for review of the results, another two markers would be involved and the assessment results would be reviewed by the

Appeal Review Committee appointed by the Council of the Hong Kong Examinations and Assessment Authority ("HKEAA").

9. Members enquired whether the fairness of the public assessment of LS without school-based assessment ("SBA") would be jeopardized. There was a view that schools should be allowed to decide whether or not to adopt SBA within three years after the implementation of the NSS structure. Thereafter, the Administration should conduct a review to decide whether SBA should be an integral part of LS for adoption by all schools.

10. The Administration explained that SBA was an integral part of LS and was not designed as an option for schools and students. The findings of a survey on schools' attitude towards LS had shown that a majority of schools had confidence in the structure and design of the subject and more than 80% of the respondents supported the assessment model. According to HKEAA, many overseas bodies had accepted that SBA was an integral part of LS. Without SBA, the recognition of the qualification of HKDSE by overseas jurisdictions might be affected.

11. There was a view that LS should not be a mandatory subject for university admission. It was pointed out that given the breadth of the curriculum, the absence of structured teaching and learning resources, and the lack of clear objective assessment criteria, many students had difficulties in grasping the subject. On the other hand, some members considered that LS should be a mandatory subject in the NSS curriculum as it was important for local students to acquire a broad knowledge base and develop critical thinking skills.

12. The Administration advised that the objective of LS was to develop students' critical thinking and analytical skills which were essential for students of all disciplines. The university entrance requirement for LS was Level 2. Students were not required to have in-depth knowledge of all the areas covered in the LS curriculum; they were required to demonstrate their abilities to analyze the given information and data and present their views on relevant issues in order to attain Level 2. HKEAA had made available LS papers and exemplars of students' performance on the HKEAA website to illustrate the requirements of Level 2.

#### *Support to LS teachers*

13. Some members pointed out that the greatest dissatisfaction upon the implementation of NAS was the inadequate support given to LS teachers. According to a survey conducted by the Hong Kong Professional Teachers' Union, LS teachers were overloaded and under immense pressure and many

schools were short of manpower for conducting SBA, teaching LS in small groups, and catering for learning diversity. There was also concern about the heavy workload of LS teachers in Independent Enquiry Study ("IES"). The Hong Kong Liberal Studies Teachers' Association had requested the Administration to provide more support to LS teachers including the provision of a three-year special allowance for teaching LS; the creation of one additional permanent LS teaching post in each school; the establishment of a network of LS teachers for mutual support; and the strengthening of support in relation to the assessment of students' performance in LS.

14. The Administration advised that a LS School Network Scheme comprising 25 district coordinators who were experienced in teaching LS and assessing LS examination papers was set up in November 2009 to provide support to both schools and teachers on the curriculum and assessment of LS. HKEAA had also launched a webpage on "Public Assessment of HKDSE LS", which provided easy access to a wide range of resources for teachers and students. The Administration recognized the importance of school network building and would continue to strengthen the support to schools and teachers regarding LS.

#### *Small class teaching for LS*

15. Members shared the view of many deputations on the importance of adopting small class for teaching LS as it would enhance interaction between teachers and students. Members noted that to help smoothen the introduction of LS, a special LS Curriculum Support Grant of \$320,000 had been disbursed by the Administration to each secondary school in the 2010-2011 school year for hiring teaching assistants and appropriate services. Members were concerned that many schools had used the resources in language subjects rather than implementing small group teaching for LS. Members urged the Administration to take measures to ensure that all schools would allocate sufficient resources for teaching LS in small groups.

16. The Administration explained that in accordance with the principle of school-based management, schools should be given the autonomy and flexibility in managing their resources. As the situations in schools varied, it was inappropriate for the Administration to mandate the use of their resources in specific areas or subjects. For schools which had difficulties in adopting small group teaching for LS, the Administration would send professional teams to these schools to assist them in improving the learning and teaching of LS.

17. On members' concern about classroom shortage for teaching LS in small groups, the Administration advised that it had allocated some vacant school premises to a number of schools to mitigate the problem. For schools which

had participated in the Voluntary Optimization of Class Structure Scheme, more classrooms would be freed up for small group teaching.

### *Training and assessment of LS teachers*

18. Members were concerned about the findings of a study conducted by the Hong Kong Institute of Education which showed that many LS teachers had a weak understanding on human rights and rule of law, and sought information on the training and assessment of LS teachers. They considered it important for the Administration to provide adequate training to LS teachers and conduct assessment after training to ascertain their readiness to teach the subject and the effectiveness of the training programmes.

19. According to the Administration, a maximum of 100 training hours would be provided to in-service teachers before they were required to take up teaching duties for LS. The training covered subject-based knowledge, pedagogy, assessment of students' learning and IES. In addition, induction programmes would be organized for new LS teachers during the summer months to prepare them for teaching the subject. Having regard to the findings of the study and members' concern, the Administration would strengthen LS teachers' knowledge of the rule of law.

### HKDSE qualification

#### *Recognition of HKDSE*

20. Members noted that following the inclusion in early 2010 of the HKDSE qualification into the Tariff System of the University and Colleges Admissions Service ("UCAS") in the United Kingdom ("UK"), Levels 3, 4 and 5 in the HKDSE Examination were broadly comparable to Grades E, C and A in the current General Certificate Education ("GCE") A Level Examination respectively, but HKDSE results lacked those levels which were comparable to Grades B and D in the GCE A Level Examination. Members were concerned about the impact of this on local students who wished to apply for admission to UK universities. Members pointed out that most of the renowned UK universities required a candidate to obtain a grade equivalent to Grade B or above in GCE A Level Examination. Without a level equivalent to Grade B in GCE A Level Examination, Hong Kong students would need to obtain Level 5 in HKDSE examination (equivalent to Grade A in GCE A Level Examination) in order to gain admission to these renowned UK universities. Given the wide range between Level 4 (tariff 80) and Level 5 (tariff 120) in HKDSE results, members suggested adding a Level 4\* in HKDSE which was comparable to Grade B in GCE A Level Examination to tackle the problem.

21. The explanation given by the Administration was that there was normally no direct grade by grade comparison between two qualifications unless the design of a system was modelled on another system such as the modelling of the HKALE on GCE A Level Examination. Some UK universities had indicated that they would not compare the grades in GCE A Level Examination directly with the levels in HKDSE and understood that Levels 3, 4 and 5 in HKDSE results were broadly comparable to Grades E, C and A in GCE A Level Examination. Both the Administration and UCAS would review the HKDSE levels after the first HKDSE examination in 2012 and would make adjustments to the levels if necessary.

22. As HKDSE was a new qualification, members considered it necessary for the Administration to expedite its promotion to obtain international recognition of the qualification. According to the Administration, overseas authorities, tertiary institutions, credential and academic agencies were positive in accepting the HKDSE qualification as a credential for application for admission. Some of the world-renowned universities, e.g. University of Oxford and the Yale University, had announced the admission requirements of HKDSE holders on their websites.

23. Some members pointed out that two renowned universities in UK did not recognize the Combined Science and Integrated Science subjects under the NSS curriculum for admission purpose and were concerned about the adverse impact on the articulation to overseas universities of students who had chosen these subjects.

24. The Administration explained that the introduction of Combined Science and Integrated Science subjects had become a trend in the education sector which attached increasing importance to the integration of subjects. Many overseas universities had a positive attitude to the recognition of the Combined Science and Integrated Science subjects.

25. Given that many local students intended to pursue tertiary education in the Mainland, the Administration was requested to explore the possibility of exempting local students from the Joint Entrance Examination for Universities in the People's Republic of China and accepting the HKDSE examination results for admission to Mainland universities.

26. The Administration advised that there were currently three ways for local students to gain admission to Mainland universities. Some universities only recognized the results of the Joint Entrance Examination for Universities in the Mainland; some universities required applicants to take the examination conducted by the universities; and some Mainland universities recognized the public examination results in Hong Kong and exempted students with good

results from taking their admission examinations. Three Mainland universities (namely Peking University, Tsing Hua University and Fudan University) would continue to directly recruit Hong Kong students and exempt them from Mainland examinations. Another three (Sun Yat-sen University, Hua Qiao University and Jinan University) might also directly recruit Hong Kong students, but would require them to sit for a separate examination. The Education Bureau informed in April 2012 that as a pilot scheme in 2012, 63 higher education institutions in Mainland China would admit Hong Kong students on the strength of their HKDSE Examination results and exempt them from the Joint Entrance Examination for Universities in Mainland China.

#### *Mathematics as a mandatory subject for university admission*

27. Members also discussed the implications of including Mathematics as a mandatory subject for university admission. Currently, Mathematics was not a mandatory subject for university admission. With the implementation of NSS structure, students had to attain Level 2 in Mathematics in HKDSE in order to apply for university admission. Members were concerned that such a requirement would deprive the chance of the students who excelled in subjects other than Mathematics for local university education. Some members requested the Administration to consider excluding Mathematics as a mandatory subject for university admission.

28. According to the Administration, local universities supported that Mathematics should be one of the core subjects as it could help students develop their analytical skills and logical thinking which were essential for all students regardless of their study programmes. Local universities had agreed to exercise flexibility in considering the applications for admission on a case-by-case basis.

#### *Reporting method for HKDSE Examination*

29. Members were concerned that the use of SRR might result in wide fluctuation in marks and increase in disputes over examination results. Concern was raised that candidates' results would be affected by the different levels of difficulty of the examination papers.

30. The Administration advised that SRR had been used for the Hong Kong Certificate of Education Examination English Language and Chinese Language examinations starting from 2007. It was a global trend to use SRR, which enabled employers and universities to understand the candidates' level of performance with reference to a set of standards rather than their relative ability among candidates taking part in the same public examination. It also provided a good basis for comparing the standards and performance of students who took

the examination in different years. More importantly, SRR could facilitate teachers to adjust the pedagogy according to the ability of students.

### Mechanism for rechecking/remarking of HKDSE Examination

#### *Upgrading criteria for rechecking/remarking*

31. Members noted that for rechecking, the results would be upgraded if the final mark after correction of technical errors attained the minimum cut-off score of the next higher grade. For remarking, the results would be upgraded if the new mark after averaging all the valid marks of the original marker(s) and the remarker(s) reached a specified margin above the minimum cut-off score of the next higher grade. Members raised concern about the different upgrading criteria for rechecking/remarking and sought justification for such difference.

32. According to HKEAA, rechecking referred to the checking of technical errors such as arithmetical errors, incorrect mark entries and unmarked pages which did not involve professional judgment. Hence, subject/component results would be upgraded if technical errors were found and the final mark after correction of technical errors attained the minimum cut-off score of the next higher grade. On the other hand, remarking involved the remarking of each answer script independently by a different marker. Marking involved professional judgment, especially for open-ended questions. It was well-established that slightly different marks might be given if a script was being marked twice, even when done by the same marker. As such, a small margin above the minimum cut-off score was necessary to take such marker variation into account in determining an upgrade.

#### *Financial assistance to needy students*

33. Another concern of members was the level of the fees for rechecking/remarking and whether needy students would be deprived of the opportunity to apply for rechecking/remarking of HKDSE Examination results due to a lack of means. Members suggested that a simple and user friendly mechanism should be put in place to provide financial assistance to those who could not afford the rechecking/remarking fees. Consideration should be given to reducing the rechecking/remarking fees and granting all applications from students with financial difficulties for waiving such fees for the 2012 HKDSE Examination.

34. The Administration responded that the Examination Fee Remission Scheme administered by the Student Financial Assistance Agency ("SFAA") and the Comprehensive Social Security Assistance ("CSSA") administered by the Social Welfare Department ("SWD") all along did not provide automatic



assistance for supplementary services provided by HKEAA, including rechecking/remarking of examination results, as they were not essential services or necessary procedures for a candidate to sit for an examination. Nevertheless, needy candidates could apply to HKEAA for consideration of a partial waiver for fees on rechecking/remarking if there were genuine needs. HKEAA would consider the applications on a case-by-case basis, taking into account such factors as the reasons given by the candidates and the financial situation of HKEAA. Whether candidates were beneficiaries of CSSA had also been an important factor consideration by HKEAA. Fees for rechecking/remarking would be refunded to candidates who got an upgrade in the examination result after the review.

### Teachers' professional development

35. Members considered it necessary for the Administration to provide appropriate professional development programmes and sufficient support to teachers for the implementation of the NSS curriculum. The Administration advised that since the implementation of the NSS curriculum in September 2009, about 39,000 training places for NSS teachers had been offered. For the 2012-2013 school year, the total number of professional development programmes and training places planned were about 550 and 52 000 respectively. Also, there were specific courses on conducting the internal assessment of IES. A web course had also been offered for teachers who did not have the time to attend face-to-face courses.

36. To support teachers, apart from the recommended NSS textbooks (152 sets), about 221 learning and teaching materials for NSS subjects had been developed, and around 359 resources/web links were also available. The "NSS Learning and Teaching Resource List" which listed out the availability and sources of relevant learning and teaching materials for each NSS subject (e.g. textbooks, the learning packages and websites) was uploaded in May 2011 for teachers' reference.

37. Members noted that the existing basic teacher-to-class ratios for senior secondary classes were 1.3:1 for S4 and S5 and 2:1 for S6 and S7. Top-up provisions were provided in the form of split-class teaching entitlement, additional teachers for Chinese Language, school librarians, additional teachers for remedial teaching, and additional non-graduate teachers. Under the NSS structure, the top-up provisions in existing staff establishment were subsumed into a revised teacher-to-class ratio.

38. Members were concerned whether the revised teacher-to-class ratios for the implementation of NAS would lead to more surplus secondary teachers. They called on the Administration to reduce the existing class size of 40

students to facilitate effective teaching and learning at senior secondary levels, and plan the necessary manpower for implementing NAS.

39. The Administration explained to members the transitional arrangements to facilitate schools to move smoothly to NAS. A five-year transition period would be provided for schools to phase out the surplus teachers by natural wastage after the double cohort year. The Administration considered it not appropriate to have a single standard class size for schools with different circumstances, subjects with different contexts, and students with different needs and aptitudes. Schools were encouraged to exercise discretion to apply small group teaching for individual subjects or students as appropriate. Members noted the decision of the Administration to reduce the number of S1 students allocated under the Secondary School Places Allocation system from 38 to 36 students in 2009 and further to 34 students in 2010. According to the information provided by the Administration in December 2008, from 2012-2013 (i.e. after the double cohort year), the revised teacher-to-class ratios would be 1.7 teachers per junior secondary class and 2.0 teachers per senior secondary class. Additional resources including the Senior Secondary Curriculum Support Grant ("SSCSG") would be provided for all schools. The SSCSG was a recurrent provision equivalent to 0.1 teacher per senior secondary class. The projected changes in the provision of teachers in 2012-2013 after the adoption of the revised teacher-to-class ratios and the provision of the SSCSG, as compared with that in 2008-2009, is in **Appendix I**.

#### Support for students with intellectual disabilities

40. Members sought information on the support measures to assist students with intellectual disabilities ("ID") to adapt to the NSS curriculum designed for them and the pathways for graduates of the curriculum.

41. According to the Administration, to ensure the smooth implementation of the NSS Curriculum for students with ID ("NSS(ID)") in special schools, support measures had been and would continue to be provided for special schools. Such measures included (a) supplementary guides of elective subjects; (b) trial-run for Ethics and Religious Studies and General Studies for providing more appropriate choices to students and enhancing a smooth interface between the basic education and NSS in special school for students with ID; (c) a wide range of professional development programmes from subject-based knowledge and related pedagogy to sharing on good practices; (d) developing a web-based resource platform (launched in April 2011) for sharing the learning and teaching resources with teachers; and (e) coordinating NSS Coordinators Network meetings for teachers' sharing of good practices. According to the Administration, a task force was set up in September 2011 for planning the establishment of accreditation system to recognize the educational achievement

of ID students.

42. Regarding pathways for NSS(ID) graduates, there would be more cooperation between the training institutes and social enterprises including the Vocational Training Council, Hong Chi Association and Caritas to equip students with the capabilities of acquiring basic vocational knowledge and furthering studies, and to provide them with job experience to enhance their employability. As for students with severe ID who would be considered by SWD for admission to residential care, day activity centres or sheltered workshops when they reached 16 years old (under the old system), EDB had liaised with SWD on the need to review this mechanism taking into account the implementation of NAS when students usually left school at the age of 18 or above.

### **Relevant papers**

43. A list of the relevant papers on the Legislative Council website is in **Appendix II**.

Council Business Division 2  
Legislative Council Secretariat  
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**Projected changes in the provision of teachers in 2012-2013  
as compared with that in 2008-2009**

Provision of Teachers	Number of Schools* (Percentage)
Increased (> 0.5 teacher)	About 280 (about 80%)
Non significant change (= 0.5 teacher)	About 50 (about 14%)
Reduced (> 0.5 teacher)	About 20 (about 6%)

\* The above projections are calculated on the basis of aided secondary schools operating three classes or more at each level.

Source : Extracted from LC Paper No. CB(2)561/08-09(01) provided by Education Bureau in December 2008.

**Relevant papers on implementation of the new academic structure**

<b>Committee</b>	<b>Date of meeting/ issue date</b>	<b>Paper</b>
Legislative Council	15.10.2003	<a href="#">Official Record of Proceedings Pages 10 - 18 (Question)</a>
Panel on Education	29.10.2004 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a> <a href="#">CB(2)1721/04-05(01)</a>
Panel on Education	20.12.2004 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	3.1.2005 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Legislative Council	5.1.2005	<a href="#">Official Record of Proceedings Pages 68 - 71 (Question)</a>
Panel on Education	3.6.2005 (Items I - III)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Finance Committee	24.6.2005	<a href="#">Minutes</a> <a href="#">FCR(2005-06)24</a>
Panel on Education	20.10.2005 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	13.2.2006 (Item IV)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Legislative Council	10.5.2006	<a href="#">Official Record of Proceedings Pages 86 - 91 (Question)</a>
Panel on Education	12.6.2006 (Item IV)	<a href="#">Agenda</a> <a href="#">Minutes</a>

<b>Committee</b>	<b>Date of meeting/ issue date</b>	<b>Paper</b>
Panel on Education	10.7.2006 (Item IV)	<a href="#">Agenda</a> <a href="#">Minutes</a> <a href="#">CB(2)2680/05-06(01)</a> <a href="#">CB(2)2680/05-06(02)</a> <a href="#">CB(2)2680/05-06(03)</a> <a href="#">CB(2)2792/05-06(01)</a>
Panel on Education	19.10.2006 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	25.5.2007 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	9.7.2007	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	12.11.2007 (Item VII)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Establishment Subcommittee	28.11.2007	<a href="#">Minutes</a> <a href="#">EC(2007-08)10</a>
Legislative Council	21.5.2008	<a href="#">Official Record of Proceedings</a> <a href="#">Pages 77 - 78 (Question)</a>
Panel on Education	12.6.2008 (Item V)	<a href="#">Agenda</a> <a href="#">Minutes</a> <a href="#">CB(2)561/08-09(01)</a>
Panel on Education	10.11.2008 (Item V)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Legislative Council	11.2.2009	<a href="#">Official Record of Proceedings</a> <a href="#">Pages 86 - 91 (Question)</a>
Panel on Education	30.3.2009 (Item II)	<a href="#">Agenda</a> <a href="#">Minutes</a>

<b>Committee</b>	<b>Date of meeting/ issue date</b>	<b>Paper</b>
Panel on Education	11.7.2009 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Legislative Council	21.10.2009	<a href="#">Official Record of Proceedings Pages 98 - 101 (Question)</a>
Legislative Council	6.1.2010	<a href="#">Official Record of Proceedings Pages 118 - 127 (Question)</a>
Panel on Education	30.4.2010 (Item II)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	12.7.2010 (Item IV)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Legislative Council	18.5.2011	<a href="#">Official Record of Proceedings Pages 83 - 89 (Question 7)</a>
Panel on Education	13.6.2011 (Item VII)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Education	12.3.2012 (Item IV)	<a href="#">Agenda</a> <a href="#">CB(2)1681/11-12(01)</a>

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