For discussion on 11 July 2009

Panel on Education Discussion on Liberal Studies under the New Senior Secondary Curriculum

Purpose

This paper aims to:

- (a) report on the development process of Liberal Studies and analyse some key issues regarding the subject;
- (b) outline the supportive measures for the implementation of Liberal Studies under the New Senior Secondary Curriculum; and
- (c) report on the arrangements for examinations and assessment of Liberal Studies.

Background

- 2. Liberal Studies will be a core and examination subject in the New Senior Secondary (NSS) curriculum to ensure that students experience a broad education in their senior secondary years. Its design is to enable students to make connections across knowledge areas and see things from different perspectives, and to expand their knowledge.
- 3. Liberal Studies has been offered at Advanced Supplementary Level (ASL) to sixth form students in the local curriculum for 17 years, and schools have accumulated useful experience in the teaching and assessment of the subject to support its implementation in all schools.
- 4. Liberal Studies was first introduced to the Hong Kong school curriculum in 1992 with the intention of broadening the school curricula by adopting the issue-enquiry approach in order to enhance students' social awareness and critical thinking. It was originally proposed as a core subject at ASL for sixth form students by the Working Group on Sixth Form Education, but was later implemented as an elective subject.

- 5. In the consultation on education reform for Hong Kong in 1999, the proposal to have Liberal Studies as a core subject for the senior secondary curriculum was put forward again. The Working Group on the Review of the Academic Structure of Senior Secondary Education and Interface with Higher Education (RASIH) in 2003 accepted the idea and recommended that Liberal Studies be made a core subject at the senior secondary level in the new academic structure.
- 6. The Curriculum Development Council (CDC)—Hong Kong Examinations and Assessment Authority (HKEAA) Committee on Liberal Studies (Senior Secondary) was formed in November 2003 to work on the development of the curriculum and assessment of the subject. Its membership included principals and teachers of secondary schools, academics and educators from various disciplines in local tertiary institutions and officers from the Education and Manpower Bureau (now Education Bureau, EDB) and HKEAA.
- 7. The design of the NSS Liberal Studies in the Liberal Studies Curriculum and Assessment Guide (S4-6) (C&A Guide) followed the principles and rationale of the ASL Liberal Studies and was built on the foundation knowledge, skills, values and attitudes of the curriculum reform in basic education as recommended in the Basic Education Curriculum Guide (CDC, 2002) and Key Learning Area Curriculum Guides for primary and junior secondary levels (CDC, 2002). References were also made to two Secondary 4-5 subjects in Hong Kong, namely, Integrated Humanities (IH) (largely for science students) and Science and Technology (S&T) (largely for arts students), which also adopted an issue-enquiry approach like the ASL Liberal Studies and were developed as transitional subjects in the current academic structure to pave the way for the NSS structure. In 2008/09, a total of 235 schools offer at least one subject in ASL Liberal Studies, IH, or S&T. The design of NSS Liberal Studies has also considered overseas experience in cross-disciplinary studies, with due consideration given to their relevance in the Hong Kong context.
- 8. The development of NSS Liberal Studies progressed with the same overall timeframe as all other NSS subjects. The first and second consultations were launched in October 2004 and May 2005 respectively, where strong support for the subject was received from society, especially the education sector. Over 90% of schools expressed approval of the rationale and goals of the subject; with more than 80% of them supported the overall curriculum design, objectives and themes and enquiry questions of all units. The assessment framework also received a support rate of over 85%. In the international benchmarking exercise conducted for all NSS subjects by EDB

¹ The two subjects were introduced in 2003 for providing a broad and balanced curriculum to senior secondary students under the existing academic system.

during the second consultation period, the subject gained high recognition from overseas educational authorities, namely, the University of Cambridge Local Examinations Syndicate, Australian Council for Educational Research and International Baccalaureate Organization. The curriculum was finalised in January 2006 and a third consultation emphasising public assessment was launched in September 2006. The *C&A Guide* for the subject was finalised and published in 2007.

Some Key Issues Regarding the Subject

The core subject status of Liberal Studies

- 9. The process of developing the curriculum and assessment of Liberal Studies has involved a number of thorough consultations with various stakeholders, including professionals and the general public. Their views had been taken into account to modify the original curriculum and assessment proposal and there was strong support for making it a core subject in the NSS curriculum to address the bias towards single discipline subjects in the rest of the curriculum. The Heads of Universities Committee announced their support for the 334 system, including the status of Liberal Studies as an admission criterion, on 18 May 2005. Teacher education institutions are also offering support to the implementation through providing in-service programmes, conducting research, providing school-based support for schools, and offering post-graduate studies in Liberal Studies.
- 10. Liberal Studies contributes directly to the attainment of the goals of the senior secondary curriculum². In particular, it aims to broaden students' knowledge and perspectives, help them connect knowledge and concepts across different disciplines and enhance their social awareness through the study of a wide range of issues that would impact on their lives in the future. It also promotes the positive values of students by requiring analysis of relevant issues concerning the well-being of individuals, society, the nation and the world with judgment based on evidence and the understanding of values of their own and others. These issues are discussed in the contexts provided by the following modules: (1) Personal Development & Interpersonal Relationship, (2) Hong Kong Today, (3) Modern China, (4) Globalisation, (5) Public Health and (6) Energy Technology & the Environment. The subject also contributes to the development of students' independent mind, high adaptability to change and

3

² The RASIH report (2003) recommended Liberal Studies as a core subject so that students "will be able to analyse practical problems with a wider perspective by applying cross-curricular concepts and knowledge." The subject was also expected to provide students with greater opportunities to acquire knowledge through enquiry-based approaches.

life-long learning capabilities, all of which are essential qualities for meeting the challenges of an ever-changing world and the knowledge economy. The vital role it plays in the school curriculum is more apparent when one considers that a typical student studies only six or seven subjects in the NSS curriculum. Liberal Studies, with its curriculum covering a wide range of important issues, provides students with essential learning experiences for their whole-person development. Together with other core subjects and elective subjects, it helps to achieve the balance between breadth and depth in the school curriculum.

The approach to public assessment for Liberal Studies

- 11. During the consultation process, there was discussion on whether Liberal Studies would adopt an approach to public assessment different from other NSS subjects. One suggested approach was to have a pass-or-fail-only arrangement for its public assessment, while another was to implement it as a non-examination subject. Both suggestions were not adopted on the ground that students' effort and achievements in this important subject should be properly assessed, recognised and reported. Students' motivation to learn the subject would be greatly reduced if there is no public assessment on it.
- The standards-referenced reporting adopted for all NSS subjects enables 12. users of the assessment information to have a better understanding of the levels of performance of the candidates in the public assessment. It is also important for international benchmarking of the subjects. Adopting a pass-or-fail-only approach for Liberal Studies would deprive the subject of international recognition enjoyed by other NSS subjects. Under the existing academic system, ASL Liberal Studies, IH (S4-5) and S&T (S4-5) are all public examination The HKEAA has accumulated years of experience in setting and marking examination papers in these subjects. This issue will be elaborated in the later section on "Public Assessment of Liberal Studies" of this paper. fact, many disciplinary subjects like geography, history, or the sciences have been adopting an enquiry or investigative approach to their learning and teaching, and open-ended assessment methods have been more common in these subjects. In the current Hong Kong Certificate of Education Examination and the Advanced Level Examination, questions on enquiry-based issues are not only common but also essential parts of the papers of these subjects, and will continue to be so in the future Hong Kong Diploma of Secondary Education (HKDSE) examination papers.

The subject nature of Liberal Studies

- 13. Debates over the subject nature of the NSS Liberal Studies started very early in the curriculum consultation and development processes. While the public understood and supported the importance of Liberal Studies, many members of the public were concerned whether the subject, with its emphasis on adopting an issue-enquiry approach in curriculum design as well as pedagogy, would encourage "empty talk" and weaken the knowledge foundation of students.
- 14. To address such concerns, the curriculum is structured around three Areas of Study³ which represent broad areas of concern about the human condition and the contemporary world. Knowledge foundation and the expected scope of enquiry for the six modules are spelt out in the *C&A Guide* in terms of themes, questions for enquiry, explanatory notes, etc. The knowledge foundation expected to be acquired in basic education at junior secondary level for each module is also stated in the *C&A Guide* to remind teachers of the importance of a firm foundation in basic education. In addition, students are required to conduct an Independent Enquiry Study (IES) making use of the knowledge and perspectives from the Liberal Studies learning modules and other disciplines/subjects in basic education to explore new issues or contexts so that they could further integrate and synthesise knowledge.
- 15. With due emphasis given to the place of knowledge in the subject, it is important to point out that the nature of NSS Liberal Studies, which adopts a student-oriented approach, is different from that of General Education or Liberal Education in universities. It is a curriculum organisation that suits the context of Hong Kong and achieves the learning goals identified for senior secondary education. It subscribes to the common view that all students can construct and expand knowledge through a variety of learning and teaching activities suitable for their age group based on prior knowledge learned in basic education in Hong Kong. The issue-enquiry approach it takes for learning and teaching enables students to see the connection among different themes and disciplines, and appreciate the complexities of knowledge.

The issue of textbooks

16. In view of the evolving and ever-changing nature of issues to be studied in Liberal Studies, it is inconceivable that the learning and teaching of the subject should rely on textbooks. The controversial nature of many issues

³ They are "Self & Personal Development", "Society & Culture", and "Science, Technology & the Environment".

requires that students have access to a range of materials, so that they are not bound by one or a small number of perspectives as well as static knowledge. Therefore, textbooks are not recommended for NSS Liberal Studies.

17. The *C&A Guide* provides detailed guidelines and recommendations on selecting and making effective use of various forms and sources of learning and teaching resources for the subject. EDB, in collaboration with the Hong Kong Education City, has developed a *Web-based Resource Platform for Liberal Studies* which supports teachers through on-going provision of learning and teaching resources.

Preparation and Supportive Measures for the Implementation of Liberal Studies

Professional development programmes for teachers

- 18. We are aware that Liberal Studies is a new subject to some teachers who may not have previously taught ASL Liberal Studies, IH (S4-5), or S&T (S4-5). Based on the projections provided by schools in 2005 and 2008, we have planned enough training places for all teachers going to teach Liberal Studies under NSS⁴. As in June 2009, about 8,200 teachers from almost all of the secondary schools have been trained in the relevant courses. Programmes related to assessment and examinations are jointly planned and delivered with HKEAA.
- 19. There will be around 12,000 training places for both new and in-service teachers of the subject in 2009/10. The professional development programmes will include support to schools on planning of IES, induction courses for new teachers, condensed courses for newly recruited panel heads, and advanced courses on learning and teaching strategies as well as public assessment.

The Web-based Resource Platform for Liberal Studies (the Platform)

20. The *Platform* was set up in 2006 to provide a one-stop service for teachers to obtain materials necessary for the preparation of teaching NSS Liberal Studies. Besides teaching plans, lesson plans, glossaries and explanatory notes on essential concepts, the *Platform* also provides learning tools and references to enhance teachers' expertise in the subject. There are

6

⁴ The programmes launched since July 2005 have focused on the following six aspects: (1) Understanding & Interpreting the Curriculum, (2) Learning & Teaching Strategies, (3) Enriching Knowledge, (4) Assessing Student Learning, (5) Independent Enquiry Study and (6) Curriculum Management, Planning & Leadership.

also hyperlinks to "Friends of Liberal Studies", which are relevant organizations that have contributed to the development of the subject in terms of teacher training or publication of learning and teaching resources.

- 21. The *Platform* has been revamped recently to include newly added features such as advanced search engines and video-on-demand to facilitate in-class discussion on current issues. These videos will be updated on a monthly basis to include hot topics such as the rehabilitation project after the Sichuan Earthquake, the development of the Human Swine Influenza A/H1N1, impact of the financial tsunami, etc. Web courses on IES and specific modules for teachers' professional enrichment have also been planned for the 2009/10 school year. We shall continue to work in close partnership with professional organizations to develop useful resources for teachers and students.
- 22. All serving Liberal Studies teachers have already made use of this website to prepare their lessons. In addition to serving newly recruited Liberal Studies teachers who will have their accounts ready in the new academic year, we also plan to extend our service to teacher education institutions and their student teachers so that they can gain access to the *Platform* by 1 October 2009.
- 23. Teaching materials on current issues will be updated on a monthly basis. Samples of assessment exercise will also be developed and made available on the *Platform*. A teacher's manual on various exemplars as hosted on the *Platform* will be published in late July 2009 for teachers' reference.

Network support for teachers

- 24. Since 2004, EDB has provided different types of network support to prepare schools for the implementation of Liberal Studies. The aims of these networks are to provide professional sharing platforms for teachers to participate in collaborative lesson and curriculum planning, school-based curriculum projects and professional sharing. Professional sharing in these different types of networks is facilitated by experienced teachers, experts from tertiary institutions and EDB officers.
- 25. Up to 2008/09, around 200 secondary schools have benefited from these network support services. EDB will continue to support schools to develop their learning communities through more elaborate means in the coming school years.
- 26. Starting from 2009/10, EDB, in collaboration with the HKEAA, will develop a Liberal Studies Network Scheme on a district basis to provide immediate and effective support to schools on School-based Assessment (SBA).

Eighteen serving teachers of ASL Liberal Studies who are also markers of the HKEAA will be invited to serve as Liberal Studies District Coordinators to support other schools in the same district. They will offer professional advice regarding curriculum matters, and help monitor the standardisation of SBA within and among schools.

Communication with parents

27. Thematic parent seminars and meetings with various parent-teacher associations will continue to be organised on a need basis to provide parents with up-to-date information on learning and teaching as well as assessment criteria of the subject. A parent handbook on Liberal Studies will also be published to inform parents of ways to facilitate and develop students' critical thinking in daily life.

Public Assessment of Liberal Studies

Framework for public assessment

28. The framework for public assessment of the Liberal Studies curriculum is as follows:

Component		Weighting
Public	Paper 1: Data-response questions	50%
Examination	Paper 2: Extended-response questions	30%
School-based	Independent Enquiry Study (IES)	20%
Assessment		

Design of examination papers

- 29. The public assessment of Liberal Studies, in accordance with the curriculum design, is enquiry and issue-based and cross modular. In the public examination, candidates are required to apply relevant concepts and knowledge to analyse various issues using appropriate thinking skills in answering examination questions. They have to understand and make use of the data provided in the questions as well as put forth their own arguments and support them with evidence and examples for illustration.
- 30. Two types of open-ended questions will appear in the Liberal Studies examination papers. In Paper 1 there will be "data-response questions" which require candidates to respond to information provided in different formats, and

mainly test candidates' basic skills in data handling and thinking. In Paper 2, there will be "extended-response questions" which require candidates to write an argumentative essay within the context of a wider issue with reference to the stimulus materials provided and to demonstrate various higher-order thinking skills.

- 31. As a core subject in the NSS, Liberal Studies will have a large candidature with a wide ability range. Thus, the questions in the examination papers will cover different levels of difficulty so as to discriminate among candidates of varying abilities and to report their levels of achievement accurately.
- 32. The question format stated above means that there will be no "model answers" to Liberal Studies examination questions. In order to maintain fairness and reliability in marking, the HKEAA will provide marking guidelines for each question suggesting acceptable approaches illustrated by sample responses. These marking guidelines will comprise descriptions of the basic requirements and expected performance of candidates for each level, and marks will be awarded according to the level of criteria a candidate's performance has met.

Marking procedures

- 33. A series of procedures and mechanisms will be adopted to ensure the reliability and fairness of the marking of examination papers. A Markers' Meeting will be held before the marking work starts. In the meeting, markers will have ample opportunities to study candidates' sample answer scripts, exchange views and arrive at professional consensus on the marking criteria and standards for each question.
- 34. After the standardisation process in the Markers' Meeting, markers have to go through training and pass a qualifying test before they are allowed to mark the live scripts.
- 35. When markers have started marking live scripts, the Chief and Assistant Examiners will supervise their work through systematic checkmarking. Furthermore, a rigorous and well-established monitoring mechanism on the onscreen marking (OSM) system helps to check whether markers follow the agreed marking criteria⁵.

⁵ The OSM system used by the HKEAA is at the forefront of onscreen marking technology. It monitors markers' performance by means of control scripts which are scripts with standard scores pre-determined by the Examiners. These are distributed randomly among the live scripts to check whether the scores awarded by the markers tally with the standardised scores. Markers whose scores deviate significantly from the standardised

36. To further ensure the reliability of marking, "double-marking", which means independent marking of each script by two markers, will be adopted for Liberal Studies. If there is a large discrepancy between the marks awarded by the two markers, a third marker will be introduced.

Marker training courses for teachers

37. Apart from providing teachers with professional development programmes on assessment of Liberal Studies as mentioned in paragraph 18, a series of marker training courses will also be offered from 2010 onwards. A number of teachers from each school will be nominated by their principals to take part in these courses. The course participants may be recruited as 2012 HKDSE Liberal Studies examination markers upon the satisfactory completion of the training.

School-based Assessment - Independent Enquiry Study (IES)

- 38. SBA is a salient feature of the HKDSE. In the context of public assessment, SBA refers to assessments administered in schools and marked by the students' own teachers. The SBA component of Liberal Studies is in the form of an IES, which is a research study where students are required to demonstrate various enquiry skills. Each IES project report should include a certain amount of subject matter acquired through the students' reading, research and personal experiences. The IES is assessed in three stages, namely the project proposal stage, the data collection stage, and the product completion stage. At each stage, students will be assessed on "Task" and "Process". Students may use different formats or modes to present their findings.
- 39. In order to ensure fair and reliable assessment of the IES, performance requirements and marking guidelines for "Task" and "Process" have been developed. Teachers are required to familiarise themselves with the guidelines before marking students' IES works. Before the commencement of marking, a within-school standardization meeting among teachers will be held. Teachers from different classes or groups will review and trial mark samples of students' work so that common marking standards will be arrived at. IES scores submitted by schools will be statistically moderated so that comparability among different schools is achieved.

scores will be disqualified immediately, and they have to go through training and qualifying stages again before they are allowed to resume marking live scripts. The adoption of onscreen marking will ensure better quality control and further enhance marking reliability.

- 40. Students are required to conduct their IES work stage by stage under teachers' guidance. This stage-wise design of the IES is in fact a built-in mechanism for authenticating student's works. Furthermore, in accordance with the recommendation of the *C&A Guide*, 90 hours of learning time within the three years of senior secondary education are reserved for the implementation of IES where teachers have ample opportunities to supervise their students' work.
- 41. There is a growing international as well as local recognition that modern secondary school students need to be able to demonstrate a broader and higher level of intellectual skills, beyond the acquisition of knowledge and application of standard procedures. They must show how well they cope with the collection and analysis of significant sets of information, how well they can plan project work, and how well they can evaluate and discuss complex, multi-disciplinary issues in a holistic, balanced fashion. Suitable assessment tasks are increasingly seen to be significant pieces of open-ended work that require strong personal input from students. The design of the public assessment of Liberal Studies is trying to address these concerns.
- 42. This Liberal Studies assessment framework, comprising the data analysis and essay examination papers as well as the IES, reflects similar components being developed and implemented elsewhere in places like Singapore and the United Kingdom (UK). Higher education systems around the world have learned to place a higher value on the similar pieces of assessed work that lie at the core of the International Baccalaureate (IB) diploma programme. Both Cambridge International Examinations and the IB have responded favorably to the proposed Liberal Studies curriculum and assessment framework. During the international recognition exercise conducted through Universities & Colleges Admissions Service (UCAS) in the UK early in 2009, the assessment tasks for Liberal Studies were very much appreciated by the assessors.

Evaluation and Monitoring

43. An evaluation plan to study the implementation processes and outcomes of the New Academic Structure is already prepared to collect feedback from schools, parents and other stakeholders so that support strategies for schools could be improved accordingly. The implementation of the HKDSE and results of the first student cohort of HKDSE would also be reviewed to ensure smooth implementation in future.

Education Bureau July 2009