

For discussion  
on 13 January 2014

## Legislative Council Panel on Education

### Review on the Implementation of Territory-wide System Assessment

#### Purpose

This paper briefs Members of the progress of the Review on Territory-wide System Assessment (TSA) and seeks Members' views on the recommendations on the implementation arrangements of TSA.

#### Background

2. The TSA is one of the components of Basic Competency Assessments (BCA) proposed in the Education Commission's 2000 Report entitled Learning for Life, Learning through Life. It is a low-stakes assessment on the basic competencies (BC) of students at the end of the three key learning stages (i.e. P3, P6 and S3 levels) in Chinese Language, English Language and Mathematics (CEM). The BC are part of the three curricula necessary for learning to progress to higher levels. The territory-wide data help the Government review policies and provide focused support to schools while the school level reports are used by schools to draw up plans to improve learning and teaching. No individual students' results are provided in the TSA school reports. Details of the implementation of TSA are at Annex A.

3. Since its introduction in 2004, the TSA has served the function of promoting *Assessment for Learning* by providing information to schools which helps teachers identify the strengths and weaknesses of students on an overall basis and formulate plans to improve the effectiveness of learning and teaching based on the assessment data and their own development needs. After analysing students' performance in the TSA, follow-up measures, such as adjustment of lesson content,

design of worksheets/assessments and provision of after-school remedial programmes, are generally adopted by schools.

4. In a questionnaire survey conducted by the Hong Kong Examinations and Assessment Authority (HKEAA) in May 2008, 96% of the responded schools confirmed that their teachers had made reference to the TSA data in enhancing teaching plan. Most teachers found the school reports useful for analysing students' performance. They agreed that the TSA could provide an objective, system-context for schools to identify areas where their students were faring relatively well and areas where they might need to improve upon including the possibility of seeking professional support and additional resources or adjustment in curriculum planning. However, there are variations in the depth of the TSA data analysis and follow-up actions among schools. In some schools, teachers are still inclined to give students TSA-oriented drilling with practice papers, and some other schools even confine their design of learning tasks, homework, test or examination papers to match the TSA only.

5. Notwithstanding the intended low-stakes purpose of the TSA, there have been voices that the TSA has induced great pressure to P6 students because they have to sit for the internal school examination, TSA and Pre-Secondary One Hong Kong Attainment Test (Pre-S1 HKAT) within weeks in June and July. With a view to alleviating the pressure of P6 students as well as preserving the core functions of both assessments, an external working group was set up in November 2010 to review the P6 assessment arrangement. After considering the recommendations of the working group, the EDB announced in November 2011 that the P6 TSA would be suspended in 2012 and 2014 while the Pre-S1 HKAT would be suspended in 2013. In the year of suspension of the P6 TSA, schools could opt to take P6 assessment on a voluntary basis<sup>1</sup>. At the same time, the EDB undertook to review TSA and further examine areas including implementation arrangements, reporting functions, coverage and question items.

---

<sup>1</sup> In 2012, there were in total 51 schools (10% of primary schools) voluntarily participating in the P6 assessment.

## **Consultation with Stakeholders**

6. To collect school personnel's views on the suspension arrangements in alternate years at the P6 level, the HKEAA conducted five focus group meetings in end 2012. Most of them found relief in both workload and pressure because they could focus on either the P6 TSA or Pre-S1 HKAT in a particular school year. Schools which voluntarily joined the P6 assessment in 2012 all along valued the item analysis reports and considered these data useful in understanding their students' learning needs and planning the curriculum. Schools, in general, considered continuation of the present arrangement (i.e. alternate-year plus opt-in arrangement) acceptable and hoped that the Government would announce the new TSA arrangement early to facilitate their timely preparation.

7. With a view to facilitating thorough deliberations among different stakeholders and to soliciting their views and suggestions on other possible enhancement measures for the TSA, the EDB met the representatives of various stakeholders in 2013, including the primary and secondary schools councils, the Committee on Home-school Co-operation, the Federation of Parent and Teacher Associations, the Hong Kong Professional Teachers' Union, the Education Commission, the Curriculum Development Council, as well as the TSA Concern Group. In addition, nine focus group meetings were also conducted by the HKEAA in September 2013 with primary and secondary schools' principals, vice-principals, primary school curriculum leaders, panel heads and subject teachers.

## **Further Considerations and Justifications**

8. Stakeholders expressed grave concerns about the pressure on students and teachers arising from the excessive drilling which might be attributed to the reporting and the handling of the TSA school level results. According to the current protocol on using school level data of TSA, school heads receiving the school level TSA report are advised to keep good custody of the school level data on behalf of the School Management Committee (SMC) and present them to the SMC and only

those school personnel who need the data to help school in formulating plans to improve the effectiveness of learning and teaching. Persons so presented the data will be required to undertake to keep the data under confidential cover and will not reveal them to a third party under whatever circumstances. However, some teachers, especially in primary schools, revealed at the consultation meetings that it was not uncommon that the school level data had been used inappropriately for comparisons within and among schools, thereby creating pressure and workload for teachers and students. We are fully aware of the excessive drilling practices especially in some of the schools which place strong emphasis on the school level BC attainment rates.

9. Indeed, proper use of TSA results as a tool to facilitate and support teaching imposes little risk for schools and students. Behind the aggregate picture reflected in the number of students achieving BC and school's BC attainment rates is a significant amount of valuable data embodied in the item analysis report which reflects areas where intervention is necessary. Schools getting similar overall results may have very different spread of strengths and weaknesses among different dimensions/skills of a particular subject. Many teachers reflected to us that the item analysis report of TSA were very useful for analysing students' performance. These objective data provide invaluable information not obtained in daily learning and teaching for teachers to identify students' strengths and weaknesses and to enhance teaching strategies.

## **Proposals**

10. In considering the future direction of the TSA, we aim to strike a balance between preserving the core functions of the TSA and at the same time alleviating the pressure on students and teachers. Taking into account the views collected from different stakeholders, we propose the following arrangements :

IA. Implementation arrangement - Extend the current alternate-year arrangement for the P6 TSA and Pre-S1 HKAT to 2015 and after

11. Taking into consideration the positive response from schools, we propose to extend the current arrangement to 2015 and after, i.e. the P6 TSA will be suspended in even years while the Pre-S1 HKAT in odd years. This arrangement has the merit of relieving P6 students from the pressure of facing frequent examinations while keeping track of the P6 students' performance on a territory-wide basis. Opt-in schools can choose to obtain continuous assessment data for their P6 students through voluntary participation in the P6 assessment during gap years while others can make use of TSA data in every other year coupled with other school-based assessments to monitor the progress of their students.

IB. Implementation arrangement - Administering TSA for P3 and S3 each year

12. We propose administering P3 and S3 TSA each year and keeping the scale of assessment unchanged. With a view to alleviating pressure on teachers and students arising from excessive drilling, we solicited the views of stakeholders on adopting a sampling approach to the TSA. However, principals and teachers were against this arrangement as they pointed out that sampling could not alleviate their pressure and that fairness was also a concern.

13. For P3 and S3 TSA, while most teachers welcomed the recommendation of maintaining the status quo, there were also comments calling for the abolishment of P3 TSA. However, as reflected in the focus group meetings, there was no consensus on the proposal of abolishing the P3 TSA. In fact, both local and international research evidence shows that students' learning gap normally starts to widen at P3 or P4 levels. Given that the TSA is the only formal public assessment for students at the first learning key stage (i.e. P3), abolishing or conducting the P3 TSA by sampling will fail to provide schools with objective and reliable data which help the school personnel understand the strengths and weaknesses of their students and make necessary improvement in learning and teaching at an early stage. For secondary schools, teachers appreciated that the item analysis reports were useful in the planning of curriculum and pedagogy for junior secondary.

However, we propose a change to the school reporting for primary schools as set out in paragraphs 14 to 16 below.

## IIA. Reporting functions – Different school level reports for primary and secondary schools

### ***Not disclosing BC attainment rates for primary schools***

14. To avoid inappropriate comparisons within and among schools, we propose not to disclose the number and percentage of students achieving BC of the CEM to primary schools from 2014 onwards (i.e. the data currently shown on page 1 of the TSA School Report (**Annex B**)). Some teachers, primary school councils and primary school principals commented that the number and percentage of students achieving BC in individual schools were not essential for enhancing learning and teaching. Many teachers were of the view that the item analysis reports of TSA alone could sufficiently serve as a very useful reference in analysing students' performance. As for parents, representatives supported removal of "page 1" provided that it could alleviate the pressure on students and teachers.

15. While most stakeholders welcomed the removal of "page 1", some were concerned about the possible workload arising from the requests of school principals for a detailed analysis of each TSA question or even a calculation of their own "BC attainment rate" based on the information available.<sup>2</sup> Nonetheless, this proposal represents virtually the greater majority views, whilst balancing the interests of different stakeholders in the course of relieving the pressure for primary students, parents and teachers. We hope that schools would focus on understanding the strengths and weaknesses of their students by making fuller use of the TSA reports and other available assessment information for improving learning and teaching instead of superficial direct ranking or comparison within and among schools.

---

<sup>2</sup> The "school average as a percentage of maximum score (學校答對率)" for each individual item is provided in the item analysis report but its calculation is based on a concept different from that being used to calculate the BC attainment rates. Therefore, it is impossible for schools to calculate their own BC attainment rates based on the schools' performance in different sub-papers, questions or BC.

16. Consequential to the removal of “page 1”, we propose that the data of same cohort of primary school students currently shown on the existing supplementary school report (at **Annex C**) should also be deleted from 2014 TSA onwards. Otherwise, schools would be able to derive their attainment rates based on the rates of their cohorts collected over the years.

### ***Keeping the BC attainment rate for secondary schools***

17. We propose that the school level report for secondary schools should remain unchanged. Most of the stakeholders from secondary schools were not convinced that the BC attainment rates currently shown on page 1 of the report were the source of stress. Some secondary schools commented that the loss of the overall BC attainment rates would create inconvenience and that they could no longer compare the performance of their students against the territory-wide rates. To them, the judicious use of data for teacher development rather than performance appraisal purposes would help relieve the stress on teachers. They also appreciated that a different treatment could apply to the primary schools.

### **IIB. Reporting functions – A more interactive downloading platform**

18. To further facilitate teachers’ analysis of the TSA data, different stakeholders supported the proposed provision of an interactive platform where teachers could obtain more statistical information while downloading their item analysis reports. We propose to revamp the existing downloading platform to a more interactive one where a) question papers with model answers and question items in current year; and b) charts showing performance over three years on a particular BC/question intent would be shown in the item analysis report on the downloading platform. Examples are illustrated at **Annex D**.

### **III. Review on the coverage and question items of TSA**

19. In the course of reviewing the implementation of TSA, opportunities were also taken to examine the coverage and question items of the TSA. As there has been no major change in the existing curriculum for P1 to S3 since 2004, we do not suggest revising the BC

descriptors.

20. For the review on assessment design, it was considered in general that the level of difficulty of the TSA items was appropriate and the question types and coverage were suitable for most students. That said, we propose enhancing the assessment frameworks by setting word limits for the reading passages of Chinese and English Language to ensure consistency of the length of passages over the years, and slightly adjusting the assessment time for certain sub-papers in English Language to allow students sufficient time to demonstrate their language skills. A wider variety of question types other than multiple choice questions will also be gradually included.

#### IV. Removal of the TSA from the Key Performance Measures

21. Currently, the TSA is one of the Key Performance Measures (KPM) under the domain of “student performance” to facilitate schools’ self-evaluation. If BC attainment rates will not be released to primary schools, we propose that the TSA should also be removed from the list of KPMs for primary schools. Such a decision would help to dispel the myth that low performing schools in the TSA will be “penalized” by EDB one way or the other, hence significantly reducing pressure on teachers. Nonetheless, the TSA data should not be used in isolation or as the only indicator to assess students’ performance. The valuable TSA item analysis data could remain to serve as a very useful reference in assessing students’ performance during school’s self-evaluation.

#### **Professional Development and Capacity Building**

22. The EDB will continue to strengthen the promotion of *Assessment for Learning* through various channels, including professional development programmes, seminars and briefings, production of resource materials, publicity work and school visits, etc. Schools should be encouraged to capitalise on the range of student performance data available from lessons, class work, homework, tests and examinations etc. to better design and scaffold learning tasks and teaching practices in everyday learning and teaching.



23. Noting that the purposes of TSA are sometimes misunderstood by school principals, teachers and parents, we will continue to disseminate good school practices and promote the meaningful use of TSA data to the school sector, including teachers, principals and school sponsoring bodies, etc.

### **Advice Sought**

24. Members are invited to give views on the proposals set out in paragraphs 10 to 21. Taking into account Members' views, we will refine the proposals as necessary and aim to announce the new TSA arrangement and the enhancement measures in Q1 2014.

**Education Bureau**  
**January 2014**

## Implementation of the Territory-wide Student Assessment

- The Education Bureau (EDB) commissioned the HKEAA in 2001 to develop and implement the TSA. It was introduced to P3 in 2004, P6 in 2005 and S3 in 2006. Since 2006, all students at P3, P6 and S3 take part in the TSA annually (except P6 TSA which was and will be suspended in 2012 and 2014 respectively).
- The main purposes of TSA are :-
  - (i) to provide the Government and school management with information on school standards in key learning areas for the purposes of school improvement and to provide more focused support;
  - (ii) to provide teachers with feedback positively so as to enhance the effectiveness of learning and teaching; and
  - (iii) to enhance assessment literacy and promote the culture of *assessment for learning* in schools, especially in basic education (P1 to S3).
- The design of this standards-referenced assessment is based on the BC Descriptors at the end of each learning key stage and the Curriculum Guide prepared by the Curriculum Development Council. The BC represent just part of the curriculum requirements. After the first year's administration of the TSA at each level (i.e. P3 in 2004, P6 in 2005 and S3 in 2006), panels of judges were formed to set the BC standards for the three subjects using two well-known psychometric methodologies (Angoff method and the Bookmark Method). The BC standards set remained unchanged across the years. To maintain the standards set, a research test is used to link and equate students' performance shortly before the conduct of each year's TSA.

- The TSA assessment items are endorsed by the Moderation Committees, which are composed of academics from tertiary institutions, serving teachers as well as officers from EDB and HKEAA. Meetings are conducted regularly to ensure item quality and consistency in item difficulty level.
- The assessments are conducted on designated dates and in the pencil and paper mode, except for the oral assessments of Chinese Language and English Language which are conducted by sampling. Each student is required to attempt only one sub-paper of each subject.
- On the day of release of TSA results, a TSA report with territory-wide data and students' performance exemplars, all question papers and marking schemes are uploaded to the HKEAA BCA website for public access. Schools can gather information from the website (particularly the territory-wide students' performance in different areas) and download their individual school reports, via a password preset for each school, for analyzing and evaluating the learning and teaching strategies.
- Apart from the school's overall attainment rates on the CEM subjects, the individual school level report also provides the item analysis report, cohort report and other supplementary reports, which serves the feedback purpose of TSA. No individual students' results are provided in the TSA school reports. The TSA results also do not affect schools' appeal in Primary One Admission nor students' allocation results under the Secondary School Places Allocation.
- Every year around November to December, the HKEAA will hold a series of seminars to help teachers interpret the TSA data and enhance their understanding about students' strengths and weaknesses.

2013 年全港性系統評估  
Territory-wide System Assessment 2013  
學校報告  
School Report

Annex B

機 密  
CONFIDENTIAL

Sample

學校： 999學校 (全日制)

School: 999 SCHOOL (WD)

級別 Level: 小三 Primary 3

科目 Subject	完成紙筆評估 的學生人數 Number of students completing written assessment (A)	已達基本水平 的學生人數 Number of students achieving Basic Competency (B)	學校已達基本水平 的學生百分率 School percentage of students achieving Basic Competency (B/A x 100%)	全港已達基本水平 的學生百分率 Territory-wide percentage of students achieving Basic Competency
中國語文 Chinese Language	25	18	72	87
英國語文 English Language	25	9	36	80
數學 Mathematics	25	19	76	87

## Territory-wide System Assessment 2013 Supplementary School Report

**School : 999 SCHOOL (WD)**

This Supplementary Report provides results for those students in P.6 in 2013 who also sat for the TSA in the same school in P.3 in 2010. To generate this report, it was necessary to link the data from 2010 and 2013. The number of students that were successfully linked is likely to be smaller than the number of students currently in P.6. This is explained by movement in and out of the school of students between P.3 and P.6 and problems in matching some students on the basis of their STRN.

Subject	Number of students sat for the TSA in both P.3 and P.6	Number of students in (A) achieving Basic Competency in 2010 and 2013	School percentage of students in (A) achieving Basic Competency in 2010 and 2013	Territory-wide percentage of students who sat for the TSA in both P.3 and P.6 achieving Basic Competency in 2010 and 2013 (%)
	(A)	(B)	(B/A x 100%)	(%)
<b>Chinese Language</b>				
P3, 2010	50	40	80	87
P6, 2013	50	30	60	79
<b>English Language</b>				
P3, 2010	50	30	60	80
P6, 2013	50	20	40	74
<b>Mathematics</b>				
P3, 2010	50	40	80	88
P6, 2013	50	30	60	85

Subject	Number and percentage of students achieving Basic Competency in both P.3 and P.6	Number and percentage of students achieving Basic Competency in P.3, but not in P.6	Number and percentage of students achieving Basic Competency in P.6, but not in P.3	Number and percentage of students achieving Basic Competency in neither P.3 nor P.6
<b>Chinese Language</b>				
This school	30(60%)	10(20%)	0(0%)	10(20%)
Territory-wide	35,234(76%)	5,304(11%)	1,280(3%)	4,590(10%)
<b>English Language</b>				
This school	20(40%)	10(20%)	0(0%)	20(40%)
Territory-wide	32,556(70%)	4,773(10%)	1,759(4%)	7,543(16%)
<b>Mathematics</b>				
This school	30(60%)	10(20%)	0(0%)	10(20%)
Territory-wide	38,005(81%)	3,215(7%)	1,654(4%)	3,819(8%)

\* Same school refers to the school with the same registration number in EDB in academic years 2009/10 and 2012/13.

Revamping the existing downloading platform to a more interactive one with enriched content by phases

For example:

- a. Question papers with model answers and question items in current year will be shown in the item analysis report starting from 2014 TSA onwards.

範疇 Skill	基本能力 Basic Competency	卷別 Sub-paper	題號 Item no.	選項 Option	得分/等級 Score/Grade	學校百分率 School percentage	全港百分率 Territory-wide percentage
閱讀	BR1.2 能理解所學詞語 三年分析	3CR1 3CR3	Q01 Q01		0 1 U#	5.0% 95.0% 0.0%	7.0% 92.0% 1.0%
		3CR1 3CR3	Q02 Q02		0 1 U#	0.0% 100.0% 0.0%	3.5% 96.5% 0.0%
		3CR1	Q10		0 1 U#	2.0% 98.0% 0.0%	5.5% 94.5% 0.0%
		3CR1	Q11	A* B C D U#		91.0% 0.0% 3.0% 2.0% 4.0%	90.0% 0.5% 3.0% 1.5% 5.0%
閱讀	BR1.3 能理解簡淺敘述性文字的段意及段落關係 三年分析	3CR1 3CR3	Q04 Q03		0 1 U#	10.0% 90.0% 0.0%	7.5% 92.0% 0.5%
		3CR1 3CR3	Q06 Q06	A B* C D U#		0.0% 91.0% 3.0% 2.0% 4.0%	0.5% 90.0% 3.0% 1.5% 5.0%

Click 3CR1, question papers with model answers will be shown.

The screenshot shows a detailed view of the question paper for item 3CR1. On the left, there is a reading passage in Chinese about a family's move and a bar chart. On the right, there are five multiple-choice questions. The model answer for question 1 is shown as 'B'. A sidebar on the right provides the following data for item 3CR1:

全港百分率 Territory-wide Percentage
7.0%
92.0%
1.0%
3.5%
96.5%
0.0%
5.5%
94.5%
0.0%
90.0%
0.5%
3.0%
1.5%
5.0%
7.5%
92.0%
0.5%
0.5%
90.0%
3.0%
1.5%
5.0%

- b. Charts showing performance over three years on a particular BC/question intent will also be provided starting from 2015 TSA onwards.

For example:

