
PowerPoint Presentation at
Teachers' Seminar on School-based
Assessment (October 2010)



HKDSE Chemistry & CS(Chem) SBA Arrangement

Minimum number of Assessment per student				
S5 (2011)				S6 (2012)
Basic Chemical Analysis (BCA)		Experiment		Experiment
VA	QA	EXPT		EXPT
Chemistry	1	1	1	2
CS(Chem)	1	----	1	1



	VA	QA
Student's work	Individual Volumetric Analysis	Individual Detection of cation/anion/ both
Assessment	Individual worksheet	Individual worksheet

	EXPT
Student's work	Group experiments (other than VA & QA) in the Curriculum and Assessment Guide
Assessment	Individual worksheet/simple report/detailed report/quiz (same mode for all students per task)

Teacher's work	Marking students' written work (worksheet / simple report / detailed report / quiz)
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- There is **no** need to deal with **Switching of Courses / Transfer Students / School Repeater** for S5 (2011) submission.
 - For details, please see Chapter 2 of the 2012 SBA Teachers' Handbook.
 - Please see also **SBA Sample Tasks** provided by HKEAA at <http://www.hkeaa.edu.hk>



Submission of Marks, Student Work Samples and Task Lists

- Tentative Schedule: S5 (May 2011 – June 2011) ; S6 (January 2012 - February 2012)
- Training will be provided upon the readiness of **SBA system** in early 2011.
- Accept 0 to 10 marks (integer only) with ‘0 mark’ means extremely poor performance. Assessment performed within a school should be standardized as **moderation will base on whole school** using mainly statistical approach.
- SBA moderation booklet published by end of 2010, plus requirements on sample collection.



Why Moderation – Standardization between Schools

- Teachers know their students well and are best placed to judge their relative performance
- However, they may not be aware of the standards of performance across all schools
- Some schools may be harsher or more lenient in marking and/or use a narrower or wider mark range
- Standardization across schools to ensure fairness



Moderation Method

- Statistical moderation with an element of expert judgment
- Moderation to be conducted on school basis (not class-based/teacher-based)
- Therefore, within-school standardization of teachers' marking standard is necessary
- Queries about marking are dealt with by schools before mark submission



Statistical Moderation – Basic Principles

- In accordance with SBA School Leaders' and Teachers' Handbook:
 - Statistical moderation based on school exam results
 - Follow up with appropriate action for outliers identified
- Moderation based on exam results appropriate for most schools
- But adjustment based solely on exam results may not fully reflect students' actual SBA performance in some schools



Features of **Statistical Moderation**

- Internal ranking would not be changed
- The statistical moderation method would consider the empirical correlation between exam results and SBA results
- Suppose teachers tend to give high marks to their own students; under the moderation method, such an effect would be eliminated when calculating the moderated marks
- **Sample review** to help identify outlier schools
- For outlier schools, adjustment will be carried out, if necessary, by considering a number of factors, such as moderated marks based on exam results and sample review findings so as to reflect the actual SBA performance



Reasons for Collecting Samples of Students' Work

- Quality assurance for SBA
- Moderating SBA marks submitted by schools
- Securing international recognition of HKDSE
- Providing school-level feedback to schools



Sample Review

- Purpose of sample review in the moderation process:
 - Outlier detection
 - Identifying those schools where the standard of SBA work is significantly better/worse than their exam results suggested
 - Stratified random sampling
 - Random sampling:
 - Each student work in a school has a chance to be selected, which is a necessary condition for obtaining a representative sample (i.e., unbiased estimations)
 - Stratification:
 - Student works are divided into a number of strata, in each of which the performances of works are similar with each other (i.e., homogenous)
 - Some samples are selected from each stratum
 - Such an arrangement reduces sampling errors



Proposed Arrangements for Collecting Samples

- To be collected towards end of S6, after school submit the S6 SBA marks
- Six pieces of work representing students' **performance across the whole ability range** to be randomly selected based on schools' SBA marks, using stratified random sampling techniques
- For each of the selected students, all S5 and S6 marked worksheet / simple report / detailed report / quiz should be submitted. Only the work with marks submitted to HKEAA is required. If the system is on-line (will be informed later), the work (A4-size paper preferred) should be combined into a single PDF file for uploading. That is, one PDF file for each selected student.



Task Titles to be entered in the system

- Teachers are advised to arrange enough tasks for learning and teaching. However, in order to avoid unnecessary pressure that might be induced from SBA and to strike a balance, the following arrangement will be adopted:

		Maximum number of task titles that can be entered in the system		
		VA	QA	EXPT
Chemistry	S5	2	2	5
	S6	---	---	5
CS(Chem)	S5	2	---	3
	S6	---	---	3



Task Titles to be entered in the system

		Minimum number of task titles that are required to enter in the system for <u>S5 + S6</u>
Chemistry	S5	$VA + QA + EXPT \geq 8$
	S6	
CS(Chem)	S5	$VA + EXPT \geq 4$
	S6	



Assessment marks

- Assessment marks for each student to be submitted to HKEAA **should come from the task titles entered in the system**. If the number of assessment marks entered for a student for a certain task exceeds the minimum requirement, the system will automatically **average** out the marks in the calculation of the final SBA mark of that student at S6 submission.



Submission of **Task Lists** (Required for both **S5** and **S6**)

- Teachers are required to submit the **task list** of his/her teaching group. **One task list per teaching group** is required. If the system is on-line, the list (**A4-size** paper preferred) should be transformed into a single **PDF** file for uploading.



Support from District Coordinators

- Teachers are required to **submit the tentative task lists** to the District Coordinator at the beginning of each academic year. District Coordinator will discuss with teachers in his/her group of the lists if needed.
- Teachers need to attend a **mid-year group meeting** to share experience especially in **consensus marking** of SBA tasks.
- Teachers and/or School Coordinators may discuss with District Coordinator if needs arise.
- District Coordinator may also visit the schools of his/her group for professional sharing and collecting feedback.



2013 SBA Teachers' Handbooks

- Requirements similar to 2012 Exam
- Subject to review in light of feedback from 2012 Exam
- Electronic version available in the HKEAA website in Dec 2010

