



# 香港中學文憑考試

**Hong Kong Diploma of Secondary Education Examination**

**2024**

化學

**Chemistry**

校本評核教師手冊

**School-based Assessment Teachers' Handbook**

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## **Preface**

This Handbook serves as a guide to subject teachers for administering school-based assessment (SBA) for Chemistry at their schools for the Hong Kong Diploma of Secondary Education (HKDSE) Examination. Teachers are expected to comply with the requirements and procedures stipulated in this Handbook when conducting the related assessment activities.

## **Chapter 1 Introduction**

As stipulated in the Chemistry Curriculum and Assessment Guide (Secondary 4-6), there is a school-based assessment (SBA) component constituting part of the public assessment of these subjects.

It is believed that the incorporation of an SBA component into the public assessment of Chemistry will make the assessment more comprehensive, as there are skills in the curricula that cannot be assessed with conventional written examinations. The SBA of the subject covers the assessment of students' performances in practical work in their S5 and S6 years of the course. As teachers are the people most familiar with their students' achievements in the subject, the incorporation of their assessment of their students' achievements into the public assessment should enhance the validity of the public assessment.

SBA should be an integral part of the learning and teaching process, and involves assessment of students' performance at different times during their courses. It must be emphasised that a series of mini examinations is not intended. With SBA, teachers can provide appropriate feedback to students so as to help consolidate the learning of concepts related to chemistry and scientific investigative skills, and foster the development of generic skills such as creativity, critical thinking, communication and problem-solving.

This document sets out to explain the SBA, state the regulations governing the operation of SBA and give additional notes for the guidance of teachers.

## Chapter 2 Assessment Requirements

### 2.1 SBA Requirements

The SBA of Chemistry covers the assessment of students' performances in practical work in their S5 and S6 years of the course. Candidates are required to perform a stipulated amount of practical work, which may include designing experiments, reporting and interpreting experimental results, etc. The work should be integrated closely with the curriculum and form a part of the normal learning and teaching process. Apart from these, candidates attempting the HKDSE Chemistry examination may also be required to design and conduct a group-based experimental investigative study with a view to solving an authentic problem. They are expected to make use of their knowledge and understanding of chemistry in performing such an investigative study, through which their generic skills, practical skills, process skills and reporting skills, etc. would be developed and assessed.

#### 2.1.1 Assessment Requirement for Chemistry

For **each candidate attempting the HKDSE Chemistry examination** for the first time, the minimum numbers of assessments and the weightings in subject required in S5 and S6 for the SBA are summarised in the table below:

	Minimum number of assessments*	Weighting in subject
S5	2	10%
S6	2	10%

\* Over the two years of S5 and S6, there should be at least one assessment for Volumetric Analysis (VA), one assessment for Qualitative Analysis (QA) and two assessments for Other Experiments (EXPT).

\* Investigative Study (IS) can be done in lieu of Other Experiments (EXPT). In this case, one assessment on 'proposal' and one assessment on 'process and report' should be performed. These two assessments can satisfy the minimum requirement for Other Experiments (EXPT).

#### Notes

- (1) Teachers are encouraged to carry out more than the minimum number of assessments for each student.
- (2) Teachers will be asked to submit their assessment marks together with a list of tasks done in S5 and in S6, showing the coverage of the different types of work.

### ***2.1.2 Requirements for Repeaters and Transfer Students***

School repeaters are candidates who have sat the HKDSE Examination in previous year(s) and are currently enrolled as S6 students in a school to retake the examination as school candidates.

Generally speaking, SBA is compulsory for school repeaters. If a repeater studies in a school that offers Chemistry, the student has to be re-assessed in S6 and meet the stipulated SBA requirements. Their SBA results obtained in previous examinations will not be counted. If a repeater studies in a school that does not offer Chemistry, special permission may be granted for the student to be exempted from the SBA for this subject and his/her subject result will be based on the public examination result only. The school has to submit an application for exemption to the HKEAA when the repeater applies to enter for the examination and certify that the subject concerned is not offered by the school.

Transfer students are S6 students sitting the examination for the first time, but who have transferred from one school to another after S5. Their SBA results obtained in S5 in the former school will not be counted. They will need to meet the SBA requirements for S6 only. Transfer students should provide to their new school information about the school in which they attended the Chemistry course in S5 and the assessments completed for their teachers' reference.

School repeaters and transfer students have to meet the respective minimum requirements for SBA in S6 (see below) and the SBA marks will be proportionally adjusted to 20% for Chemistry and incorporated into their subject mark.

Minimum number of assessment marks to be submitted for <b>CHEMISTRY</b>
2

Students who repeat S5 or who have transferred to an S5 class in another school are not considered to be school repeaters or transfer students. They must meet the full SBA requirements as normal S5 students.

### ***2.1.3 Private Candidates***

Private candidates are not required to complete the SBA component. Their subject mark will be based entirely on their public examination results.

Private candidates who have SBA marks obtained from previous examinations will not be allowed to carry forward these marks to subsequent examinations.

## 2.2 Guidance in Assessment Process

- (a) SBA should be an integral part of learning and teaching. Through SBA, teachers can guide their students to learn and to understand the concepts of chemistry outlined in the curricula. They should continually assess students' achievements and award marks on selected assessment tasks to fulfill the requirements of the SBA over the S5 and S6 years of study. To ensure that teachers arrange a reasonable number of practical activities for students, a minimum number of **8** practical work for Chemistry is stipulated for the two years of S5 and S6.
- (b) The teacher can decide on how many students are to be assessed when performing each practical work. This depends on factors such as the nature of the work, class size, etc. Although it is desirable that all students in a school be assessed on the same task, this may be impracticable in schools with very large class sizes. If students in a school are assessed on different tasks, care should be taken to ensure that the tasks chosen for assessment are of a similar nature and complexity, and call for similar skills.
- (c) SBA marks can be awarded by using a scheme of marking (e.g. checklist). Suitable schemes can be devised to mark different parts of a student's work. The essence of awarding marks is that teachers should be able to give a reasonable spread of marks which reflects the rank order of the students as well as the relative differences between students' achievements.

## 2.3 Setting Assessment Tasks

Teachers are free to devise their SBA tasks so that students will be exposed to a variety of experiences covering different topics of the curricula rather than focusing on only one or two of the topics. They should bear in mind the workload of students and avoid asking students to do a lot of work outside class time. The tasks devised should:

- help students to develop science process skills and other generic skills outlined in the curricula;
- help achieve a balanced integration between theory and practice;
- be appropriate to the topic taught, and suit the strength and ability of the students;
- enable differentiation of the students in their demonstration of the ability to be assessed.

Teachers should refer to *Sections 2.1.1* of this Handbook for the setting of practical work. They can design their own tasks and/or modify the sample SBA tasks provided to suit the standards of their students. The School-based Assessment Framework is summarised in the following table:



School-based Assessment Framework

	Practical Work			
	VA	QA	EXPT	IS
Task content (student's work)	Volumetric Analysis <ul style="list-style-type: none"> <li>• Volumetric Analysis</li> <li>• Worksheet</li> </ul>	Qualitative Analysis <ul style="list-style-type: none"> <li>• Detection of cations or anions or both</li> <li>• Worksheet</li> </ul>	Other Experiment <ul style="list-style-type: none"> <li>• Perform experiments suggested in the Curriculum and Assessment Guide (other than Volumetric Analysis &amp; Detection of ions)</li> <li>• Worksheet / simple report / detailed report on experiments performed; AND/OR Quiz on the experiment involved.</li> </ul>	Investigative Study  Proposal  Process & Report
Group/Individual	<ul style="list-style-type: none"> <li>• Individual VA</li> <li>• Individual worksheet</li> </ul>	<ul style="list-style-type: none"> <li>• Individual QA</li> <li>• Individual worksheet</li> </ul>	<ul style="list-style-type: none"> <li>• Group EXPT</li> <li>• Individual worksheet/report/quiz</li> </ul>	<ul style="list-style-type: none"> <li>• Group IS</li> <li>• Individual report</li> </ul>
In-class time	80 mins	30 mins	80 mins	20 hours
Out-of-school time	0 mins	0 mins	0 – 60 mins	2 hours
Means of assessment (teacher's work)	Mark worksheet	Mark worksheet	Mark worksheet / simple report / detailed report / quiz	<ul style="list-style-type: none"> <li>• Mark proposal</li> <li>• Assess lab/process skills</li> <li>• Mark written/oral reports, etc.</li> </ul>
Authentication	Hand in worksheets in class time	Hand in worksheets in class time	Hand in the following in class time: <ul style="list-style-type: none"> <li>• worksheet / simple report / raw data sheet (if detailed report to be finished at home)</li> </ul> AND/OR <ul style="list-style-type: none"> <li>• quiz</li> </ul>	<ul style="list-style-type: none"> <li>• Allow group work</li> <li>• Individual students may be questioned by teacher in class time</li> </ul>

## 2.4 Assessment Criteria

### 2.4.1 Practical Work

Practical work includes volumetric analysis, qualitative analysis, performing experiments and carrying out an investigative study. The assessment of these tasks can be made by direct observation and/or with reference to the students' submitted work. The assessment criteria for these tasks are described below.

#### (1) Criteria for assessment of volumetric analysis

Teachers are required to mark the worksheets submitted by their students. Teachers may also assess student performance during practical lessons if circumstances allow. The criteria involved are as follows:

- (a) The number of accurate titration readings is adequate and there is an inclusion of the trial run.
- (b) There is an accurate detection / recording of colour change.
- (c) Calculations are shown clearly and concisely.

#### (2) Criteria for assessment of qualitative analysis

Teachers are required to mark the worksheets submitted by their students. Teachers may also assess student performance during practical lessons if circumstances allow. The criteria involved are as follows:

- (a) Results are recorded and described accurately.
- (b) Unknowns are deduced in a systematic and logical way.
- (c) Due consideration has been given to laboratory safety.

#### (3) Criteria for assessment of experiment

Teachers have discretion in choosing a range of experiments covering various aspects of the curricula which suit the circumstances of individual schools. Teachers are required to mark the worksheets / short reports / detailed reports / quizzes submitted by their students. Teachers may also assess student performance during practical lessons if circumstances allow. The criteria involved are as follows:

- (a) Good manipulative skills in handling apparatus with dexterity are shown.
- (b) Safety measures have been taken into consideration.
- (c) There is a full understanding of the objectives and procedures of the experiment.
- (d) The interpretation of results is accurate and demonstrates comprehensive chemical knowledge.
- (e) The results are recorded accurately and the units, where necessary, are stated correctly.
- (f) Calculations, where necessary, are accurate and clearly shown.
- (g) Results are presented and recorded in the appropriate format.

(4) Criteria for assessment of investigative study

**(I) Criteria for assessment of proposal**

- (a) Background knowledge is demonstrated clearly.
- (b) The plan is well-organised with clear objectives, a concise rationale of study and feasible procedures.
- (c) The plan shows that the investigative study can be completed within an appropriate time frame.
- (d) Risk assessment has been made.

**(II) Criteria for assessment of process and report**

- (a) Good manipulative skills are demonstrated.
- (b) Results are accurately and concisely recorded in an appropriate format.
- (c) The procedures are modified whenever necessary.
- (d) Collaborative skills, problem solving skills and self-discipline are demonstrated.
- (e) Relevant chemical terms and concepts are used throughout the report.
- (f) The objectives, procedures, results and discussion are presented in a concise, systematic, logical and analytical way.
- (g) There is effective communication of chemical knowledge / findings.

**2.4.2 Mark Scale**

A 10-point scale will be used for the assessment of SBA tasks. This scale is applicable to different tasks in SBA. Zero marks will be given if the work submitted by a student fails to meet the minimum requirements of the assessment standard. The quality of work of a student is to be judged by matching his/her performance against the mark scale as follows:

<b>Marks</b>	<b>Quality of work</b>
10-9	Excellent
8-6	Good
5-3	Fair
2-1	Poor

## **Chapter 3 Guidance in the Conduct of SBA**

### **3.1 Provision of Information to Students**

Students should be informed clearly at the beginning of the courses of the various requirements and regulations regarding the SBA component, including:

- task requirements and assessment criteria;
- schedule of assessment and critical deadlines;
- the school's regulations and administrative procedures for conducting SBA;
- the importance of academic honesty and proper conduct in SBA;
- guidance on how to quote and acknowledge sources properly in their SBA work; and
- record keeping requirements.

Students should be asked to sign a declaration form regarding proper conduct in SBA at the beginning of each school year in which SBA is undertaken. (*Please refer to Paragraph 3.3 for details.*)

After the completion of the marking, teachers are expected to provide feedback to students, including their marks or grades on individual assessment tasks. Other appropriate feedback may include students' strengths and weaknesses as revealed in the assessments, and advice on how improvements can be made. Students should also be informed that the SBA marks awarded by the school are subject to moderation by the HKEAA and hence their marks may change after the moderation process. Details of the moderation mechanism are provided in Paragraph 5.2.

### **3.2 Guidance from Teachers**

Teachers are expected to provide appropriate guidance to assist students in preparing for the completion of their work. Students should be informed of the assessment conditions and other related information, including how their work is to be assessed.

For each of the tasks conducted, teachers can provide background information of the task such as its objectives, the underlying principles and the skills to be assessed. Such information can be channeled to students through the conduct of a pre-laboratory / pre-activity talk or by distribution of an appropriately designed handout in class. However, teachers should avoid providing a detailed outline to help students to complete their work or specific advice / suggestions to individual students on how to improve their work to meet the assessment criteria. Teachers should also help students recognise the importance of effective time management for completing their work.

Students should be advised of the importance of keeping a well-written log of the data they have collected, the draft of their design for an experiment and the information searched for. This can help them keep track of their work at different stages. They should also be advised to acknowledge information quoted from other sources which they use in their work.

It is understandable that teachers' guidance is most valuable to students in the learning and teaching process. However, it must be emphasised that undue assistance should not be provided to students while undertaking assessments that will count towards their public assessment results. As a general rule of thumb, the guiding principle should be that the ability of an individual student is fairly assessed and that the work submitted for assessment is the student's original work. The teacher should take into consideration any additional assistance given to a student who experiences genuine difficulty in completing the tasks such that the marks awarded represent the student's own achievement. Works once submitted for final assessment cannot be revised and submitted for retrospective assessment. Interaction between teacher and students is encouraged to facilitate learning and teaching. For some tasks, interaction among students is also allowed during assessments, but this should be carefully monitored by the teacher so as to prevent plagiarism and disturbance.

### **3.3 Authentication of Students' Work**

To ensure fairness in assessment, teachers should devise ways to ensure authentication of students' work, such as:

- asking students to write and submit the outline of an investigation and/or the outline of the plan for an experiment before the end of a lesson;
- having the laboratory report written and submitted in class;
- checking the authenticity of experimental data by comparing them with those written in the student's log book;
- conducting quizzes for tasks which involve work outside class time;
- making changes to the tasks across years; and
- developing new tasks to replace old ones.

In order to strengthen the message to students about academic honesty and proper conduct in SBA, schools should ask their students to complete and sign a declaration form (*see Appendix E*) at the beginning of each school year in which SBA is undertaken to declare that all SBA tasks/assignments completed are their own and to agree to adhere to a code of honour in completing the SBA for all subjects. The declaration form is available on the HKEAA website (<http://www.hkeaa.edu.hk/en/sba/>).

Students should be asked to keep a proper and complete record of their work.

When submitting the SBA marks online, teachers are required to confirm that, to the best of their knowledge, the work presented for assessment is the student's own work. School principals are required to confirm that the SBA is conducted in accordance with the requirements of the HKEAA. Once the assessment is completed and marks submitted to the HKEAA, no further changes should be made to the students' work and assessment records.

### **3.4 Within-school Standardisation**

The moderation of SBA marks submitted by schools to the HKEAA is conducted on a school basis, i.e. taking each individual school as a moderation unit. If there is more than one subject teacher teaching the subject to the same cohort of students in the school, it is necessary for the teachers involved to agree on the criteria for awarding marks so that the same standard of assessment is applied to all students. Below are some recommended practices for schools' consideration:

- to conduct meetings among teachers to align the marking criteria;
- to set common SBA tasks across classes;
- to conduct trial marking of samples of students' work;
- to adjust marks of some teachers, if necessary, to ensure consistency of assessment standards for the whole school; and
- to use reference materials (such as those provided by the HKEAA) and archive materials (such as samples of students' work from previous years) to help standardise marking within the school.

### **3.5 Handling Queries against Assessment Decisions**

In general, schools already have procedures to handle any queries from their students regarding internal assessment results and can continue with their existing practice for handling SBA results. Some schools may consider setting up a panel to handle those queries that cannot be resolved by the subject teacher (to whom students should first address any queries). The panel may consist of the principal or his/her designate, and the panel head. The panel will adopt appropriate procedures to investigate the case, such as

- listening to the points raised by the student;
- listening to the views and justifications provided by the subject teacher;
- assigning the panel head or another teacher to serve as a third-party to re-assess the student's work; and
- asking the student to complete a task of a similar nature for verification.

Based on the investigation of the panel, the school will make a judgment as to whether the student's query is valid or not. The student will be informed of the result within a reasonable period of time in accordance with the school's procedures.

Schools are expected to resolve students' queries before submitting SBA marks to the HKEAA. After the release of public assessment results, candidates may submit an application to the HKEAA for rechecking of results, including the SBA component. However, they cannot appeal for a re-assessment of their performance in SBA.

### **3.6 Record Keeping**

Schools are required to keep a proper record of the following until the end of the examination cycle, which normally means the completion of the appeal process after the release of public assessment results:

- SBA assessment tasks and activities administered;
- students' SBA marks and relevant assessment records; and
- documentation of any special or irregularity cases and the actions taken.

The keeping of a proper record of assessment will enable another teacher to take over from a predecessor who leaves the school during the course. To ensure a smooth handover of SBA duties to the succeeding teacher, schools are expected to arrange for the leaving teacher to hand over the relevant mark records and documents to the panel head (or other responsible person in the school). Generally speaking, it is the students' responsibility to keep a good record of their work. Schools can have their own policy regarding the timeframe for returning assessed work to students. Whenever assessed work is returned to students, they should be informed that they are responsible for keeping safe custody of their work until the end of the assessment process, as it may be required for inspection at the request of the school or the HKEAA. The HKEAA will conduct sample inspections of students' work and assessment records. Schools will be informed in advance about the details of the sample inspection.

Schools are encouraged to keep samples of students' work at different levels of performance as archive material, which may be useful for future reference as well as maintaining assessment standards across years.

### **3.7 Language Requirements**

Students are expected to complete their assessment tasks / activities in the same language as the medium of instruction according to schools' medium of instruction policy.

## **Chapter 4 Administrative Arrangements**

### **4.1 Participating in SBA**

SBA is compulsory for all school candidates. Schools which cannot comply with the requirements specified in this Handbook will not be eligible to present candidates to enter for the subject in the examination. Schools may refer to the HKDSE Examination Regulations regarding the procedures for applying to participate in the examination.

Permission for schools to continue with the SBA in a particular subject will be automatically renewed unless the SBA Supervisor's recommendation is to the contrary. In cases where the HKEAA considers that a particular school does not meet the stipulated requirements for the implementation of SBA, the HKEAA may consider taking the following action(s) as appropriate to remedy the situation:

- providing further guidance to the school or teachers concerned;
- issuing a warning letter to the school concerned and granting a grace period for the school to meet the requirements;
- barring the school from entering candidates for the subject in subsequent examinations until the school is able to demonstrate compliance with the stipulated requirements of the SBA component.

### **4.2 Late Submission and Absence from Assessment**

Students should submit their completed work on schedule. Those submitting the work late may be subject to a penalty in accordance with their school's regulations.

Students failing to complete the assessment for legitimate reasons should give those reasons and provide relevant supporting documents (e.g. medical certificates) to the HKEAA via their schools for special consideration, which will be given for medical and other legitimate reasons.

Students failing to submit work for assessment without legitimate reasons will get a zero mark in the assessment(s) concerned. Schools may consider issuing a warning letter to the student concerned to remind him / her of the consequences of absence from assessment or failure to complete the work.



### 4.3 Students with Special Educational Needs

Students with special educational needs will not be deprived of their right to the HKDSE school-based assessment. When conducting SBA tasks, schools have the autonomy to provide special arrangements to these students depending on the nature and severity of their disabilities. The provision of such arrangements allows these students to be equitably assessed under suitable conditions without having an unfair advantage. Examples of such arrangements may include:

- extension of preparation time;
- extension of assessment time;
- provision of ancillary aids; and
- provision of special assistance during the conduct of the assessment etc.

In cases where a school cannot provide special arrangements for a particular student, the matter should be brought to the attention of the HKEAA in writing by the principal of the school for HKEAA's special consideration at the beginning of the school year. Such cases, once approved, may include exemption from part or whole of the SBA tasks.

### 4.4 Submission of SBA Marks

The HKEAA will coordinate the deadlines of mark submission for different subjects. At the beginning of the course, the HKEAA will inform schools of these deadlines so that subject teachers can plan their SBA schedule for the year. Teachers should also inform students of these deadlines and set specific dates for students to complete their SBA work in accordance with their schools' schedule.

It must be emphasised that the submission deadlines do not mean deadlines for students to complete their work, as ample time should be left for finalising the assessment results and records as well as following up on any irregularities so that marks can be submitted to the HKEAA on time. Schools are advised to coordinate the timing for students to complete SBA tasks across subjects, taking into account the workload of students and teachers, so that students' work for assessment is not concentrated into one or two critical months but spread out over two years.

All schools have to submit the SBA marks using the online School-based Assessment System. A user manual for the system and training sessions will be provided to help teachers to become familiar with the system before they need to submit SBA marks. Before the school principal endorses the marks for submission to the HKEAA, teachers have to check carefully the marks entered in the system to ensure the marks awarded to each student are correct.

In order to streamline the administrative procedures, schools are only required to **submit all S5 and S6 SBA marks to the HKEAA in one go in S6**. Regarding the adoption of this 'One-off Submission', the following points should be noted:

- (a) There is no change to the SBA requirements and how SBA is conducted in school. SBA should continue to be conducted in S5 and S6 according to the stipulated SBA requirements and schools' internal schedule.
- (b) The S5 SBA marks should be properly kept by the school for submission in S6. To facilitate schools to store the S5 SBA marks, the HKEAA will provide SBA mark sheet templates (in the format of MS Excel files) for teachers to input the SBA marks for internal record-keeping.
- (c) A list of frequently-asked questions concerning this measure can be found at [www.hkdse.hkeaa.edu.hk](http://www.hkdse.hkeaa.edu.hk) > SBA-FAQs for one-off submission of S5 and S6 SBA Marks.

#### **4.5 Declaration Requirements**

To prevent potential / perceived conflicts of interest, teachers conducting SBA have to declare whether the students they are assessing are their relatives (relatives include children, brothers and sisters, nephews and nieces, cousins and others living in the same home). The declaration records will be submitted to the HKEAA through the School-based Assessment System.

Apart from the provision of the declaration records to the HKEAA, school leaders are also expected to establish an internal system for directing teachers to make formal declaration of conflict of interest at the beginning of the school year in regard to their personal relationship with the students they teach, and to take appropriate actions to mitigate the declared interest, e.g. redeployment of teachers to avoid their conducting the assessments for the student(s) concerned, where applicable.

#### **4.6 Security Requirements**

As SBA marks will count towards students' public assessment results, for fairness and security purposes, schools have to adopt appropriate measures, including those adopted in internal examinations, in the conduct of those assessments, where preservation of secrecy is deemed necessary before the assessment.

## Chapter 5 Moderation of SBA Marks

### 5.1 Rationale for Moderation of SBA Marks

The main reason for having moderation is to ensure the fairness of SBA. Teachers know their students well and thus are best placed to judge their performance. In consultation with their colleagues, they can reliably judge the performance of all students within the school in a given subject. However, they are not necessarily aware of the standards of performance across all schools. Despite training in carrying out SBA, and even given that teachers will assess students on the same tasks and using the same assessment criteria, teachers in one school may be harsher or more lenient in their judgments than teachers in other schools. They may also vary in the awarded mark ranges.

To address these potential problems, the HKEAA (like most other examination authorities) makes use of various methods for “moderating” assessments submitted by different schools, with an aim to ensuring the comparability of SBA scores across schools.

### 5.2 Moderation Mechanism

In Chemistry, a statistical moderation method will be adopted to moderate the SBA scores submitted by schools. This is done by adjusting the average and the spread of SBA scores of students in a given school with reference to the public examination scores of the same group of students, supplemented with review of samples of students’ work. The statistical moderation results will be compared to the results from the sample review. If the two are broadly comparable with each other, the statistical moderation results will be adopted. If the difference between the two is significant, HKEAA will follow up with these outlier cases. If necessary, adjustments will be made to the statistical moderation results so that the final moderated scores of these schools can properly reflect the performance of their students in the SBA. During the moderation process, students’ SBA marks may be adjusted but the rank order determined by the school will remain unchanged.

Details of the moderation mechanism are provided in the booklet “*Moderation of School-based Assessment Scores in the HKDSE*”, which is available on the HKEAA website (<http://www.hkeaa.edu.hk/en/sba/>).

The moderation is conducted on a school basis, i.e. taking each individual school as a moderation unit. If there is more than one subject teacher teaching the subject to the same cohort of students in the school, it is necessary for the teachers involved to agree in advance on the criteria for awarding marks, so that the same standard of assessment is applied to all students. Teachers may refer to *Paragraph 3.4* for some recommended practices on within-school standardisation.

After the examination each year, SBA moderation reports will be sent to schools for their reference. The report will specify the extent of adjustment made to the marks submitted by schools.

## Chapter 6 Malpractice

Malpractice refers to any activities that allow a student to gain an undue advantage over others, examples of which include, but are not limited to:

- presenting work completed by others, in part or in whole, as one's own work;
- including material copied directly, in part or in whole, from books, newspapers, magazines, CDs, the Internet or other sources without proper acknowledgement.

These behaviours are generally referred to as plagiarism.

### 6.1 How to Handle Malpractice

Students are forbidden to indulge in any malpractice when completing their assessment activities. Teachers are expected to provide sufficient supervision to ensure that the work which is assessed is that of the student concerned (see *Paragraph 3.3 Authentication of Students' Work* for details). Teachers know their students well and hence should be able to detect plagiarism and other malpractices through a close monitoring of students' work.

Schools should establish procedures for handling suspected malpractice cases. These procedures may include investigating suspected cases and determining appropriate action for proven incidents of malpractice. During the investigation, students may be required to:

- provide evidence of the development of their work;
- discuss the content of the work with teachers and answer questions to demonstrate their knowledge and understanding of the work submitted;
- complete, under supervision, a supplementary assessment task related to the original task; and
- attend an interview or complete a test to demonstrate the work submitted is their own.

## Plagiarism

Plagiarism in SBA is to be handled as described below, depending on the severity of the offence:

Category	Method of handling
<b>Serious plagiarism cases (P cases):</b> Serious cases in which nearly the whole or the whole SBA task/assignment is plagiarised, with very little or no contribution from the student.	To be forwarded to the HKEAA for follow up
<b>Other plagiarism cases:</b> Less serious cases, including - minor infringement identified in students' SBA work, or - part of the student's SBA work copied from source(s) without proper acknowledgement, but the student has made some contribution to the work.	To be handled by schools

### Procedures in Handling P cases

Schools should submit a report on the P cases identified to the HKEAA for follow-up, after the completion of mark submission in S6. The report should record details of the case and be submitted with relevant documents. *Appendix F* shows a template of the report for schools' use in reporting such cases, which is available on the HKEAA website (<http://www.hkeaa.edu.hk/en/sba/>). When submitting the SBA marks to the HKEAA, schools should input "P" in the relevant mark box for the student concerned.

These P cases will be deliberated by the HKEAA's Standing Committee and, for proven cases, a recommendation will be made to the Public Examinations Board (PEB) for their consideration. The PEB will review all the information and evidence and decide on the penalty to be imposed in accordance with the Board's guidelines on handling examination irregularities. The levels of penalty to be imposed for proven P cases are as follows:

- (a) **Zero marks** will be given to the task in which serious plagiarism is proven. In addition, a penalty of **downgrade by one level** will be imposed in the subject concerned.
- (b) For extreme cases, e.g. repeated offence of plagiarism, candidates may be subject to **disqualification from the subject(s) concerned or the whole examination**.

### **Procedures in Handling Other Plagiarism Cases**

Other less serious cases are to be dealt with by the school. These cases need not be reported to the HKEAA for follow-up. However, schools should keep a proper record of such cases.

For proven cases, schools should impose appropriate penalty in accordance with the school regulations and the HKEAA guidelines, taking into consideration the seriousness of the offence. This may include:

- Issuing a warning letter to the students (e.g. for minor offence due to negligence or committed at the initial stage of the assessment);
- Deducting marks for the task concerned; and
- Awarding zero marks for the task concerned.

It is important to note that in marking students' work, any proven plagiarised material should be disregarded and any marks awarded should be based on the students' own work only.

After the release of examination results, candidates may only submit applications to the HKEAA for rechecking of their SBA marks but cannot apply for a re-assessment of their performance in SBA. Hence it is important that students should be informed of the penalty imposed. Schools should handle any queries from students against assessment decisions in accordance with their established internal procedures. Any queries from students should be resolved before submitting the SBA marks to the HKEAA.

### **Plagiarism Cases Identified by the HKEAA**

After the completion of mark submission in S6, the HKEAA will conduct moderation of SBA marks and review of samples of student work collected from schools. Any suspected plagiarism cases identified during this process will be handled in a consistent manner as those identified by schools.

Schools will be required to follow up on any suspected cases identified. Both P cases and other less serious cases will be handled following similar procedures as stipulated above.

## **6.2 Prevention of Malpractice**

At the beginning of the course, schools are expected to advise students on what malpractice is and what its consequences are. To avoid plagiarism, guidance needs to be provided to students on how to acknowledge sources properly in their work.

In completing the SBA, students can make reference to any sources (books, newspapers, magazines, the Internet etc) and/or discuss with their peers/parents but they must not plagiarise when completing their work. They should acknowledge sources properly in their work. Some examples on how to acknowledge sources properly are provided in the booklet "*HKDSE Information on School-based Assessment*", which is available on the HKEAA website (<http://www.hkeaa.edu.hk/en/sba/>).

## **Roles and Responsibilities of the HKEAA, EDB, Schools and Students**

The following summarises the roles and responsibilities of different parties involved in the administration of the SBA, including the HKEAA, the Education Bureau (EDB), schools (principals and teachers) and students.

### **HKEAA will:**

1. develop the assessment framework, assessment/administrative guidelines and marking criteria for SBA;
2. conduct research in SBA (e.g. with regard to international policies and practices, moderation methods, psychometric issues involved and implementation issues);
3. lead and organise teacher professional development courses on assessment in collaboration with the EDB;
4. monitor the conduct of SBA in schools to ensure compliance with SBA requirements;
5. appoint SBA Supervisors and District Coordinators to oversee and support the implementation of SBA in individual subjects;
6. process assessment records submitted by schools;
7. moderate SBA marks submitted by schools; and
8. provide feedback to schools.

### **EDB will:**

1. develop the curriculum framework;
2. sponsor and organise teacher professional development courses on assessment in collaboration with the HKEAA;
3. provide learning and teaching resources to facilitate the implementation of SBA in schools;
4. support the WebSAMS system to facilitate retention of SBA teacher/class data and assessment records; and
5. evaluate quality assurance processes of school assessments including SBA (e.g. through inspection of teaching facilities, observation of lessons and the external school review process).

### **Principals (or their designates) will:**

1. establish appropriate regulations and procedures for the proper administration of SBA within the school;
2. send representatives to attend SBA conferences and coordinator-teacher meetings;

3. nominate a School Coordinator for each subject to oversee the conduct of the SBA in that subject;
4. provide information on the administration of SBA as required by the HKEAA;
5. endorse the SBA marks for submission to the HKEAA;
6. facilitate visits by HKEAA subject managers and examination personnel (e.g. supervisors, district coordinators and moderators) who may need to review students' work and assessment records;
7. maintain a quality assurance system for SBA; and
8. provide feedback to the HKEAA.

**Teachers will:**

1. explain to students the aims, requirements and assessment criteria of SBA as well as the relevant school regulations and procedures;
2. administer SBA as an integral part of learning and teaching;
3. administer SBA according to the regulations and procedures set by the HKEAA and the school;
4. provide information on the administration of SBA as required by the HKEAA;
5. assess students' work/performance using the assessment criteria set by the HKEAA;
6. authenticate students' SBA work and performance records;
7. submit SBA marks, assessment records and samples of students' work to the HKEAA on schedule;
8. retain students' assessment records and make them available for inspection if required; and
9. provide feedback to the HKEAA.

**Students should:**

1. understand that:
  - SBA tasks are part of learning and teaching of the respective subject;
  - the process of SBA, including feedback from teachers, helps them develop skills and knowledge that may not be reflected in public examinations;
  - learning through SBA complements learning in other parts of the curriculum;
2. become familiar with the task requirements, the assessment criteria, critical dates, school regulations and procedures for SBA;
3. complete the assessment tasks honestly and responsibly in accordance with the stipulated requirements;
4. complete the assessment tasks on time; and
5. keep a proper record of their SBA-related work till the end of the examination cycle and present it for inspection at the request of the school or the HKEAA.



## **Roles and Responsibilities of Supervisors, District Coordinators and School Coordinators**

When SBA is implemented in a certain subject, the HKEAA will appoint an SBA Supervisor and District Coordinators to oversee and support the implementation of SBA. School principals will be requested to nominate a teacher to be the School Coordinator for a particular subject, who will serve as a link between the subject teachers within the school and the HKEAA and the District Coordinators. Their roles and responsibilities are summarised below:

### **SBA Supervisor**

The duties of the SBA Supervisor are to:

1. be responsible to the HKEAA for the proper monitoring of SBA;
2. make any necessary arrangements with District Coordinators to familiarise them and subject teachers with the SBA, and to align assessment standards;
3. bring any irregularities to the notice of the HKEAA together with recommendations for action(s) to be taken, including SBA mark adjustment;
4. keep the HKEAA informed of the progress of SBA and recommend amendments when deemed desirable;
5. oversee the appointed District Coordinators;
6. make recommendations to the HKEAA regarding SBA moderation;
7. advise on the cut score of each reporting level during the grading meeting (if applicable); and
8. write a report on the conduct of SBA and submit it to the HKEAA at the end of the school year.

### **SBA District Coordinators**

SBA District Coordinators provide a link between the Supervisor and School Coordinators/teachers.

The duties of a District Coordinator are to:

1. liaise with School Coordinators and oversee the implementation of SBA in an assigned group of schools;
2. conduct meetings with School Coordinators/teachers involved in his/her group as necessary, pass on information about SBA to teachers and discuss difficulties and receive comments/feedback from teachers;
3. report to the Supervisor any difficulties or irregularities in the implementation of SBA in the schools in his/her group and recommend any necessary action;
4. provide guidance and support to teachers in the implementation of SBA in schools and ensure adherence to the guidelines;
5. help teachers in the schools in his/her group to establish as far as possible a uniform standard in assessment;

6. assist the Supervisor in matters concerning the operation of SBA;
7. inspect samples of students' work and relevant assessment records provided by teachers in his/her group and provide feedback to teachers on the standards of marking and students' work in his/her group; and
8. complete a report concerning each of the schools in his/her group at the end of the school year.

### **SBA School Coordinators**

The School Coordinator for Chemistry, who is nominated by the school principal, provides a link between the subject teachers within a school and the District Coordinator and the HKEAA. The duties of a School Coordinator include, but are not limited to, the following:

1. liaise with the HKEAA and the District Coordinator regarding SBA matters;
2. plan the assessment schedule (i.e. number, timing and sequence of assessment tasks) in consultation with all subject teachers teaching the same cohort of students;
3. coordinate the reporting of marks to the HKEAA; and
4. report to the District Coordinator any difficulties or irregularities in the implementation of SBA in his/her school.

### Calendar of Events

The following table shows a tentative schedule of SBA events for the 2024 HKDSE Chemistry Examination:

School Year	Month	Event
S4	September 2021	2024 SBA handbook uploaded to the HKEAA website ( <a href="http://www.hkeaa.edu.hk/en/sba/">http://www.hkeaa.edu.hk/en/sba/</a> )
	September – November 2021	SBA conference and group meetings: <ul style="list-style-type: none"> <li>• Introduction of Supervisors and District Coordinators</li> <li>• Latest information about the SBA</li> <li>• Group meeting and discussion</li> </ul>
	November 2021	Professional development course on SBA for new teachers
	March – July 2022	School visits by District Coordinators
S5	September 2022	Schools to provide the following information to the HKEAA: <ul style="list-style-type: none"> <li>• Name(s) of and relevant information about S5 teachers</li> </ul>
	September – November 2022	SBA conference and group meetings: <ul style="list-style-type: none"> <li>• Updates on SBA</li> <li>• Experience sharing on SBA</li> </ul>
	September 2022 – May 2023	<ul style="list-style-type: none"> <li>• School visits by District Coordinators</li> <li>• S5 teachers to conduct SBA activities according to school's assessment plan</li> </ul>
	May – June 2023	S5 teachers to email List of S5 Experiments to District Coordinators
S6	September 2023	Schools to provide the following information to the HKEAA: <ul style="list-style-type: none"> <li>• Name(s) of and relevant information about S6 teachers</li> </ul>
	September – November 2023	SBA conference and group meetings: <ul style="list-style-type: none"> <li>• Feedback to schools on SBA</li> <li>• Updates on SBA</li> </ul>
	September – December 2023	<ul style="list-style-type: none"> <li>• School visits by District Coordinators</li> <li>• S6 teachers to conduct SBA activities according to schools' assessment plan</li> </ul>
	January – February 2024	Schools to submit S5 and S6 SBA marks, List of S5 and S6 Experiments and samples of students' work to the HKEAA
	March – May 2024	SBA marks to be analysed and moderated by the HKEAA.
	July 2024	Release of 2024 HKDSE Examination Results
	October 2024	Schools to receive feedback on the outcome of moderation

### Channels of Communication

(1) Teachers may contact the HKEAA via one of the following means:

	<b>Examination Arrangements and Application for Special Consideration</b>	<b>Subject-specific Information and Operation of SBA in Schools</b>
Tel No.:	3628 8860	3628 8070
Fax No.:	3628 8928	3628 8091
Address:	Manager - DSE (SBA) School Examinations and Assessment Division Hong Kong Examinations and Assessment Authority 12/F, Southorn Centre 130 Hennessy Road, Wan Chai Hong Kong	SBA Team, Assessment Development Division Hong Kong Examinations and Assessment Authority 13/F, Southorn Centre 130 Hennessy Road, Wan Chai Hong Kong

(2) Teachers may view the latest SBA information or download useful documents from the HKEAA website:

- URL: <http://www.hkeaa.edu.hk>
- For general information, please click “HKDSE” on the homepage and then choose “SBA”.

(3) School Coordinators/teachers may contact the District Coordinator assigned for their schools for guidance and advice on matters concerning SBA.

**Hong Kong Diploma of Secondary Education Examination**  
**Student Declaration Form for School-based Assessment (SBA)**  
**Completed in the School Year 20\_\_ - \_\_**

**Notes:**

1. This form should be signed by senior secondary students at the beginning of each school year in which SBA is undertaken. Only one form needs to be completed by each student.
2. The completed form should be retained by the school until the end of the public examination cycle.

School Name: \_\_\_\_\_

Student's Name: \_\_\_\_\_

Class: \_\_\_\_\_ Class No: \_\_\_\_\_

**Important Reminder to Students:**

1. It is of utmost importance that academic honesty is maintained in SBA. Students are forbidden to indulge in any malpractice when completing their assessments.
2. Student can make reference to sources but must not plagiarise when completing their work. They should write in their own words and should not simply copy others' words or ideas and present them as their own. If necessary, they can quote or make reference to something written by another author in their work, as long as they ensure that these quotes or references are identified and the sources properly acknowledged.
3. Students are advised not to quote excessively in their work, as this would mean that they themselves could only make a minimal contribution to that piece of work and consequently they would be likely to get low marks from their teacher.
4. Students can make reference to the booklet "*HKDSE Information on School-based Assessment*", (<http://www.hkeaa.edu.hk/en/sba/>). Some examples on how to quote and acknowledge sources properly are provided in the booklet.
5. Students will be subject to severe penalties for proven plagiarism. The HKDSE Examination Regulations stipulate that a candidate may be liable to disqualification from the subject concerned or the whole of the Examination, or suffer a mark or grade penalty for breaching the Regulations.

**I certify that I have read the above Reminder and declare that:**

- All SBA tasks/assignments work to be completed for all subjects in this school year will be my own work.
- My SBA work will not include any materials which have been copied from other sources without acknowledgement.
- I am responsible for ensuring that the work produced is my own and will bear the consequences for committing plagiarism or other malpractice in SBA.

Student's signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Hong Kong Diploma of Secondary Education Examination  
Plagiarism Report in School-based Assessment (SBA)**

**Notes:**

1. Details of serious plagiarism cases (*P* cases) are to be recorded in this report, which should be submitted to the HKEAA for follow-up after the completion of the mark submission in S6, together with relevant documents.
2. When submitting the SBA marks to the HKEAA, schools should put “P” in the relevant mark box for the student concerned.

School Name: \_\_\_\_\_  
 Student's Name: \_\_\_\_\_ Candidate No.: \_\_\_\_\_  
 Class: \_\_\_\_\_ Class No.: \_\_\_\_\_  
 Subject: \_\_\_\_\_

**Case Summary**

	<b>Details / Remarks</b>
Task/assignment involved	
Date of completion of the task/assignment	
Irregularities identified	<p><i>(Please tick as appropriate)</i></p> <input type="checkbox"/> Nearly the whole task/assignment is plagiarized <input type="checkbox"/> The whole task/assignment is plagiarized <input type="checkbox"/> Others (please specify): _____ _____
Documentation	<p>The following documents are submitted as evidence:</p> <ol style="list-style-type: none"> <li>1. The SBA task/assignment</li> <li>2. The student's work, with the plagiarised part(s) highlighted</li> <li>3. The source material(s) from which the unacknowledged work is copied</li> <li>4. Others (<i>please specify</i>): _____              _____</li> </ol>
Follow-up actions taken	<p>Student was interviewed on _____ (Date) and informed about the submission of this report to the HKEAA.</p> <p>Others (<i>please specify</i>): _____            _____</p>

**Contact Person**

Name: \_\_\_\_\_ Post: \_\_\_\_\_

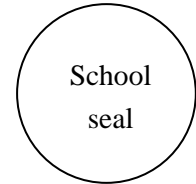
Telephone No.: \_\_\_\_\_

\_\_\_\_\_  
Signature of Subject Teacher

\_\_\_\_\_  
Signature of Principal

\_\_\_\_\_  
Name of Subject Teacher

\_\_\_\_\_  
Name of Principal



\_\_\_\_\_  
Date