2021 Bio SBA Conference

30 October 2021

香港考試及評核局
Hong Kong Examinations and Assessment Authority

Special Arrangement for 2022 HKDSE

- SBA cancelled
- Weighting of written exam adjusted.
  - Paper 1 60% → 75%
  - Paper 2 20% → 25%

2023 HKDSE

- Keep reviewing the effect of pandemic and collecting stakeholders' views
- Schools will be informed as soon as possible should there be any streamlining arrangements

SBA Work Plan for 2021-22

Month / Year	Event
October 2021	SBA annual conference
Sept 2021 – Jun 2022	S5 SBA activities to be conducted by schools
May 2022 – June 2022	Email ‘S5 Lists of experiments for 2023 Exam’ to DC

SBA requirements for 2023 HKDSE onwards

Biology

- Practical Skills (Area A) (40%)
  - Best two marks obtained in Area A throughout the study
- Report Writing (Area B) (60%)
  - Best two marks obtained from different topics in Experimental Design (B1) throughout the study
  - Best two marks obtained from different topics in Results and Discussion (B2) throughout the study

Combined Science (Biology) – last exam in 2023

- Practical Skills (Area A) (20%)
  - Best mark obtained in Area A
- Report Writing (Area B) (30%)
  - Best mark obtained from in Experimental Design (B1)
  - Best mark obtained from in Results and Discussion (B2)

Submission requirements in system

- To ensure SBA is conducted throughout the study as a continuous assessment, the system required at least one assessment in each area (A, B1 and B2) to be submitted in S5 and S6 respectively.

SBA requirements for repeater / transfer candidates

- There might be School Repeaters, Switching of Courses / Transfer Students for S6 submission, i.e. a minimum of one assessment in each area (A, B1 and B2). For details, please see Chapter 2 of the SBA Teachers' Handbook.

Cross-border students

- Keep attendance record
- Apply for exemption if they cannot fulfill the SBA requirements due to disease prevention measures

Major Changes in Area B

- Writing up of procedure is not required
- Assessment on Experimental Design (B1) and Discussion (B2), each with a 10 point scale of marking
- For each experiment, teachers may assess B1 only, B2 only, or both B1 and B2, depending on the nature of the experiment
- Report can be in form of paragraphs or worksheets

Flexibility under the new initiatives

- Teachers may consider using a task to assess a certain area and focus on learning and teaching of another area

Scenario 1

- Provide procedures, discuss with students the design elements of the experiment for the learning and teaching of Area B1
- Conduct the experiment to assess Area A
- Collect results and discuss with students the results, conclusion, sources of errors / limitations and improvement for the learning and teaching of Area B2

Scenario 2

- Provide a task (with generic questions or specific questions) with apparatus and materials, allow students to have hands-on trials to formulate their design, submit Area B1 under teacher supervision
- Provide feedback on their B1, provide procedure, conduct experiment and assess Area A
- Collect results and discuss with students the results, conclusion, sources of errors / limitations and improvement for the learning and teaching of Area B2

Scenario 3

- Provide procedure of a complicated experiment (with the collection of quantitative data) that you think students would not be able to design it on their own, discuss with students the design elements of the experiment for the learning and teaching of Area B1
- Conduct the experiment to assess Area A
- Collect results and assess Area B2

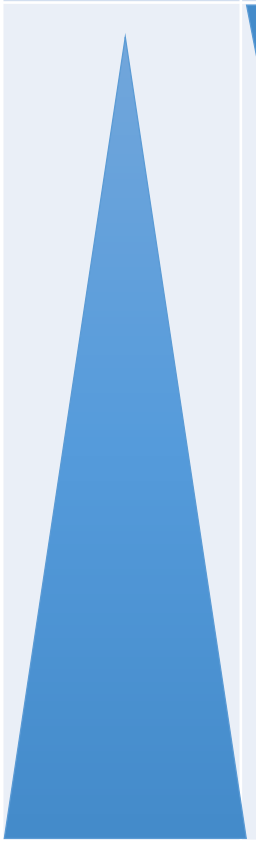
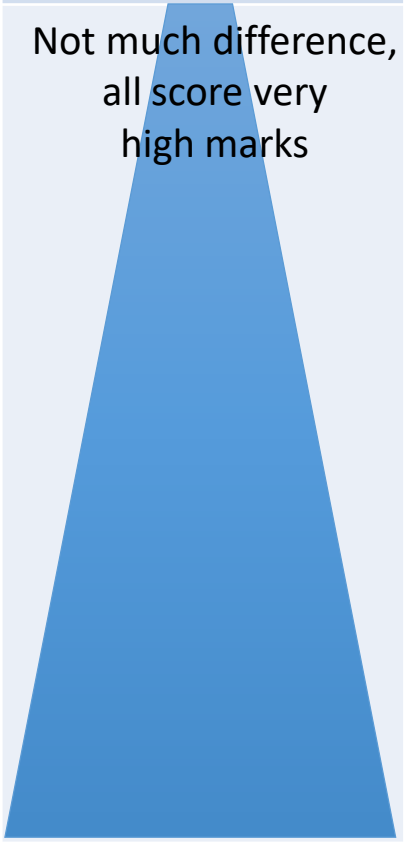
Scenario 4

- Provide students the design task which involves decision marking in the choice of measurements / alternative designs / sampling consideration for the assessment of Area B1
- Conduct the experiment to assess Area A
- Collect results, if the results are very simple ones without much analysis or discussion, consider not assessing Area B2

Cater for learner diversity

- Different schools may have different practices in conducting SBA, difficulties of SBA tasks, and marking standards for marking SBA tasks
- Most importantly, these differences should allow differentiation of students with correct rank order
- Moderation will take care of the differences

Consideration: when to give the task sheets?

Practices	Difficulty	Mark differences	
		Less able students	More able students
Task sheet with questions given before the assessment			
Aim on investigation given before the assessment, task sheet with question given on the date of assessment			
Related topic(s) given before the assessment, task sheet with question given on the date of assessment			
Related topic(s) given before the assessment, aim of investigation given on the date of assessment			
Related topic(s) given before the assessment, open-end investigation			

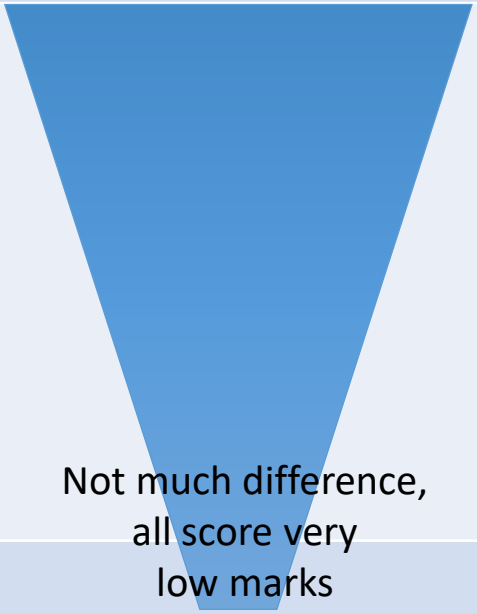
The wider the difference, the better the differentiation, i.e. more accurate the rank order

Consideration: difficulty of question in the task sheet

Question types	Difficulty	Mark differences	
More no. of easy and direct Qs		Less able students	More able students
		Not much difference, all score very low marks	Not much difference, all score very high marks
More no. of difficult and open-ended Qs			

The wider the difference, the better the differentiation, i.e. more accurate the rank order

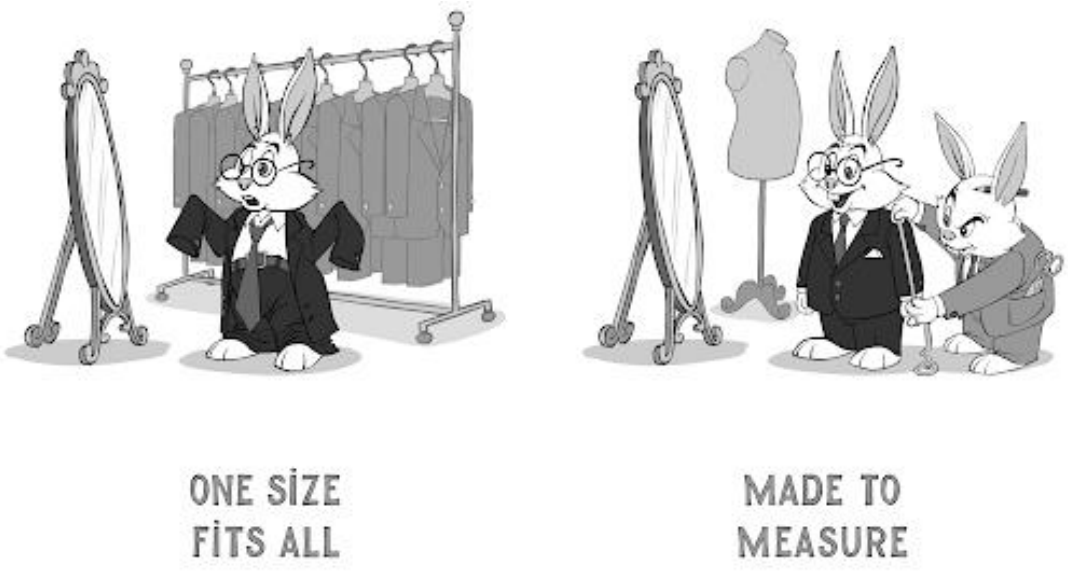
Consideration: marking standard

Marking Standard	Mark differences	
Lenient	Less able students	More able students
	 Not much difference, all score very low marks	 Not much difference, all score very high marks
Strict		

The wider the difference, the better the differentiation, i.e. more accurate the rank order

Sharing of practices

- If you have some ideas / tasks under this new mode of SBA, you are welcome to share with us.
- We want to collect some practices and share in the future how you make the tasks fit for your students.



For students with Special Educational Needs (SEN)

- Accommodation
- Applying for exemption (if applicable)

Accommodation

- Provide necessary assistance to the student concerned and perform a FAIR assessment
- e.g. assigning a technician / classmate / teacher to tell the student the colour of the reacting mixture
- Provide alternative task (but same level of difficulty) and perform a FAIR assessment (e.g. making reference to School's SEN policy, soliciting advice from school management / Psychologist / Therapist)

Exemption

- Formal approval from the HKEAA required
- Application form: https://www.hkdse.hkeaa.edu.hk
- Apply at the beginning of school year

Supporting documents

- School's recommendation for exemption

- Relevant Medical supports, Psychologist's supports, Attendance record (such as record of extended sick leaves)

Reminders

- Contact the SBA Team of the HKEAA for questions related to logistical arrangements
- Discuss with your District Coordinator for subject-related questions
- Explain to the student the accommodation, or why no accommodation is necessary
- Mark in the student work the kind of accommodation / exemption involved if being selected to be submitted to the HKEAA

Suggestions for conducting experiments during pandemic

- Observe the safety guidelines from EDB
- May consider some simple and safe experiments which can be done at home, e.g.
  - Growth conditions of plants
  - Alcohol production in anaerobic respiration (by putting grape juice with skin in a sealed container)
- To save time, for experiments involving repeated measurements (e.g. effect pH / temperature / light intensity on X), may consider having one group working one measurement and then pool the data for whole class

For assessment of Area A

- If necessary, have limited number of groups per session, and run several sessions in the afternoon for Area A
- May conduct individual assessment on the use of microscope for Area A, a limited number of students each time
- May consider assess drawing skills for Area A

For assessment of Area B

- May consider experiments involving repeated measurements, each group work on one measurement to provide hands-on experience, then pool data for results and discussion
- May consider provision of data for results and discussions, supplemented with videos showing how the experiment was conducted