



Technology & Living (Food Science & Technology) SBA Group Meeting

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



Optional Trial for 2018 Exam

- No. of schools enrolled = 13 [10 + 3*] (*network schools)
- No. of schools submitted the marks = 8 [5 + 3*]
- Reasons for opting out the optional trial:
 - Students were unable to submit the Prescribed Task and/or Project in time
 - The assessment was not done according to the stipulated requirements

No opting out for the 2019 Exam!!



Learning from the Optional Trial

- Making a **practical** assessment plan for submitting the marks in **January 2019**
 - Preferably *all assessment* completed by *end of Oct 2018*
 - *All marking* of prescribed task and project completed by *end of Nov 2018*

Technology and Living (Food Science and Technology) Assessment Plan for SBA (2019 Exam)

School name: _____ **EXAMPLE** _____ Group no. _____
Teacher name(s): _____ 1 / 2*

A. Prescribed Task

Task Title	Experiment Date (Day/Month/Year)	Report Submission Date (Day/Month/Year)
Foam stability	2 Feb 2018	2 Feb 2018

B. Project

Project Title: _____

		Completion Date (Day/Month/Year)
Proposal	(i) Design Task / Problem	2 May 2018
	(ii) Design Brief	
	(iii) Research	
	(iv) Design Specification	1 June 2018
	(v) Idea Generation	
	(vi) Developing Own Ideas	
Realisation and Evaluation	(vii) Final product making	12 Oct 2018
	(viii) Overall evaluation (i.e. submission of the whole finished Project)	31 Oct 2018

* circle as appropriate

Please note the following when making the assessment plan:

1. The period for SBA mark submission to HKEAA is in January 2019.
2. It is important to ensure your schedule of SBA work allows the marking of student work (including the report of the Prescribed Task and the various parts of the Project) completed and all marks to be entered in the SBA System are available BEFORE the submission period.

Learning from the Optional Trial

- Support measure: **Assessment Plan**
 - For the **2019** Exam, Assessment Plans:
 - collection started from early March 2018
 - progress in assessment (*Prescribed Task* and *Proposal*) to be reported at this Group Meeting
 - progress in assessment to be updated in the SBA Teachers' Conference in Oct 2018
 - For **2020 exam and onwards**, Assessment Plans:
 - to be submitted to DCs **at the start of S5 year** (e.g. by 30 Nov 2018 for S5 students, who sit for the 2020 Exam) for advisory purpose
 - progress in assessment (*Prescribed Task* and *Proposal*) to be reported **by email** to DCs in **May/June at the end of the S5 year** (e.g. by early June 2019) for monitoring purpose

Technology and Living (Food Science and Technology)
Assessment Plan for SBA (2019 Exam)

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	(iv) Design Specification		
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Learning from the Optional Trial

- Pay attention to the SBA requirements stated in **Chapter 2** of the **SBA Handbook** (<http://www.hkeaa.edu.hk/DocLibrary/SBA/HKDSE/SBAhandbook-2019-TL-E.pdf>)

Table 1

Task	No. of Assessment	Weighting in subject
Prescribed task	1	10%
Project / Design Folio <ul style="list-style-type: none">• Proposal• Realisation and evaluation	1	20%

Table 2

Task	Assessment Areas	Assessment Criteria	Mark	Total Mark
Prescribed task	Experimental work	• conducting of experiment and recording of observations	10	20
	Report writing	• interpretation of data and report writing	10	
Project / Design Folio	Proposal	• development of the project outline / design brief and study item / design specification	10	20
		• development of study items / design ideas	10	
	Realisation and evaluation	• realisation of the study item / design idea	15	20
		• communication and presentation	5	



Section 2.2

SBA Requirements

2.2 Guidance in Assessment Process

- (1) It must be stressed that the SBA of Technology and Living is not an “add-on” element in the curriculum, but an integral part of the learning and teaching process. Teachers should incorporate relevant learning activities (e.g. experiments, practical work) into their teaching schedules so that students will be exposed to a wide range of different topics of the Technology and Living curriculum.
- (2) Assessment should be based on students’ individual work. Students should be informed clearly at the beginning of the course of the various requirements and regulations of the SBA. The assessment rubrics provided in Section 2.4 are guidelines to teachers for awarding marks. 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 their overall performances in SBA.

NO group work allowed for either the Prescribed Task or the Project



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Section 2.2

SBA Requirements

Prescribed task

The prescribed task involves the assessment of two areas: experimental work and report writing. The assessment of experimental work is based on teacher's observation of the students' performance in conducting the experiment and the quality of the results presented; while that of report writing is based on the quality of student's report. Each of these areas is to be marked on a 10-point scale. Teachers can award marks by matching an individual student's performance to the characteristics described in each level of performance in the assessment rubrics in Table 4. Alternatively, teacher can devise their scheme of marking for each assessment criteria for a specific experiment.

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Assessment Rubrics for Prescribed Task

- Assessment focus:
 - Ability to handle apparatus and equipment
 - Skills in conducting the experiment
 - Safety
 - Quality of data collected and their presentation
- The ability to design an investigation is **not** an assessment focus in this part

Table 4 Assessment rubrics for prescribed task

Assessment criteria	Typical performance	Marks
Conducting of experiment and recording of observations (10-point scale)	<ul style="list-style-type: none">• Perform experimental work safely and demonstrate a full range of skills• Use apparatus and instruments proficiently• Complete data collection and present the results systematically and accurately	9-10
	<ul style="list-style-type: none">• Perform experimental work safely and demonstrate some skills• Use apparatus and instruments properly• Complete data collection and present the results appropriately	6-8
	<ul style="list-style-type: none">• Perform experimental work safely but demonstrate limited skills• Demonstrate some difficulty in using apparatus and instruments properly• Collect some relevant data but present the results in an inappropriate form	3-5
	<ul style="list-style-type: none">• Perform experimental work unsafely and demonstrate little / no skills• Demonstrate great difficulty in using apparatus and instruments properly• Collect a limited amount data and present the results in an inappropriate form	1-2



Assessment Rubrics for Prescribed Task

- To assess students' ability to:
 - describe and interpret the findings and results based on scientific theories;
 - discuss the applications of the findings and results in cookery;
 - suggest how to improve the experiment and suggest if there is any further investigation;
 - draw the conclusion based on the results of the experiment and in relation to the objective.

Interpretation of data and report writing (10-point scale)	• Interpret findings and discuss the results thoroughly with application of relevant scientific theories	9-10
	• Draw valid and meaningful conclusion(s) based on the findings	
	• Interpret findings and discuss the results with application of relevant scientific theories	6-8
	• Draw valid conclusion(s) based on the findings	
	• Interpret findings and discuss the results with application of scientific theories, but some are irrelevant	3-5
	• Draw vague conclusion(s) based on the findings	
	• Interpret findings and discuss the results with some use of scientific theories, but many are irrelevant	1-2
	• Draw invalid conclusion(s)	



Assessment Rubrics for Prescribed Task

- To assess the student's ability to:

- describe and interpret the findings and results based on scientific theories;
- discuss the applications of the findings and results in cookery;
- suggest how to improve the experiment and suggest if there is any further investigation;
- draw the conclusion based on the results of the experiment and in relation to the objective.

EXAMPLE

Factors Affecting the Rising of Bread Dough - Temperature

[TEACHERS' NOTES]

- Most of the schools used sample Prescribed Tasks for assessment in the Optional Trial.
- Teachers are encouraged to develop/adopt/adapt experiments that are suitable for use in TL(Food) for assessment, i.e. assessing the abilities described in the rubrics

→ Independent assessors will **give marks to the parts in the Report that are related to the these 4 aspects**



Assessment Rubrics for Project

Project / Design Folio

There are two parts in the project / design folio: **proposal**, and realisation and evaluation. The **Proposal should be completed by the end of S5**, and the whole project / design folio has to be completed before the end of S6. The assessment rubrics for these two parts are listed in Table 5 (Proposal) and Table 6 (Realisation and Evaluation). The point scale to be used for marking each assessment criterion is also given in each table.

Assessment
Rubrics of
Project to
be revisited
in the 2nd
part of this
Meeting

Sec 2.4 SBA Handbook

- (4) For the project / design folio, teachers should **set internal deadlines** for students to submit their work at different stages. Teachers may comment on students' proposals and return them for redrafting. They may also consider offering assistance if a student's proposal is not feasible. However, the kinds of assistance given should be recorded and due consideration should be given when assessing the student's work.



Section 2.2 SBA Requirements

- (5) Teacher should record the marks on the student's work (e.g. report, proposal) as part of their normal feedback to the student. All mark sheets and records of the study item / product produced for the project / design folio (e.g. photographs of the study item / product) should be kept until the end of August of the exam year. During the three-year course, these items may be required for inspection by Coordinators or Supervisors.
- (6) Normally, work to be assessed should be conducted within class time except for those parts which require extensive reading and collection of data from other sources, e.g. the collection of opinions through questionnaires or information through literature reviews.
- (7) Teachers teaching different classes / groups of students should hold standardisation meetings prior to their marking to ensure that they arrive at the same and full understanding of the standard described in the assessment rubrics.
- (8) Once the assessment task has been submitted for marking, no further amendment may take place. Late submission will not be accepted.

e.g. Reports to be done under teachers' supervision to ensure the work is done by the student himself/herself

Learning from the Optional Trial

- Mark submission:
no problems identified
- Mark template available at http://www.hkeaa.edu.hk/en/SBA/forms/mark_template for teachers' reference and use to ease keeping of SBA marks

SBA Mark Template for 2018 HKDSE Examination (Technology and Living - Food Science and Technology)					
1	A	B	C	D	E
2					
3	Notes:				
4	1. As information like candidate numbers are not yet available for the time being, the SBA Mark Templates only serve to facilitate schools to input their SBA marks for internal record-keeping but are not used for submission purpose in S6.				
5	2. Schools are free to adapt these Mark Templates or use other suitable means to keep their SBA marks in safe custody for submission in S6.				
6	3. Other than marks, teachers may also enter E = Exemption; F = Fail to submit/performance; or P = Serious plagiarism.				
7	4. For 'E' case, if a school cannot provide special arrangement for a student with special education needs in conducting the SBA, the matter should be brought to the attention of the HKEAA in writing by the school principal for HKEAA's special consideration at the beginning of each school year. Such cases, once approved, may include exemption from part or whole of the SBA tasks. Moreover, for any 'E' entered, such as for students taking extended sick leave, schools should gain formal approval from the HKEAA.				
8	Class Name	Class No.	Student Name (Eng)	Prescribed task (PT) (0-20)	Project / Design Folio Proposal (P) (0-20)
9					
10					
11					

Task	Assessment Areas	Assessment Criteria	Mark	Total Mark
Prescribed task	Experimental work	• conducting of experiment and recording of observations	10	20
	Report writing	• interpretation of data and report writing	10	
Project / Design Folio	Proposal	• development of the project outline / design brief and study item / design specification	10	40
		• development of study items / design ideas	10	
	Realisation and evaluation	• realisation of the study item / design idea	15	
		• communication and presentation	5	14



Learning from the Optional Trial

- Student Work submission:
 - 6 students are **chosen** by the SBA system **AFTER** all mark input

The System only accepts file formats of **zip**, **pdf**, txt, **doc**, **docx**, rtf, ppt, pptx, xls, xlsx, csv, mp4, mp3, mpg, wmv, avi, jpg and tif.

One single file, ≤40MB for EACH student

- If different files are used for the cover mark sheet, prescribed task and project, zip them all into **1 zipped file**
- Teachers are *recommended* to use **a single file** for EACH *selected* student, including the following (*in order*)
 1. **Cover Mark Sheet**
 2. **Prescribed Task**
(with the results for assessor's reference)
 3. **Project**



- Some **good** practices:
 - ✓ **zero marks** awarded were clearly given in the mark sheet
 - ✓ comments to provide feedback to student

2018 科技與生活
(食品科學與科技)

暫定稿

(2017 年 10 月)

(I) 指定課業評分紙

評核準則	分數	總分 (PT)	備註／評語 (如適用)
實驗及觀察結果的記錄	(最高 10 分)	(入分用；最高 20 分) 0	-Description in sample A is not totally correct. -Should describe sample A to D clearly. -Not mention the use of plastic is not desirable in whisking egg white.
數據分析及報告的撰寫	(最高 10 分)		

(II) 專題研習評分紙

計劃書

評核準則	分數	總分 (P)	備註／評語 (如適用)
研習大綱與研習項目表格的制定	(最高 10 分)	(入分用；最高 20 分)	Design specification & cost are missing.
研習項目的制定	(最高 10 分)		

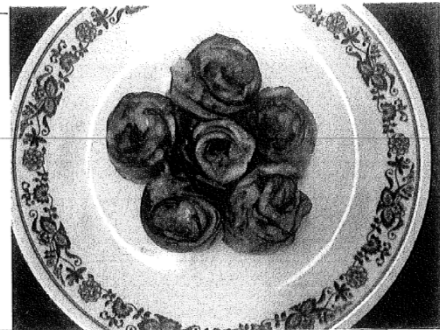
實踐與評鑑

評核準則	分數	總分 (RE)	備註／評語 (如適用)
研習項目的實踐 (最高 15 分)	實踐 (最高 10 分)	(入分用；最高 20 分) 0	報告遺忘空白。 報告未有完成。
	評鑑 (最高 5 分)		
書面溝通與表達技巧 (最高 5 分)	(最高 5 分)		

Some problems and suggestions

Problem	Suggestion
No cover Mark Sheet	<ul style="list-style-type: none"> • checklist to remind oneself of what to be submitted
Missing pages	<ul style="list-style-type: none"> • random check for completeness; especially those double-sided documents
Naming the file	<ul style="list-style-type: none"> • suggested convention: TL(Food)(123456).pdf (6-digit ID no)
Scanning	<ul style="list-style-type: none"> • check clarity • better use colour scanning, especially for the Project
Student/ school name shown	<ul style="list-style-type: none"> • check if the student / school names are properly masked

Photo of the final food product



菜式生產過程圖片





Students' performance in Prescribed Tasks

- Mixed abilities were displayed.
- Generally, students demonstrated an acceptable level of scientific knowledge.
- Some students were quite weak in
 - linking up the concepts
 - using scientific theories to explain the results and only explained the cause-effect relationship in a superficial way



Support

- Revised / Newly developed Sample Prescribed Tasks
 - Enzymatic browning
 - Revised version
 - Ginger Milk Curd
 - Ginger age and Milk temperature
 - Ginger juice : milk ratio

**Teachers are welcome
to try them out and
give us some feedback!**



THANK YOU!