

Hong Kong Examinations and Assessment Authority
Hong Kong Advanced Level Examination 2007
Advanced Supplementary Level Computer Applications /
Advanced Level Computer Studies

School-based Assessment Guidelines (Teachers)

<u>Contents</u>	<u>Page</u>
1. Introduction	2
2. General Requirements for the Scheme	2
2.1 Application Procedure	
2.2 Language used in the School-based Assessment	
2.3 Plagiarism and Disqualification	
3. Implementation of the Scheme	4
3.1 Attending the Teachers' Seminar	
3.2 Allocation of Human Resources	
3.3 Core Skills Assessment	
3.4 Project Assignment	
3.5 Moderation and Supervision	
4. Submission of Assessment Records' Data and Report Samples	6
4.1 Items to be submitted	
5. Irregularities	7
5.1 Late Submission	
5.2 The Departure of a SBA Coordinating Teacher During the Course	
6. Documents to Download	7
7. General Enquiries	7
8. Categories of Core Skills	8
9. Core Skills Assessment Record	10
10. Consolidated Mark Sheet	11
11. Suggested List of Reserved Words and Functions	12
12. Annex: Roles and Responsibilities of HKEAA, EMB and Schools in SBA Administration	13

1. Introduction

In School-based Assessment (SBA) teachers have the responsibility and flexibility for designing, constructing and administering assessment tasks, and for appraising student work. It recognises teachers' professional judgments in the evaluation of student work. Based on the principles of assessment for learning, SBA should be on-going, formative, comprising multiple assessment and multidimensional with integrated / contextualised tasks.

Throughout the course of Computer Applications / Computer Studies there are concepts and knowledge, applications of computer skills, generic skills (communication, creativity, problem solving and critical thinking) and project management skills, which students should master or develop. There should, however, be a balance between the knowledge, concepts and understanding outcomes, and skills (technical and generic) outcomes.

The SBA is treated as a paper of the examination. The contribution of each paper to the final subject mark is as follows:

Computer Applications	Paper 1	70%
	Paper 2 (SBA)	
	- core skills assessment	10%
	- project assignment	20%
Computer Studies	Paper 1	40%
	Paper 2	40%
	Paper 3 (SBA)	
	- core skills assessment	5%
	- project assignment	15%

For more information, please refer to the 'Curriculum and Assessment Guide' and 'HKALE Regulations and Syllabuses.'

2. General Requirements for the Scheme

The SBA is compulsory for all candidates. Schools which cannot comply with the requirements specified in this section will not be allowed to nominate candidates to this subject.

2.1 Application Procedure

2.1.1 Participating in the SBA for the first time : Schools permitted by the Education and Manpower Bureau (EMB) to operate Computer Applications / Computer Studies for the first time must write to the Hong Kong Examinations and Assessment Authority (HKEAA) to request participation in the SBA for the Hong Kong Advanced Level Education Examination **not later than 1st June, two years preceding the date of the Examination**. They should inform the HKEAA of the number of S6 candidates they intend to admit. Principals should also ensure that adequate hardware and software are provided for the SBA.

2.1.2 Schools already participating in the SBA : In **September**, participating schools should confirm to the HKEAA:

- (a) the number of candidates taking Computer Applications / Computer Studies in S6 and S7;
- (b) the name of the SBA coordinating teachers and subject teachers nominated by the Principal through a reply to the school information sheet issued by the HKEAA.

2.2 Language used in the School-based Assessment

The SBA is treated as a paper of the examination. **The language medium of the SBA should be the same as that of the written examination.**

2.3 Plagiarism and Disqualification

2.3.1 In nominating candidates for Computer Applications / Computer Studies Examination, Principals and SBA coordinating teachers of schools should bear an obligation to provide sufficient supervision to ensure that the assessments are authentically completed by the candidate concerned. All candidates and members of staff concerned must be aware that candidates are forbidden to indulge in any unfair practice, e.g. plagiarism in the preparation of assessments required for the SBA, as these assessments form part of the examination.

2.3.2 Schools should inform the HKEAA immediately of any cases whereby a candidate is found to be using or is suspected of using any unfair means in the SBA. When there is sufficient evidence to support an allegation of cheating or of dishonest behaviour in the assessment, the candidate will be liable to disqualification from the current Computer Applications / Computer Studies Examination or the whole of the current AL Examination.

3. Implementation of Scheme

3.1 Attending the Teachers' Seminar

A seminar on the administration of the SBA will be held in the year of S6. Subject teachers who teach this subject for the first time are strongly recommended to attend. Subject to seating capacity, experienced teachers nominated by the Principals are also welcome.

3.2 Allocation for Human Resources

It must be recognized that the implementation of the SBA and the provision of proper supervision will make considerable demand on teachers' time. Principals of schools are requested to give special consideration to the workload of their teachers so as to ensure the smooth running of the assessment.

3.3 Core Skills Assessment

The Core Skills Assessment aims at evaluating whether students can perform the required tasks within the two-year course.

3.3.1 Date, Time and Scope of Assessment : Teachers are free to fix the date, time and scope of each assessment provided that they must give sufficient notice to candidates about the assessment information.

3.3.2 Design of Assessment : Core Skills are grouped in different categories among computer applications, listed in Section 8. Teachers can either tailor the suggested tasks for core skills assessment provided by the HKEAA, or assess their students through their various individual tasks in school during the course of study.

3.3.3 Feedback to Students : Not only should teachers assess students' performance in Core Skills Assessment, but also analyse students' performance so as to provide formative feedback to facilitate student learning.

3.3.4 Supplementary Assessments : The SBA is used as a tool to facilitate student learning. The core skills assessment is the practice of collecting evidence of student learning of core computer practical skills.

With available time in the teaching schedule, teachers are allowed to hold supplementary assessments for their students, so as to provide feedback to the students, and to the learning process, as well as to examine the progress of the learners so that more appropriate strategies for the next stage of teaching and learning can be planned and implemented.

3.3.5 Marking: Candidates can be awarded one mark if they are able to acquire ALL core skills within a category. The total mark of the Core Skills Assessment is 20.

3.3.6 Assessment Records : Teachers are required to record and keep the information of all assessments (Refer to Sections 4.1 and 5.2) as well as the question papers and data files used.

3.4 Project Assignment

A list of project titles will be announced to schools during the year prior to the examination. Candidates can select a project title from the list. A project assignment includes the product (if any) in the form of CD-ROM together with a written report.

The nominated SBA coordinating teacher in each school should coordinate the project assessment. In the case of more than one Computer Applications / Computer Studies class in a school, the SBA coordinating teacher should try to balance and moderate the standard of the marking among the classes. Teachers who teach a class are advised to involve themselves in the marking of the corresponding class.

Teachers should mark the project assignment from 0 to 100 with the following mark allocation (six categories):

(1)	Objective & Analysis	20
(2)	Design & Implementation	35
(3)	Testing & Evaluation	10
(4)	Conclusion & Discussion	10
(5)	Documentation	10
(6)	Creativity & Process Behaviour	15

Full mark = **100**

Teachers are free to arrange the marks in each category (e.g. Objective (10) , Analysis (10)).

3.5 Moderation and Supervision

Members of the Moderation Committee will inspect the reports submitted (please refer to 4.1), with a view to equating standards among the schools and, if necessary, carry out adjustments to the assessed marks. If problems are encountered during the moderation process, the subject officer (Computer Studies) / external project assessors will contact the school individually; interviews and/or school visits will be held on a need basis. If the internal assessment is found to be unreliable, further action will be taken (e.g. an external project assessor will be appointed to re-mark all the SBA in the school).

4. Submission of Assessment Records' Data and Report Samples

Submission is due at the end of S7 in February. Schools will be informed by a circular of the exact deadline for submission of these documents.

4.1 Items to be submitted

- (a) Each candidate should submit a project assignment including the product (if any) in the form of CD-ROM together with a written report to subject teachers for the internal assessment.
- (b) SBA coordinating teachers should submit the following 3 items:
 - (1) Core Skills Assessment Record (Refer to Page 10)
 - (2) Consolidated Assessment Mark Sheet (Refer to Page 11)
 - (3) Three samples of project assignments including CDs and hardcopies of reports (the second highest mark, the median mark and the second lowest mark [§]), to

Manager (AL)
School Examinations and Assessment Division,
Hong Kong Examinations and Assessment Authority
12/F Southorn Centre,
130 Hennessy Road,
Wan Chai,
Hong Kong.

- (c) **To ensure the accuracy of the assessment documents, teachers should assign another person in the school to conduct counter checks of marks filled in the Consolidated Mark Sheet to be submitted to the HKEAA.**
- (d) For security purposes, teachers are advised to create a backup of all the data and keep all the following documents in a safe place until the end of August of the exam year:
 - (1) All assessment records (softcopy and hardcopy)
 - (2) Candidates' CDs and reports
 - (3) All irregularities reports (e.g. Letters of certification, etc.)

§ If more candidates are available to be chosen, the marks of the selected project assignments should be higher than 15.

If there are only 4 candidates in a class, the project assignments with the maximum 3 marks should be chosen. If there are 3 or lesser candidates, all should be chosen.

5. Irregularities

5.1 Late Submission

The Principal can petition for late submission by writing to the Deputy Head of School Examinations & Assessment Division (DHSE) or the Subject Officer (Computer Studies). The school must provide justification to seek for approval from the HKEAA. **Approval will only be given for unexpected difficulties/circumstances backed up by substantial reasons.**

DHSE will reply in writing once late submission is approved.

5.2 The Departure of a SBA Coordinating Teacher During the Course

The SBA coordinating teacher nominated by his/her school Principal is responsible for the administration of the SBA in the participating school. Principals should inform the HKEAA in writing immediately to the Deputy Head of School Examinations & Assessment Division (DHSE) if there are any changes in the teachers involved in the SBA. The out-going SBA coordinating teacher should also inform the Subject Officer (Computer Studies) of such changes. Principals must ensure that all documents listed below are securely in their possession before a SBA coordinating teacher leaves his/her school:

- (i) All assessment records (softcopy and hardcopy);
- (ii) Candidates' portfolios, CDs and reports;
- (iii) All documents received from and sent to the HKEAA;
- (iv) The login password of the teachers' account for the HKEAA's website.

6. Documents to Download

Softcopies of the "SBA Guidelines (Teachers)" and related documents can be downloaded through the HKEAA's website (<http://www.hkeaa.edu.hk> → SBA → Subject Information). The username and password will be distributed to schools in due course.

7. General Enquiries

If you have any questions about the SBA, please feel free to contact Mr. Ng Ka Ming, SO (Computer Studies).

Email: ***kmng@hkeaa.edu.hk***

Tel: 2916 9310

Fax: 2511 5039

8. Categories of Core Skills

Application	Category	Core Skills	
A. Word Processing	A1	<ul style="list-style-type: none"> • Apply font format properties • Insert and move block text • Copy and paste (text and/or format) • Insert symbols 	<ul style="list-style-type: none"> • Align text in paragraphs • Add bullets and numbering • Apply paragraphs format properties • Use indentation • Create columns
	A2	<ul style="list-style-type: none"> • Set page size and orientation • Set margins • Insert page breaks • Create headers and footers • Insert page numbers • Create page borders 	<ul style="list-style-type: none"> • Create tables • Add borders and shading • Modify table structure (change height and width)
	A3	<ul style="list-style-type: none"> • Insert graphics (wordart, clipart, files) • Resize objects 	
	A4	<ul style="list-style-type: none"> • Spelling and grammar checking • Find and replace text • Print 	
B. Spreadsheet	B1	<ul style="list-style-type: none"> • concatenate • auto fill • sorting • average & round • sum • max • min • and 	<ul style="list-style-type: none"> • or • not • if • count • mod • rank • add & rename worksheet; filtering • chart
	B2	<ul style="list-style-type: none"> • multi-sheet referencing • frequency • countif 	<ul style="list-style-type: none"> • large • small
	B3	<ul style="list-style-type: none"> • worksheet formatting • upper • lower 	<ul style="list-style-type: none"> • date • today, int/rounddown • left, mid, right
C. Multimedia	C1	<ul style="list-style-type: none"> • Adjust graphics file size, resolution and colour depth 	
	C2	<ul style="list-style-type: none"> • Graphic File conversion • Audio files conversion 	
	C3	<ul style="list-style-type: none"> • Import multimedia elements into a presentation package • Control multimedia elements in a presentation package 	

D. Internet	D1	<ul style="list-style-type: none"> • Search Engine • File Transfer • Instant Messaging
	D2	<ul style="list-style-type: none"> • Newsgroup/Discussion Forum
	D3	<ul style="list-style-type: none"> • Signature • Multiple receivers, CC, Attachment • Address Book • Group Receivers • Email Filtering
	D4	<ul style="list-style-type: none"> • Set homepage • Clear Cookies • Clear History • Appearance • Default Language
E. Database	E1	<ul style="list-style-type: none"> • create a database file • add records in a database file
	E2	<ul style="list-style-type: none"> • remove records from a database file • modify the structure of a database file • modify the data in a column for some records
	E3	<p>write SQL commands to perform simple queries by specifying</p> <ul style="list-style-type: none"> • the database file • the fields list with column headings • the filter conditions • the order of records to be outputted
	E4	<ul style="list-style-type: none"> • use arithmetic operators (+, -, * and /) and expressions
	E5	<ul style="list-style-type: none"> • use comparison operators, LIKE operator • use logical operators (AND, OR)
	E6	<ul style="list-style-type: none"> • export query results to text format and spreadsheet format

11. Suggested List of Reserved Words and Functions (HKALE 2007)

Database (SQL commands **)

Type	Commands/constants/functions
Constants	FALSE, TRUE
Operators	+, -, *, /, >, <, =, >=, <=, <>, %, _ , ' , AND, NOT, OR
SQL	ABSOLUTE (ABS), AVG, INT, MAX, MIN, SUM, COUNT
	ASC, AT, CHAR (CHR), CHAR_LENGTH (LEN), LOWER, TRIM, SPACE, SUBSTRING (SUBSTR/MID), UPPER, VALUE (VAL)
	DATE, DAY, MONTH, YEAR
	ADD, ALL, ALTER, ANY, AS, ASC, BETWEEN, BY, CREATE, DELETE, DESC, DISTINCT, DROP, EXISTS, FROM, GROUP, HAVING, IN, INDEX, INNER JOIN, INSERT, INTEGER, INTERSECT, INTO, LEFT [OUTER] JOIN, LIKE, MINUS, NULL, RIGHT [OUTER] JOIN, FULL [OUTER] JOIN, ON, ORDER, SELECT, SET, TABLE, TO, UNION, UNIQUE, UPDATE, VALUES, VIEW, WHERE

Electronic Spreadsheet

Type	Commands/constants/functions
Constants	TRUE, FALSE
Operators	+, -, *, /, <, >, =, <>, <=, >=
Functions	ABS, INT, MOD, QUOTIENT, RAND, ROUND, ROUNDUP, ROUNDDOWN, SQRT, TRUNC, AND, NOT, OR
	CHAR, CODE, CONCATENATE, EXACT, ISBLANK, LEFT, LEN, LOWER, MID, PROPER, RIGHT, TEXT, TRIM, UPPER, VALUE
	AVERAGE, COUNT, COUNTA, COUNTBLANK, COUNTIF, LARGE, MAX, MIN, RANK, SMALL, SUM, SUMIF, SUMPRODUCT, SUMSQ, FREQUENT
	DATE, NOW
	FIND, HLOOKUP, VLOOKUP, LOOKUP, SEARCH, CHOOSE
	IF

** Based on SQL-92 Standard

Roles and responsibilities of HKEAA, EMB and schools in SBA administration

HKEAA

1. Develop the assessment framework, assessment/administrative guidelines and marking criteria of SBA.
2. Conduct research in SBA to better inform One Committees and working groups (e.g. international policies and practices, moderation methods, psychometric issues involved and implementation issues).
3. Lead and organize teacher professional development courses on assessment in collaboration with EMB.
4. Monitor the conduct of SBA in schools to ensure compliance with SBA requirements.
5. Process assessment records submitted by schools.
6. Moderate SBA marks submitted by schools.
7. Provide feedback to schools.

EMB

1. Develop the curriculum framework.
2. Sponsor and organize teacher professional development courses on assessment in collaboration with HKEAA.
3. Provide 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.
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).

School (Principals and Teachers)

1. Explain to students the design, requirements and assessment criteria of SBA, as set out in the relevant guidelines issued by HKEAA.
2. Send representatives to attend SBA conferences and coordinator-teacher meetings.
3. Administer SBA according to requirements and regulations set by HKEAA.
4. Provide information on the administration of SBA as required by HKEAA.
5. Facilitate visits by HKEAA subject officers and examination personnel (e.g. supervisors, coordinators and moderators) who may need to review students' work and assessment records.
6. Facilitate visits by EMB inspectors who may need to observe lessons.
7. Assess students' work/performance using assessment criteria set by HKEAA.
8. Maintain a quality assurance system for SBA.
9. Implement control and security measures in handling question papers (where applicable) and assessment records.
10. Authenticate students' SBA work and performance records and verify that no irregularities have occurred.
11. Submit SBA marks and assessment records to HKEAA according to schedule.
12. Retain students' assessed work and performance records and make them available for inspection if required.
13. Provide feedback to HKEAA.