

For discussion on 17 May 2004

Legislative Council Panel on Education

Review on the handling of missing examination scripts
by the Hong Kong Examinations and Assessment Authority

Purpose

This paper briefs Members on the Hong Kong Examinations and Assessment Authority's (HKEAA) handling of missing examination scripts.

Background

The HKEAA

2. The HKEAA is an independent statutory body established in May 1977 under the HKEAA Ordinance (Cap. 261). Its statutory responsibility is to plan and conduct the Hong Kong Certificate of Education Examination (HKCEE) and the Hong Kong Advanced Level Examination (HKALE). The HKEAA is currently governed by a 27-member Council whose members are drawn from tertiary institutions, schools, business sector and government officials.

The Ombudsman's direct investigation into the handling of examination scripts under marking and its recommendations

3. Noting media reports on incidents of missing examination scripts, The Ombudsman announced its decision to conduct a direct investigation in November 2003. It released the investigation report on 4 March 2004. This direct investigation examines the measures for the safe custody of examination scripts during the marking process; the adequacy and effectiveness of such measures; remedial action on loss of scripts; the appropriateness of such action; and scope for review and improvement.

Statistics

4. Each year, some 150,000 candidates take the HKCEE and HKALE. The HKEAA appoints about 5,000 markers and handles about two million scripts of the two public examinations. The number of scripts found missing in the last five years is set out below:

Year	Number of missing scripts		
	HKALE	HKCEE	Total
1999	5	7	12
2000	3	18	21
2001	6	16	22
2002	9	8	17
2003	3	2	5

(Details of the missing scripts by subject are set out in Appendix 1a and 1b for HKCEE and HKALE respectively.)

Current Procedures

Checking the Number of Scripts and Instructing the Markers

5. The HKEAA has adopted stringent procedures throughout the logistic flow from the collection of scripts at examination centres to the final stage of checking data entry of scores in order to ensure the safety of all scripts. On appointment, all markers are given the “Instructions to Markers” and a briefing on such details as the collection and checking of scripts as well as the marking and check marking procedures. Markers are also instructed not to mark the scripts in public places, preserve the confidentiality of the scripts and to keep them in safe custody.

6. The HKEAA requires centre supervisors to ensure that the number of scripts collected tallies with the number of candidates present before dismissing the candidates. The centre supervisor then seals the script envelopes with adhesive sellotape and signs across it together with an invigilator. The HKEAA sorts the sealed script envelopes by marker number and checks the number of envelopes against

the list of expected number of envelopes for each marker.

7. When markers collect the scripts from the HKEAA, they are required to check that the number of script envelopes is correct. The HKEAA requires the markers to check the number of scripts in the sealed script envelopes returned by the examination centres against the computer report showing the attendance of candidates (present or absent) in the examination centres. They have to report the number of scripts received and any discrepancies found to the HKEAA at the markers' meeting a few days after the collection of scripts.

Investigation Procedures and Scenarios of Missing Scripts

8. In case a missing script is reported, the HKEAA has a set of established investigation and handling procedures as set out in Appendix 2. By past experience, the four scenarios of missing scripts have been identified as follows:

- (a) Discrepancy between the number of scripts which the marker confirms to have received after collecting the sealed envelopes from the HKEAA and opening them for detailed checking at home and the number of candidates within the marker's batch marked present by the centres as reflected in the computer report.
- (b) Discrepancy between the number of scripts in the envelopes counted by the HKEAA staff after opening the sealed envelopes inside the HKEAA premises before distribution to markers (for scripts which require grouping by question number for marking) and the number of candidates marked present by the centres as reflected in the computer report.
- (c) Discrepancy between the number of scripts confirmed to have been received by the marker and that returned by him/her after marking, in which case the marker admits as missing.
- (d) Discrepancy between the number of scripts returned by the marker to the HKEAA and that under his/her batch marked present by the centres. This is detected by HKEAA temporary staff (university students) during the final stage of checking to ensure correct calculation and data entry of scores and every page of the scripts is marked, which is carried out within the HKEAA

premises.

(A breakdown of missing scripts by these four scenarios is set out in Appendix 1a and 1b. A flowchart showing the passage of scripts is given in Appendix 3.)

9. There could be three reasons attributing to the aforementioned discrepancies:

- The examination centre personnel have failed to collect all the scripts or have misplaced some scripts. [Scenarios (a) and (b)]
- The markers have misplaced the scripts. [Scenarios (a), (c) and (d)]
- The HKEAA personnel have misplaced the scripts. [Scenarios (b) and (d)]

The Appeal Mechanism

10. The HKEAA has an established mechanism for handling appeals. Each candidate may apply for full appeal (rechecking of marks and remarking of scripts) for a maximum of two subjects. In addition, a candidate may apply for rechecking of marks for not more than two other subjects. All appeals are processed in accordance with the procedures laid down by the School Examinations Board, whose membership consists of tertiary sector representatives, school principals, school teachers and government officials. (Statistics of appeals for the past five years are set out in Appendix 4).

Improvement Measures

11. The HKEAA will implement the following new measures starting from the 2004 public examinations, some of which have been announced in its press releases of 29 January and 4 March 2004:

12. Precautionary measures

- (a) Strengthen the reminder about the safe custody of scripts in the “Instructions to Markers” with a warning note that markers who lose any script due to

negligence will not be re-appointed.

- (b) Reiterate at the annual Centre Supervisors' Conference the importance to strictly enforce the instruction that candidates (especially early leavers) should not be allowed to depart with their scripts.
- (c) Analyse the causes of loss of scripts in any such cases and bring these to markers' attention to enhance their awareness and alert them of the possible circumstances leading to loss of scripts.
- (d) Make special arrangement to separate the scripts of private candidates in the HKCEE's single-script subjects for centralized marking at HKEAA premises starting from the 2004 public examinations. Two separate answer books will also be introduced for such subjects starting from the 2005 public examinations.

13. Investigation procedures

- (a) Require markers to submit a written report on any case of missing scripts where they have already confirmed receipt of such scripts.
- (b) Prepare a sequential record of all actions taken in each case to provide a reference trail.

14. Enforcing penalty

Any marker who has confirmed receipt of a script and subsequently reports its loss without any acceptable reason will not be re-appointed as marker.

15. Remedial Measures

- (a) At present, a candidate whose script is confirmed as missing will be given an assessed grade by reference to his/her performance in other paper(s) of the same subject, or in the case of a single paper subject, his/her performance at school, moderated by the relevant public examination results of his/her schoolmates*.

- (b) With effect from 2004, the basis on which to derive the assessed grades will be strengthened as follows:
- (i) For multi-script subjects, the candidate's school result in the subject concerned and the relevant public examination results of his/her schoolmates* will also be taken into consideration.
 - (ii) For both single-script and multi-script subjects, the candidate's public examination results in other subjects, particularly those of a similar nature, will also be taken into consideration when deriving the assessed grade.
- * Not applicable to private candidates who have no school results for reference.
- (c) The remedial measures adopted are in line with the established practices of renowned examining boards elsewhere including those in Australia, United Kingdom and Asia.
- (d) Taking into account the school results of the candidates concerned is also in line with a growing world trend to recognize students' attainment at school. In Hong Kong, the current plan is also to gradually extend school-based assessment to more subjects (with appropriate moderation) in the two public examinations

16. Transparency

Up to now, candidates whose scripts are missing are not informed, a practice not uncommon among examining boards elsewhere. For increased transparency, as already announced, with effect from the 2004 public examinations, the HKEAA will notify the candidates concerned and inform them of their assessed grades on the day of publication of results. Earlier notification is not recommended as the assessed grades could only be worked out at the end of the grading process. Furthermore, to advise the candidates concerned about the missing scripts without the assessed grades would only lead to unnecessary anxiety on their part. It would also be fair and consistent to announce results to the entire candidature on the same day.

The Policy of Re-sit Examination

17. The HKEAA is currently considering whether candidates concerned will be offered to re-sit an examination in the same administration.

18. This policy involves professional considerations regarding the comparability of public examination results that must be carefully evaluated. In essence, an alternative paper is a different examination and grading could not be carried out on comparable grounds with the rest of the candidature in the same administration. This is the main reason why few, if any, examination authorities elsewhere have adopted such an approach.

The Way Forward

19. By its statutory remit to conduct the two public examinations of HKCEE and HKALE, the HKEAA has the responsibility to address The Ombudsman's recommendations and come up with appropriate solutions. A number of improvement measures as recommended by The Ombudsman are either being implemented in the 2004 public examinations or will be implemented from 2005 onwards. The HKEAA will also consider other related measures such as electronic scanning of scripts and on-line marking with a view to further strengthening its overall operating procedures.

20. The HKEAA is reviewing its policy of re-sit examination. The issue of re-sit will primarily be considered on professional grounds giving due weight to fairness, comparability and practicality.

21. The Government has noted The Ombudsman's findings and recommendations. We support the HKEAA in its effort to enhance transparency and to develop an even more rigorous system of handling examination scripts under marking. The Education and Manpower Bureau will work with the HKEAA as it addresses and implements The Ombudsman's recommendations.

Education and Manpower Bureau
May 2004

**1999-2003 Hong Kong Certificate of Education Examination
Statistics of Missing Scripts**

Year	Subjects	Scenarios* & No. of Missing Scripts				Total
		A	B	C	D	
1999	Chinese Language	1				1
	English Language (Syllabus B)		2	2		4
	Mathematics	1				1
	Religious Studies	1				1
	<i>Sub-total</i>	3	2	2	0	7
2000	Chinese Language	1			6	7
	English Language (Syllabus B)		1			1
	English Language (Syllabus A)				1	1
	Economics	7			1	8
	Technical Drawing	1				1
	<i>Sub-total</i>	9	1	0	8	18
2001	Chinese Language	3		1		4
	English Language (Syllabus B)	4				4
	English Language (Syllabus A)		1			1
	Geography	1				1
	Economics	1				1
	Biology	1				1
	Physics	1				1
	Mathematics	1			1	2
	Computer Studies	1				1
	<i>Sub-total</i>	13	1	1	1	16
2002	Chinese Language	2			1	3
	English Language (Syllabus B)	5				5
	<i>Sub-total</i>	7	0	0	1	8
2003	English Language (Syllabus B)	2				2
	<i>Sub-total</i>	2	0	0	0	2

* Note: The four scenarios -

- A: Discrepancy between the number of scripts which the marker confirms to have received after collecting the sealed envelopes from the HKEAA and opening them for detailed checking at home and the number of candidates within the marker's batch marked present by the centres as reflected in the computer report.
- B: Discrepancy between the number of scripts in the envelopes counted by the HKEAA staff after opening the sealed envelopes inside the HKEAA premises before distribution to markers (for scripts which require grouping by question number for marking) and the number of candidates marked present by the centres as reflected in the computer report.
- C: Discrepancy between the number of scripts confirmed to have been received by the marker and that returned by him/her after marking, in which case the marker admits as missing.
- D: Discrepancy between the number of scripts returned by the marker to the HKEAA and that under his/her batch marked present by the centres. This is detected by HKEAA temporary staff (university students) during the final stage of checking to ensure correct calculation and data entry of scores and every page of the scripts is marked, which is carried out within the HKEAA premises.

**1999-2003 Hong Kong Advanced Level Examination
Statistics of Missing Scripts**

Year	Subjects	Scenarios* & No. of Missing Scripts				Total
		A	B	C	D	
1999	AL Chemistry				1	1
	AS Chinese Language & Culture	3				3
	AL Business Studies				1	1
	<i>Sub-total</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>5</i>
2000	AL Chemistry	1				1
	AS Chinese Language & Culture				1	1
	AL Pure Mathematics				1	1
	<i>Sub-total</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>3</i>
2001	AL Chemistry			1		1
	AS Chinese Language & Culture				1	1
	AL Principles of Accounts			1		1
	AL Physics				3	3
	<i>Sub-total</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>4</i>	<i>6</i>
2002	AL Chinese History	1				1
	AS Chinese Language & Culture				2	2
	AL Pure Mathematics				2	2
	AS Use of English	2	1	1		4
	<i>Sub-total</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>4</i>	<i>9</i>
2003	AL Applied Mathematics				1	1
	AS Chinese Language & Culture				1	1
	AS Use of English	1				1
	<i>Sub-total</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>3</i>

* Note: The four scenarios -

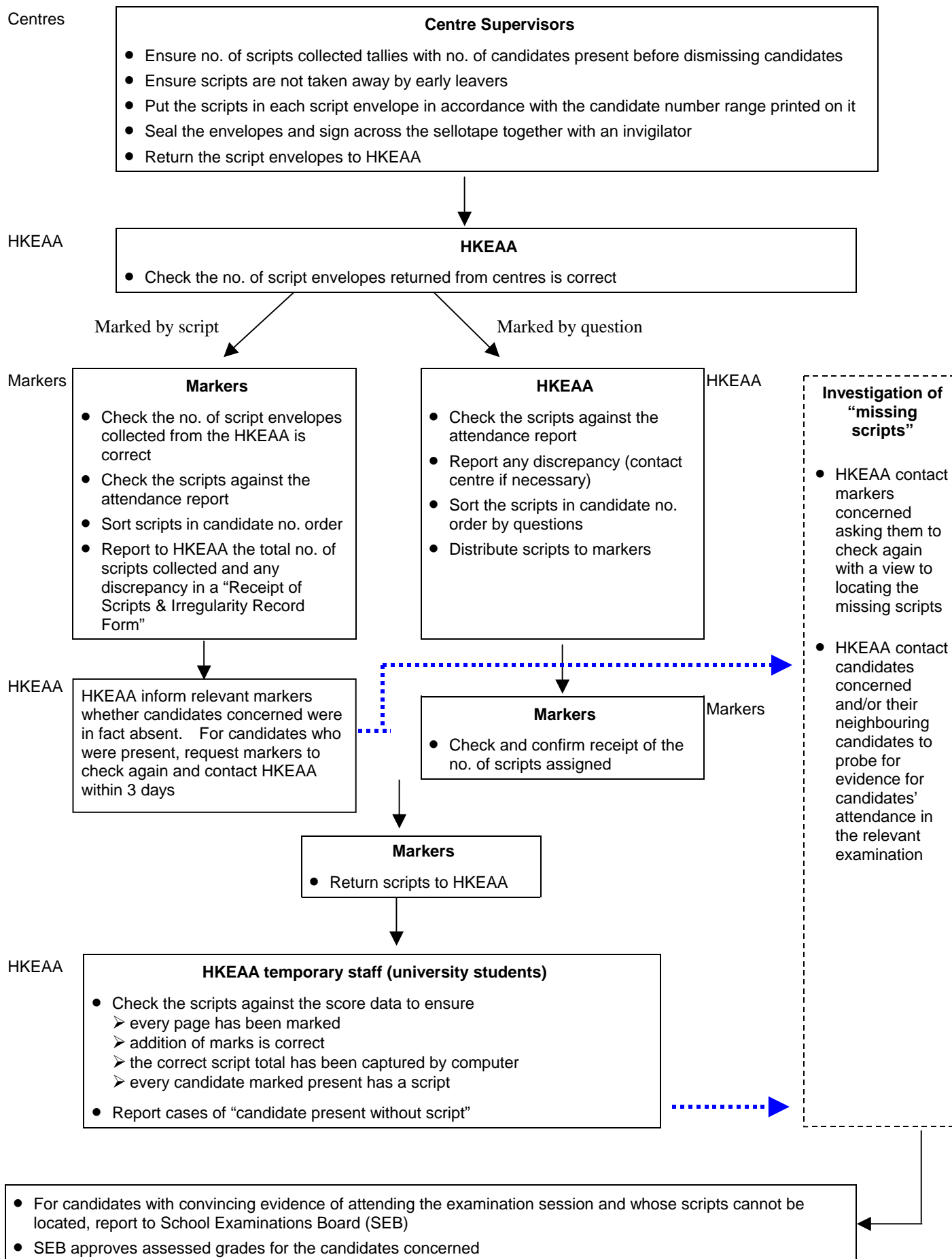
- A: Discrepancy between the number of scripts which the marker confirms to have received after collecting the sealed envelopes from the HKEAA and opening them for detailed checking at home and the number of candidates within the marker's batch marked present by the centres as reflected in the computer report.
- B: Discrepancy between the number of scripts in the envelopes counted by the HKEAA staff after opening the sealed envelopes inside the HKEAA premises before distribution to markers (for scripts which require grouping by question number for marking) and the number of candidates marked present by the centres as reflected in the computer report.
- C: Discrepancy between the number of scripts confirmed to have been received by the marker and that returned by him/her after marking, in which case the marker admits as missing.
- D: Discrepancy between the number of scripts returned by the marker to the HKEAA and that under his/her batch marked present by the centres. This is detected by HKEAA temporary staff (university students) during the final stage of checking to ensure correct calculation and data entry of scores and every page of the scripts is marked, which is carried out within the HKEAA premises.

The HKEAA's procedures for investigating and handling the missing scripts

- (1) Contact the marker concerned for a thorough search for the missing script when a case of missing script is reported.
- (2) Telephone the candidate concerned and/or the neighbouring candidates to probe for evidence for his/her attendance at the particular examination.
- (3) Confirm the loss of the script when the candidate's attendance is confirmed and a search for the script proves futile.
- (4) Require the marker concerned to submit a written report on the loss of any of the scripts which he/she has confirmed receipt. (With effect from the 2004 public examinations.)
- (5) Prepare a sequential record of all actions taken in each case to provide a reference trail. (With effect from the 2004 public examinations.)
- (6) Report a summary of confirmed cases of missing scripts to the School Examinations Executive Committee (SEEC)**.
- (7) SEEC** awards the assessed grades to the candidates concerned, as a remedial measure.

** Note: With streamlining of the HKEAA committee structure, the existing School Examinations Board (SEB) will take up the role of the SEEC starting from the 2004 public examinations. The composition of SEEC and SEB is comprehensive, consisting of tertiary sector representatives, school principals, secondary school teachers and government officials.

Flowchart of Processing Scripts



**1999-2003 Hong Kong Advanced Level Examination &
Hong Kong Certificate of Education Examination**

Statistics on Appeals

Hong Kong Advanced Level Examination

Year	No. of Appeals#	No. of upgraded cases (%)
1999	7 279	337 (4.63)
2000	7 761	283 (3.65)
2001	13 821	394 (2.85)
2002	8 327	260 (3.12)
2003	6 967	195 (2.80)

Hong Kong Certificate of Education Examination

Year	No. of Appeals#	No. of upgraded cases (%)
1999	2 575	146 (5.67)
2000	3 392	198 (5.84)
2001	5 316	250 (4.70)
2002	3 584	125 (3.49)
2003	3 647	191 (5.24)

Note: There have been no appeals made on grounds of missing scripts as the candidates concerned were not informed of the incident of missing scripts. Starting from the 2004 public examinations, the candidates concerned will be informed of the incident and their assessed grades on the day of publication of results. In case of appeal, the process by which the assessed grades are established will be rechecked to ensure that there is no procedural error.