Commissioned by Education Bureau The Government of the Hong Kong Special Administrative Region





Survey on Opinions of Employers on Major Aspects of Performance of Publicly-funded First Degree Graduates in Year 2006

> Executive Summary Date: Apr 2010

1. Introduction and Survey Methodology

1.1 Background

The then Education and Manpower Bureau¹ has been conducting the Survey on Opinions of Employers on Major Aspects of Performance of Graduates as a way of keeping track of the value-added output in the education system. So far, 4 surveys in the same series had been conducted covering full-time publicly-funded first degree graduates of the University Grants Committee (UGC)-funded institutions in the years 1998, 1999, 2000 and 2003. The findings of the surveys have provided insight into the performance of our graduates at work, and have helped both the Government and the tertiary institutions to better understand the employers' needs.

Following the completion of the last survey, Education Bureau (EDB) decided to conduct similar Surveys once every 3 years with a view to keeping track of the performance of graduates at work. The present survey covers the graduates of 2006.

1.2 Study Objectives

The objectives of the survey are to:

(i) Obtain the opinions of employers on major aspects of performance of our 2006 full-time publicly-funded first degree graduates in the work place with regard to 9 major aspects of performance, i.e.

- a. Chinese Language Proficiency;
- b. English Language Proficiency;
- c. Numerical Competency;
- d. Information Technology Literacy;
- e. Analytical and Problem-solving Abilities;
- f. Work Attitude;
- g. Inter-personal Skills;
- h. Management Skills; and
- i. Technical Skills Required for the Job.

The study also looks into graduates' competency in knowledge aspects, as well as collecting employers' suggestions to institutions on ways to improving the quality of graduates.

¹ The Education and Manpower Bureau has been re-organized as Education Bureau since 1 July 2007.

(ii) Identify any changes in opinions given by the employers on 2006 graduates as compared to that of the opinions given in the previous rounds.

1.3 Coverage

Target companies/organizations are those that have employed the 2005/2006 full-time publicly-funded first degree graduates of the 8 UGC–funded institutions as at December 2006:

- a. City University of Hong Kong
- b. Hong Kong Baptist University
- c. Lingnan University
- d. The Chinese University of Hong Kong
- e. The Hong Kong Institute of Education
- f. The Hong Kong Polytechnic University
- g. The Hong Kong University of Science and Technology
- h. The University of Hong Kong

The target respondents of the survey are the immediate supervisors of the graduates or staff at senior level who have knowledge of the performance of the graduates.

1.4 Sampling Frame

According to the information from the Graduate Employment Survey conducted by individual institutions in end-2006, 11,362 graduates were identified to be working on a full-time basis. The remaining respondents (who might be working on a part-time basis, or pursuing further studies) were considered irrelevant to this survey.

Among the 11,362 graduates, 994 failed to provide sufficient information about their employers and were excluded from the survey. As a result, the present survey covered 10,368 graduates working on a full-time basis as at December 2006.

Among the 10,368 working graduates, 836 were employed by the Government. The EDB has provided a list of bureaux/departments which employed these graduates. The remaining 9,532 graduates were working full-time in companies/organizations in the non-Government sector and provided employment details (e.g. employer's name, employment sector and employment size) to the Graduate Employment Survey. Records of these graduates were used as the sampling frame.

1.5 Sample Design and Allocation

All graduates (836) employed by the Government were enumerated.

In the non-Government sector, all the companies/organizations which employed 2 or more graduates were invited to participate in the survey. For companies/organizations employing only 1 graduate, they were listed in order of industry, and within industry, by employment size, and one-quarter of them were selected for the survey, using a systematic random sampling method.

However, to minimize respondents' reporting burden, companies/organizations employing 2 or more graduates were asked to provide assessment for a proportion of the graduates as follows:

No. of first degree graduates employed by each company/organization	% of graduates to be sampled within each company/organization			
2 – 29	50%			
30 – 49	40%			
50 – 99	30%			
100 or above	20%			

1.6 Sample Size

According to the sampling procedure, a total of 4,651 first degree graduates of year 2006 were included in the study, with 836 in the Government sector and 3,815 in the non-Government sector.

1.7 Data Collection Method

Data were collected by means of a self-administered questionnaire. Telephone calls were made to the Government bureaux/departments and the sampled companies/organizations to explain the purpose of the survey and to identify a contact person to co-ordinate the survey. These contact persons were usually the Personnel Managers or Human Resources Managers.

Copies of the questionnaires, together with a letter from the Permanent Secretary for Education and a general guideline for completing the questionnaire, were sent to the contact persons on 9 July, 2008. A copy of survey documents sent to the contact persons is at Appendix I. For companies/organizations employing more than 1 graduate, they were requested to select graduates randomly for assessment by following the rules given in the general guideline and distribute the questionnaires to the immediate supervisors of the sampled graduates. These immediate supervisors were requested to complete and return the questionnaire using the pre-paid self-addressed envelope. Alternatively, the respondents could fax the questionnaires to a dedicated number. Telephone follow-up calls and field visits were made to contact persons/immediate supervisors who did not return the questionnaires.

1.8 Response Rate

By April 2009, 1,972 questionnaires were received, representing a response rate of 55% (which was compiled by excluding 1,082 invalid cases in most of which the companies/organizations reported that they had not employed any 2006 graduates as at December 2006 or that the graduates have left the company with no staff knowing their performance).

1.9 Questionnaire Design

The survey covered 9 aspects of performance, i.e. (A) Chinese Language Proficiency; (B) English Language Proficiency; (C) Numerical Competency; (D) Information Technology Literacy; (E) Analytical and Problem-solving Abilities; (F) Work Attitude; (G) Inter-personal Skills; (H) Management Skills; (I) Technical Skills Required for the Job. These aspects were carefully chosen with reference to available survey reports and research papers on the subject. Each aspect was measured by a number of attributes, and a total of 45 attributes were included for measuring the 9 aspects of performance.

For each attribute, respondents were requested to give (i) their assessment on the performance of the sampled graduates and (ii) their views on the importance of the attributes for the post held by the sampled graduates. Their assessments were indicated by a score on a 5-point scale as follows:

Score	Performance	Importance
5	Always exceeds the employers' required standard	Very important
4	Sometimes exceeds the employers' required standard	Quite important
3	Generally meets the employers' required standard	Average
2	Sometimes fails to meet the employers' required standard	Not quite important
1	Always fails to meet the employers' required standard	Not important at all

33100003 Survey on Opinions of Employers on Major Aspects of Performance of Publicly-funded First Degree Graduates in Year 2006 The overall performance score or the performance score for each aspect was taken as the weighted average of the performance scores of its constituent attributes, with the respective importance scores taken as the weights. Appendix II shows the details of the estimation method.

Apart from performance, the questionnaire also assessed graduates' competency in 9 knowledge aspects.

Regarding improvement areas for the graduates, respondents were asked to express how much they agreed on 7 pre-identified improvement measures, as well as providing their own suggestions for institutions to improve the quality of students.

1.10 Pilot Test

Before starting the main fieldwork of the survey, a pilot test was carried out to test the questionnaire and survey arrangement. It covered 52 graduates selected among those not sampled for the main survey. Based on the results of the pilot test, some minor modifications to the survey arrangements were made but no change to the questionnaire was required.

1.11 Estimation Method

Of the 1,972 returned questionnaires, 423 were from the Government sector and 1,549 from the non-Government sector. The data in these questionnaires were weighted according to the actual number of 2006 first degree graduates employed in full-time basis in 2006 by the companies/organizations.

1.12 Quality Control Measures

Measures were taken to ensure that the survey results were of high quality. These included proper training of interviewers responsible for telephone follow-up calls and field visits, monitoring of process, editing of the returned questionnaires and validation of the collected data by fieldwork supervisors.

1.13 Cautionary Remarks

Readers are advised to take caution in interpreting sub-group of the findings based on small number of observations (less than 50). These sub-group findings are subject to relatively larger sampling error. Such sub-groups are highlighted throughout the report.

1.14 Reliability of the Estimates

Results of the survey are subject to sampling error and non-sampling error. The estimates in this report are based on information obtained from a particular sample, which is one of the numerous possible samples that could be drawn by using the same sample design. By chance, estimates derived from different samples would differ from each other. The 'sampling error' is a measure of these variations and also a measure of the precision with which an estimate derived from a particular sample would be applied to infer the population parameters that need to be measured.

It should be noted that since all estimates contained in this report are subject to sampling error, a zero figure may mean a non-zero figure of a small number of observations.

For comparing the precision of the estimates of various variables contained in this report, the coefficient of variation (CV) can be used. The CV of the estimates of the main variable contained in this report is given below :

Variable	<u>Estimate</u>	<u>CV</u> <u>%</u>
Performance score	3.59	0.6
Chinese Language Proficiency	3.73	0.6
English Language Proficiency	3.49	0.6
Numerical Competency	3.66	0.6
Information Technology Literacy	3.81	0.5
Analytical and Problem-Solving Abilities	3.43	0.7
Work Attitude	3.75	0.6
Inter-personal Skills	3.66	0.6
Management Skills	3.25	0.7
Technical Skills Required for the Job	3.46	0.6

2. Summary of Key Findings

2.1 Overall Performance

The overall performance of the 2006 first degree graduates as assessed by the employers was quite satisfactory, with a score of 3.59, which was between "generally meeting employers' required standard" and "sometimes exceeding employers' required standard". In particular, 23% of the graduates received a rating above 4, implying that their performance was between "sometimes" and "always" exceeding employers' required standard. On the other hand, only 1% of the graduates received a rating of 2 or below, implying that very few of them failed to meet employers' required standard. (Table 2.1)

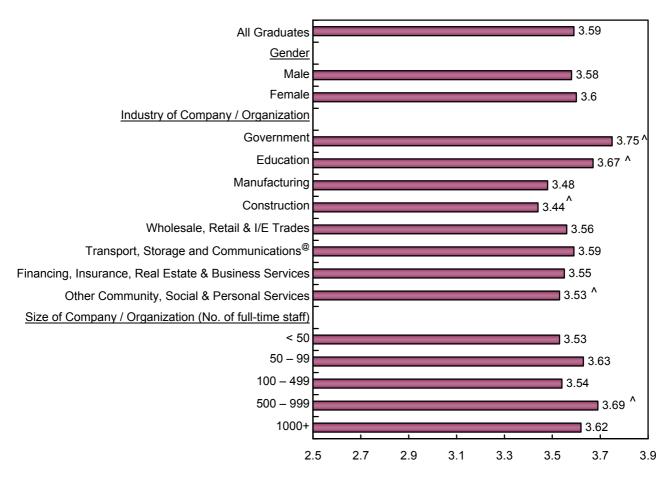
			Distribution of performance score					
		Performance	5 – 4.01	4 – 3.01	3 – 2.01	2 – 1.01	1	Not applicable
	Aspect	score	%	%	%	%	%	%
	OVERALL	3.59	23	64	13	1	-	*
A	Chinese Language Proficiency	3.73	25	54	20	*	*	1
В	English Language Proficiency	3.49	7	43	40	3	*	8
С	Numerical Competency	3.66	11	46	34	2	*	6
D	Information Technology Literacy	3.81	21	56	22	*	-	1
E	Analytical and Problem-Solving Abilities	3.43	15	53	28	3	*	*
F	Work Attitude	3.75	32	48	17	2	*	*
G	Inter-personal Skills	3.66	21	57	20	1	*	*
Н	Management Skills	3.25	8	41	41	5	*	4
I	Technical Skills Required for the Job	3.46	13	47	35	2	-	4

Table 2.1 – Overall Performance Scores and Performance Scores of the Nine Aspects

Notes: (i) * : Less than 0.5%

(ii) Percentages may not add up to 100% due to rounding

Generally, there is no obvious difference between the overall performance of female (3.60) and male (3.58) graduates. In terms of industry engaged, graduates working in the Government sector (3.75) received the highest performance score, while graduates from the Construction sector (3.44) received the lowest. Regarding the size of companies/organizations, the overall performance of graduates working in large (500-999 staff) companies/organizations was more favourable, with a score of 3.69. (Figure 2.1)





Notes: (i) @ : Small no. of observations (less than 50)

(ii) ^ : Significantly different (at 95% confidence level) from the figure of all graduates

Comparing the result of the present survey with the previous 4 surveys, the overall performance score of 2006 graduates (3.59) was the highest. Similar observations are found in most of the individual aspects and attributes. Details are presented in paragraphs below.

	1998	1999	2000	2003	2006
	Graduates	Graduates	Graduates	Graduates	Graduates
Overall performance	3.46	3.46	3.51	3.58	3.59

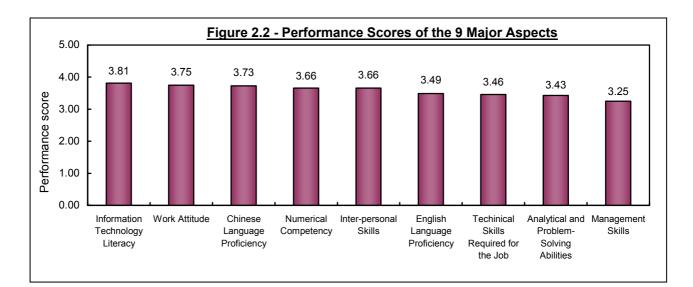
2.2 Assessment of Graduates' Performance in 9 Aspects

The performance score in respect of each of the 9 major aspects and the corresponding importance score are presented in Table 2.2.

Aspect	Performance score	Importance score
A Chinese Language Proficiency	3.73	4.06
B English Language Proficiency	3.49	4.10
C Numerical Competency	3.66	4.04
D Information Technology Literacy	3.81	3.95
E Analytical and Problem-Solving Abilities	3.43	4.14
F Work Attitude	3.75	4.40
G Inter-personal Skills	3.66	4.28
H Management Skills	3.25	3.89
I Technical Skills Required for the Job	3.46	4.05

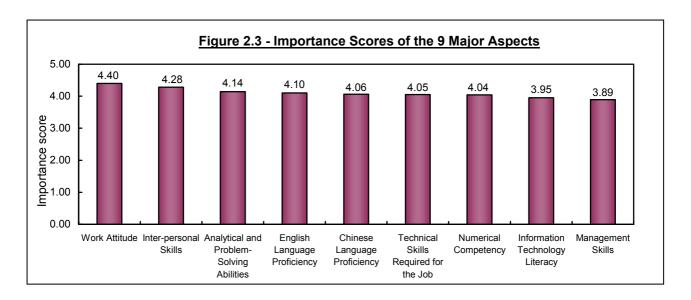
 Table 2.2 – Performance and Importance Scores of the 9 Aspects

The performance scores of the 9 major aspects were all above 3.20, implying that the graduates were able to perform better than "generally meeting employers' required standard". However, graduates' performance varied among different aspects, with the lowest score of 3.25 for Management Skills and the highest score of 3.81 for Information Technology Literacy. Figure 2.2 shows the performance scores of the 9 major aspects in descending order.



2.3 Assessment of Importance of the 9 Aspects

Regarding the importance of these aspects as perceived by the employers, nearly all aspects received a rating between "quite important" and "very important", with Management Skill receiving the lowest score of 3.89 and Work Attitude being the most important aspect (4.40). Figure 2.3 shows the importance scores of the 9 major aspects in descending order.



2.4 Detailed Analysis of Individual Aspects

A. Chinese Language Proficiency

This aspect had an importance score of 4.06. The performance score of graduates was the third highest on the list (3.73), with 25% of them receiving a rating above 4 and less than 1% receiving a rating of 2 or below.

B. English Language Proficiency

This aspect had an importance score of 4.10. Yet, the performance score (3.49) was slightly below average, with only 7% of them receiving a rating above 4 (being the lowest percentage among the 9 major aspects) and 3% receiving a rating of 2 or below.

C. Numerical Competency

This aspect had an importance score of 4.04. The performance score was 3.66, with 11% of them receiving a rating above 4 and 2% receiving a rating of 2 or below.

D. Information Technology Literacy

This aspect had an importance score of 3.95, the second least important aspect among the 9 aspects. Yet, the performance score at 3.81 was the highest among the 9 aspects, with 21% of them receiving a rating above 4 and less than 1% receiving a rating of 2 or below.

E. Analytical and Problem-solving Abilities

This aspect had an importance score of 4.14. However, the performance was the second lowest with score 3.43, with 15% of them receiving a rating above 4 and 3% receiving a rating of 2 or below.

F. Work Attitude

This aspect received the highest importance score of 4.40. The performance score was 3.75, the second highest among the 9 aspects, with 32% of them receiving a rating above 4 and 2% receiving a rating of 2 or below.

G. Inter-personal Skills

This aspect received the second highest importance score of 4.28. The performance score was 3.66, with 21% of them receiving a rating above 4 and 1% receiving a rating of 2 or below.

H. Management Skills

This aspect received the lowest importance score of 3.89, as well as the lowest performance score (3.25) among the 9 aspects, with 8% of them receiving a rating above 4 but 5% receiving a rating of 2 or below.

I. Technical Skills Required for the Job

This aspect had an importance score of 4.05. The performance score was 3.46, with 13% of them receiving a rating above 4 and 2% receiving a rating of 2 or below.

2.5 Over Time Comparison of Graduates' Performance in the 9 Aspects

The 2006 graduates performed better in all aspects as compared with graduates in 1998, but they were weaker in English Language Proficiency and Management Skills when compared with graduates in 2003. The most substantial improvement was found in Inter-personal Skills.

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	Performance score of 199 graduates		Performance score of 1999 graduates	Performance score of 2000 graduates	Performance score of 2003 graduates	Performance score of 2006 graduates
	Aspect	Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*
Α.	Chinese Language Proficiency	3.57 (100.0)	3.59 (100.6)	3.61 (101.1)	3.71 (103.9)	3.73 (104.5)
В.	English Language Proficiency	3.38 (100.0)	3.37 (99.7)	3.41 (100.9)	3.56 (105.3)	3.49 (103.3)
C.	Numerical Competency	3.52 (100.0)	3.51 (99.7)	3.55 (100.9)	3.66 (104.0)	3.66 (104.0)
D.	Information Technology Literacy	3.62 (100.0)	3.69 (101.9)	3.75 (103.6)	3.81 (105.2)	3.81 (105.2)
E.	Analytical and Problem-solving Abilities	3.26 (100.0)	3.26 (100.0)	3.32 (101.8)	3.42 (104.9)	3.43 (105.2)
F.	Work Attitude	3.57 (100.0)	3.57 (100.0)	3.62 (101.4)	3.74 (104.8)	3.75 (105.0)
G.	Inter-personal Skills	3.52 (100.0)	3.47 (98.6)	3.53 (100.3)	3.58 (101.7)	3.66 (104.0)
Η.	Management Skills	3.13 (100.0)	3.16 (101.0)	3.17 (101.3)	3.29 (105.1)	3.25 (103.8)
I.	Technical Skills Required for the Job #	NA	NA	NA	3.45 (100.0)	3.46 (100.3)

 Table 2.3 – Trend Comparison of Performance Scores of the 9 Aspects

Notes: (i) * : Figure in bracket denotes an index number with the performance score of 1998 graduates taken as 100.0

> (ii) # : New aspect added in survey on 2003 graduate; performance score of 2003 graduates, instead of 1998 graduates, taken as 100.0

2.6 Assessment of Graduates' Performance in the 45 Attributes

Table 2.4 shows the importance score and performance score of the graduates in respect of each of the 45 attributes:

				Views of employers on whether the graduates' performance had met their required standard					
		Importance Score	Performance Score	Always exceeds	Some- times exceeds	Generally meets	Sometimes fails to meet	Always fails to meet	Not Appli- cable
	Attribute	Mean	Mean	%	%	%	%	%	%
Α.	CHINESE LANGUAGE	4.06	3.73				1		1
	PROFICIENCY	4.00	5.75		-				
	Expression of ideas in								
1	(i) Written Chinese	3.80	3.60	7	41	39	1	*	11
2	(ii) Cantonese	4.28	3.97	23	51	24	*	*	1
3	(iii) Putonghua	3.11	3.20	5	15	38	9	1	32
	Comprehension in								
4	(i) Written Chinese	3.92	3.78	13	45	32	1	*	9
5	(ii) Cantonese	4.27	4.00	26	48	24	*	*	2
6	(iii) Putonghua	3.15	3.31	6	20	35	7	1	31
В.	ENGLISH LANGUAGE PROFICIENCY	4.10	3.49						
	Expression of ideas in								
7	(i) Written English	4.02	3.50	6	40	42	4	*	9
8	(ii) Oral English	3.87	3.47	6	35	45	3	*	11
	Comprehension in								
9	(i) Written English	4.04	3.58	8	41	40	3	*	8
10	(ii) Oral English	3.90	3.51	7	36	43	3	*	10
C.	NUMERICAL COMPETENCY	4.04	3.66				·		
11	Comprehension of data	3.92	3.67	10	45	35	3	*	7
12	Application of data	3.88	3.64	10	43	36	3	*	8
D.	INFORMATION TECHNOLOGY LITERACY	3.95	3.81			I	<u> </u>		
13	Use of standard computer software	3.99	3.85	16	53	29	1	*	2
14	Adaptability to new software	3.73	3.70	12	43	36	2	*	8
15	Ability to make use of the Internet & Intranet to facilitate work & business	3.94	3.88	17	53	27	1	*	2
16	Locate, gather & organize information using appropriate technology and information systems	3.88	3.79	14	49	32	1	*	3
E.	ANALYTICAL AND PROBLEM-SLOVING ABILITIES	4.14	3.43			1			•
17	Common sense	4.23	3.67	11	48	37	3	*	*
18	Foresight	4.01	3.28	6	30	50	12	1	1
19	Analytical mind	4.23	3.53	9	40	44	6	*	1
20	Problem-solving ability	4.30	3.46	9	39	41	10	1	*
21	Creativity	3.80	3.28	6	29	51	10	2	3
22	Ability to implement solution and act on opportunities for improvement	4.11	3.38	6	38	45	10	1	*
	Judgment	4.16	3.32	4	35	49	10	1	1

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				Views of			r the graduate uired standar		ance had
					Some-			Always	Not
		Importance Score	Performance Score	Always exceeds	times exceeds	Generally meets	Some-times fails to meet	fails to meet	Appli- cable
	Attribute	Mean	Mean	%	%	%	%	%	%
F.	WORK ATTITUDE	4.40	3.75			I	11		•
24	Sense of responsibility and commitment	4.58	3.91	27	43	23	5	1	*
25	Ability to work independently	4.37	3.75	19	42	32	5	1	*
26	Perseverance	4.39	3.72	19	42	32	6	1	*
27	Initiative and drive	4.38	3.60	17	38	34	10	1	*
28	Receptivity and adaptability to new ideas and environment	4.17	3.66	14	44	36	5	1	1
29	Professional/business ethics	4.46	3.82	22	42	29	4	1	2
G.	INTER-PERSONAL SKILLS	4.28	3.66						
30	Inter-personal relationship	4.32	3.79	16	50	31	3	*	*
31	Team work	4.42	3.86	19	52	24	3	1	*
32	Negotiation and communication skills	4.25	3.51	10	39	42	7	1	2
33	Able to accept and provide feedback in a constructive and considerate manner	4.22	3.67	14	46	35	5	1	*
34	Able to manage and resolve conflict when appropriate	4.09	3.43	7	37	45	7	1	4
Н.	MANAGEMENT SKILLS	3.89	3.25			-			
35	Organization of work	4.09	3.45	8	35	43	8	1	5
36	Management of staff	3.21	3.16	3	15	37	10	*	36
37	Leadership	3.29	3.12	3	15	40	10	1	31
38	Able to motivate team-members	3.46	3.15	3	18	46	10	1	21
39	Management of available resources and ability to seek resources and assistance	3.63	3.26	4	25	50	8	1	12
I.	TECHNICAL SKILLS REQUIRED FOR THE JOB	4.07	3.46						
40	Technical knowledge	4.06	3.49	8	36	45	5	*	5
41	Ability to handle technical demands in work	3.98	3.50	9	35	45	6	*	5
42	Ability to solve technical problems	3.93	3.42	7	32	47	7	*	7
43	Ability to select and use appropriate tools and technology for a task or project	3.83	3.44	6	35	47	5	*	7
44	Able to work to agreed quality standards and specification	3.98	3.47	7	37	44	6	*	5
45	Aware of occupational health and safety practices and procedures, and act in accordance with these	3.63	3.43	5	30	48	3	*	14

Notes: (i) * : Less than 0.5%

(ii) Percentages may not add up to 100% due to rounding

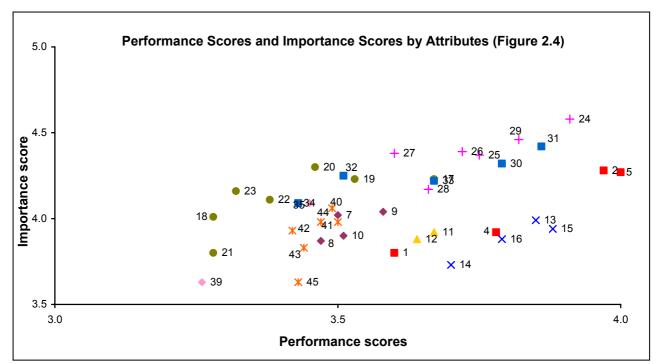
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All attributes were perceived as important (score greater than 3) for the posts held by the graduates. In particular, sense of responsibility and commitment was the most important attribute (4.58), whereas expression of ideas in Putonghua was rated as the least important attribute (3.11).

The 2006 graduates were able to perform better than "generally meeting their employers' required standard" in all 45 attributes. The 4 attributes with the highest performance score were comprehension in Cantonese (4.00), expression of ideas in Cantonese (3.97), sense of responsibility and commitment (3.91) and ability to make use of the internet & intranet to facilitate work & business (3.88). The performances of 17% to 27% of graduates in these 4 attributes were considered as "always exceeding their employers' required standard".

On the other hand, areas with lower performance scores were related to Management Skills (leadership: 3.12; able to motivate team members: 3.15; management of staff: 3.16). Expression of ideas in Putonghua was another area that obtained a low performance score (3.20). The performance of 10% to 11% of graduates were considered as sometimes or always failing to meet their employers' required standard in these 4 attributes.

The importance scores and the corresponding performance scores for the 45 attributes were plotted on a 2-dimensional graph below. It can be seen that there was a positive relationship between the 2 scores. For attributes considered as relatively more important, the graduates generally received a relatively higher rating in their performance score.



Notes: Numbers in the graph represent attributes listed on Table 2.4.

- Chinese Language Proficiency
- English Language Proficiency
- Numerical Competency
- × Information Technology Literacy
- Analytical and Problem-Solving Abilities
- Management Skills
- Inter-Personal Skills
- + Work Attitude
- X Technical Skills Required for the Job

2.7 Over Time Comparison of Graduates' Performance in the 45 Attributes

Table 2.5 shows that the 2006 graduates performed better in most of the attributes than graduates in the last 4 rounds of surveys. Attributes showing a relatively greater increase in the performance score include expression of ideas in Putonghua (in which the performance score of 2006 graduates show an increase of 20.3% over that of 1998 graduates), comprehension in Putonghua (19.5%), negotiation and communication skills (10.7%), ability to make use of the internet and intranet to facilitate work and business (9.6%), and management of staff (8.2%).

Table 2.5 – Over Time Comparison of Performance Score in 45 Attributes

		Performance score of 1998 graduates	Performance score of 1999 graduates	Performance score of 2000 graduates	Performance score of 2003 graduates	Performance score of 2006 graduates
	Attribute	Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*
Α.	CHINESE LANGUAGE PROFICIENCY	3.57 (100.0)	3.59 (100.6)	3.61 (101.1)	3.71 (103.9)	3.73 (104.5)
	Expression of ideas in					
1	(i) Written Chinese	3.35 (100.0)	3.39 (101.2)	3.44 (102.7)	3.57 (106.6)	3.60 (107.5)
2	(ii) Cantonese	3.86 (100.0)	3.90 (101.0)	3.85 (99.7)	3.94 (102.1)	3.97 (102.8)
3	(iii) Putonghua	2.66 (100.0)	2.82 (106.0)	2.92 (109.8)	3.14 (118.0)	3.20 (120.3)
	Comprehension in					
4	(i) Written Chinese	3.64 (100.0)	3.65 (100.3)	3.63 (99.7)	3.75 (103.0)	3.78 (103.8)
5	(ii) Cantonese	3.95 (100.0)	3.98 (100.8)	3.92 (99.2)	4.00 (101.3)	4.00 (101.3)
6	(iii) Putonghua	2.77 (100.0)	3.01 (108.7)	3.06 (110.5)	3.21 (115.9)	3.31 (119.5)
В.	ENGLISH LANGUAGE PROFICIENCY	3.38 (100.0)	3.37 (99.7)	3.41 (100.9)	3.56 (105.3)	3.49 (103.3)
	Expression of ideas in					
7	(i) Written English	3.33 (100.0)	3.32 (99.7)	3.39 (101.8)	3.54 (106.3)	3.50 (105.1)
8	(ii) Oral English	3.29 (100.0)	3.28 (99.7)	3.33 (101.2)	3.50 (106.4)	3.47 (105.5)
	Comprehension in					
9	(i) Written English	3.48 (100.0)	3.47 (99.7)	3.50 (100.6)	3.65 (104.9)	3.58 (102.9)
10	(ii) Oral English	3.39 (100.0)	3.38 (99.7)	3.41 (100.6)	3.57 (105.3)	3.51 (103.5)
C.	NUMERICAL COMPETENCY	3.52 (100.0)	3.51 (99.7)	3.55 (100.9)	3.66 (104.0)	3.66 (104.0)
11	Comprehension of data	3.56 (100.0)	3.54 (99.4)	3.59 (100.8)	3.70 (103.9)	3.67 (103.1)
12	Application of data	3.46 (100.0)	3.48 (100.6)	3.51 (101.4)	3.62 (104.6)	3.64 (105.2)
D.	INFORMATION TECHNOLOGY LITERACY	3.62 (100.0)	3.69 (101.9)	3.75 (103.6)	3.81 (105.2)	3.81 (105.2)
13	Use of standard computer software	3.71 (100.0)	3.77 (101.6)	3.82 (103.0)	3.85 (103.8)	3.85 (103.8)
14	Adaptability to new software	3.52 (100.0)	3.59 (102.0)	3.67 (104.3)	3.68 (104.5)	3.70 (105.1)
15	Ability to make use of the Internet & Intranet To facilitate work & business	3.54 (100.0)	3.70 (104.5)	3.79 (107.1)	3.92 (110.7)	3.88 (109.6)
16	Locate, gather & organize information using appropriate technology and information systems #	NA	NA	NA	3.77 (100.0)	3.79 (100.5)
Ε.	ANALYTICAL AND PROBLEM-SOLVING ABILITIES	3.26 (100.0)	3.26 (100.0)	3.32 (101.8)	3.42 (104.9)	3.43 (105.2)
17	Common sense	3.47 (100.0)	3.42 (98.6)	3.47 (100.0)	3.65 (105.2)	3.67 (105.8)
18	Foresight	3.05 (100.0)	3.07 (100.7)	3.14 (103.0)	3.27 (107.2)	3.28 (107.5)
19	Analytical mind	3.35 (100.0)	3.37 (100.6)	3.42 (102.1)	3.50 (104.5)	3.53 (105.4)
20	Problem-solving ability	3.28 (100.0)	3.28 (100.0)	3.33 (101.5)	3.41 (104.0)	3.46 (105.5)
21	Creativity	3.07 (100.0)	3.11 (101.3)	3.16 (102.9)	3.29 (107.2)	3.28 (106.8)
22	Ability to implement solution and act on opportunities for improvement #	NA	NA	NA	3.38 (100.0)	3.38 (100.0)
23	Judgment #	NA	NA	NA	3.36 (100.0)	3.32 (98.8)

	Attribute	Performance score of 1998 graduates	Performance score of 1999 graduates	Performance score of 2000 graduates	Performance score of 2003 graduates	Performance score of 2006 graduates
_		Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*	Score (Index)*
F.	WORK ATTITUDE	3.57 (100.0)	3.57 (100.0)	3.62 (101.4)	3.74 (104.8)	3.75 (105.0)
24	Sense of responsibility and commitment	3.76 (100.0)	3.72 (98.9)	3.81 (101.3)	3.92 (104.3)	3.91 (104.0)
25	Ability to work independently	3.53 (100.0)	3.55 (100.6)	3.60 (102.0)	3.74 (105.9)	3.75 (106.2)
26	Perseverance	3.57 (100.0)	3.54 (99.2)	3.60 (100.8)	3.68 (103.1)	3.72 (104.2)
27	Initiative and drive	3.38 (100.0)	3.42 (101.2)	3.44 (101.8)	3.59 (106.2)	3.60 (106.5)
28	Receptivity and adaptability to new ideas and environment	3.44 (100.0)	3.50 (101.7)	3.49 (101.5)	3.62 (105.2)	3.66 (106.4)
29	Professional/business ethics	3.64 (100.0)	3.63 (99.7)	3.73 (102.5)	3.77 (103.6)	3.82 (104.9)
G.	INTER-PERSONAL SKILLS	3.52 (100.0)	3.47 (98.6)	3.53 (100.3)	3.58 (101.7)	3.66 (104.0)
30	Inter-personal relationship	3.60 (100.0)	3.55 (98.6)	3.61 (100.3)	3.75 (104.2)	3.79 (105.3)
31	Team work	3.70 (100.0)	3.63 (98.1)	3.69 (99.7)	3.79 (102.4)	3.86 (104.3)
32	Negotiation and communication skills	3.17 (100.0)	3.18 (100.3)	3.22 (101.6)	3.45 (108.8)	3.51 (110.7)
33	Able to accept and provide feedback in a constructive and considerate manner #	NA	NA	NA	3.53 (100.0)	3.67 (104.0)
34	Able to manage and resolve conflict when appropriate #	NA	NA	NA	3.31 (100.0)	3.43 (103.6)
Н.	MANAGEMENT SKILLS	3.13 (100.0)	3.16 (101.0)	3.17 (101.3)	3.29 (105.1)	3.25 (103.8)
35	Organization of work	3.25 (100.0)	3.29 (101.2)	3.29 (101.2)	3.45 (106.2)	3.45 (106.2)
36	Management of staff	2.92 (100.0)	3.01 (103.1)	3.03 (103.8)	3.16 (108.2)	3.16 (108.2)
37	Leadership	2.95 (100.0)	3.05 (103.4)	3.06 (103.7)	3.11 (105.4)	3.12 (105.8)
38	Able to motivate team-members #	NA	NA	NA	3.15 (100.0)	3.15 (100.0)
39	Management of available resources and ability to seek resources and assistance #	NA	NA	NA	3.32 (100.0)	3.26 (98.2)
I.	TECHNICAL SKILLS REQUIRED FOR THE JOB #	NA	NA	NA	3.45 (100.0)	3.46 (100.3)
40	Technical knowledge #	NA	NA	NA	3.47 (100.0)	3.49 (100.6)
41	Ability to handle technical demands in work #	NA	NA	NA	3.48 (100.0)	3.50 (100.6)
42	Ability to solve technical problems #	NA	NA	NA	3.36 (100.0)	3.42 (101.8)
43	Ability to select and use appropriate tools and technology for a task or project #	NA	NA	NA	3.40 (100.0)	3.44 (101.2)
44	Able to work to agreed quality standards and specification #	NA	NA	NA	3.49 (100.0)	3.47 (99.4)
45	Aware of occupational health and safety practices and procedures, and act in accordance with these #	NA	NA	NA	3.43 (100.0)	3.43 (100.0)

Notes:

(i) * : Figure in brackets denotes an index number with the performance score of 1998 graduates taken as 100.0
 (ii) # : New/modified attributes in survey on 2003 graduates' performance score of 2003 graduates, instead of 1998 graduates, taken as 100.0

2.8 Graduates' Knowledge on Current Affairs & Business Issues, Self-learning Ability and Self-esteem

Starting from the survey on 1999 graduates, a question regarding graduates' knowledge and self-learning ability has been included. In the survey on 2003 graduates, another 5 more areas were added for a more comprehensive assessment on graduate's performance. The 5 new areas include:

- (i) Knowledge about China trade/economical development;
- (ii) Knowledge about industry or business environment working in;
- (iii) Knowledge of technical developments related to own profession;
- (iv) Ability to develop necessary new technical skills required for the job;
- (v) Self-esteem.

Employers' assessments of the 2006 graduates' self-learning ability, self-esteem, knowledge of work and profession were very favourable, with 67%, 66% and 55% of graduates respectively being rated as good or very good. Knowledge about China trade/ economical development seemed to be less relevant to the employers covered in this survey, as around a third did not have any comment on this area. Even so, among those that gave ratings in this area, a much smaller proportion of graduates were rated as good or very good. Details are shown in the following table:

Table 2.6 – Graduates' Knowledge on Current Affairs & Business Issues,
Self-learning Ability and Self-esteem

		Very Good	Good	Average	Poor	Very Poor	No Comment
		%	%	%	%	%	%
(a)	Knowledge of global issues & development	1 (1)	23 (21)	55 (53)	3 (5)	* (1)	17 (19)
(b)	Knowledge of work and profession	6 (6)	49 (46)	39 (43)	3 (2)	1 (*)	2 (3)
(c)	Knowledge of current affairs	2 (2)	28 (25)	51 (52)	3 (4)	* (1)	16 (17)
(d)	Knowledge about China trade/economical development	1 (1)	11 (10)	47 (42)	10 (10)	* (1)	30 (37)
(e)	Knowledge about industry or business environment working in	2 (3)	33 (23)	48 (52)	5 (5)	* (1)	11 (17)
(f)	Knowledge of technical developments related to own profession	5 (3)	40 (38)	45 (46)	5 (3)	* (*)	6 (10)
(g)	Self-learning ability	14 (13)	53 (53)	27 (28)	3 (2)	1 (1)	2 (3)
(h)	Ability to develop necessary new technical skills required for the job	6 (7)	41 (39)	41 (39)	4 (3)	1 (1)	7 (11)
(i)	Self-esteem	11 (10)	55 (54)	28 (30)	2 (1)	* (-)	4 (4)

Notes: (i) * : Less than 0.5%

- (ii) Percentages may not add up to 100% due to rounding
- (iii) Figures in brackets denote results of the survey on 2003 graduates

33100003 Survey on Opinions of Employers on Major Aspects of Performance of Publicly-funded First Degree Graduates in Year 2006

Comparing the results of the present and the last survey, it is found that the employers' assessment of 2006 graduates' knowledge and self-learning ability was more or less the same as those of 2003 graduates, except that more graduates were rated as good or very good in knowledge about industry or business environment working in (2006 graduates: 35% vs. 2003 graduates: 26%).

2.9 Satisfaction with the Overall Performance

69 per cent of the employers were satisfied with the overall performance of 2006 graduates. This figure is on a par with that of the 2003 graduates (71%). (Table 2.7)

Overall	1999 Graduates	2000 Graduates	2003 Graduates	2006 Graduates
Performance	%	%	%	%
Very Satisfied	13	16	18	19
Quite Satisfied	56	52	53	50
Average	24	26	25	26
Quite Dissatisfied	5	5	3	4
Very Dissatisfied	1	1	1	*
Total	100	100	100	100

 Table 2.7 – Satisfaction with Overall Performance of Graduates

Notes: (i) * : Less than 0.5%

2.10 Opinions on Suggested Improvement Measures

Regarding some measures suggested to the institutions to improve the quality of first degree graduates, employers generally indicated support. The results of the present survey are not much different from the last survey, with more employers agreeing to introduce assessment tests on English and communication skills before graduation. (Table 2.8)

			Strongly Agree	Quite Agree	Quite Disagree	Strongly Disagree	No Comment
	Im	provement Measure	%	%	%	%	%
(a)	the f	ass an assessment test on following subjects before luation:					
	(i)	Chinese language	34 (28)	52 (53)	7 (8)	1 (2)	7 (10)
	(ii)	English language	46 (41)	45 (48)	4 (5)	* (1)	5 (5)
	(iii)	Information technology	21 (18)	60 (57)	11 (13)	1 (2)	8 (11)
	(iv)	Interpersonal and Management skill	27 (24)	54 (51)	10 (13)	1 (2)	8 (10)
	(v)	Communication skills	34 (32)	51 (51)	8 (8)	1 (2)	6 (8)
(b)	relev	ersities to enhance the vance and quality of the ergraduate programmes by:					
	(i)	Involving employers in curriculum development	8 (12)	55 (54)	15 (12)	2 (2)	20 (19)
	(ii)	Arranging internship programmes in collaboration with companies/organizations for undergraduates	13 (23)	56 (50)	11 (8)	1 (1)	18 (18)

Table 2.8 – Opinions on Suggested Improvement Measures
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Notes: (i) * : Less than 0.5%

- (ii) Percentages may not add up to 100% due to rounding
- (iii) Figures in brackets denote results of the survey on 2003 graduates

Among those agreeing with the improvement measures of "involving employers in curriculum development" and "arranging internship programmes", 31% and 41% of the employers showed interest respectively in getting involved, which represents a 3%-point decline from the last survey. (Table 2.9)

		Whether willing to be involved		
		Yes	No	Don't know/Not sure
	Improvement Measures	%	%	%
(i)	Involving employers in curriculum development	31 (34)	13 (6)	56 (60)
(ii)	Arranging internship programmes in collaboration with companies/ organizations for undergraduates	41 (44)	11 (5)	48 (51)

Notes: (i) Percentages may not add up to 100% due to rounding

(ii) Figures in brackets denote results of the survey on 2003 graduates

2.11 Other Suggested Improvements

Of the 1,972 returned questionnaires, 408 (21%) gave further suggestions for improving the performance of first degree graduates. As shown in Table 2.10, 14% of respondents suggested improvements in language abilities, followed by work attitude (13%) and inter-personal and management skills (10%).

Major aspect	% of returned questionnaires with comments #
Language abilities	14%
Work attitude	13%
Inter-personal and management skills	10%
Numerical and information technology literacy	4%
Technical skills	3%
Others	3%

Table 2.10 - Other Sug	ggested Improvements
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Note: # : The number of returned questionnaires with comments as a percentage of the total number of returned questionnaires (i.e. 1,972)

Respondents recommended some possible ways to improve graduates' language abilities. Apart from providing more training and writing assignments in both languages (in particular commercial correspondence), institutions should give graduates more opportunities to make speeches/presentations. Besides, respondents also suggested introducing test on their biliteracy and trilingualism before graduation.

As regards work attitude, some respondents said that graduates should improve their willingness to take responsibilities and make commitment. They should also be more enthusiastic about their work and take more initiative at work. Some suggested introducing workshop/pre-employment training courses to enhance their knowledge about work environment, which can also help improve their office/social manner.

For the improvement of inter-personal and management skills, some respondents reckoned that graduates should be open to criticism and more willing to seek advice from colleagues. Some also commented that the graduates were too examination-oriented. More training on critical thinking and creativity should be introduced. It was also suggested that they should enhance their inter-personal and management skills by participating more in team works, group projects and workshops. Some suggested that graduates should participate in training course to enhance their leadership and management skills.

Apart from the above specific aspects, some respondents suggested that attachments to training programmes in large companies/organizations should be arranged for undergraduates so that they can gain work experience.

APPENDICES

Appendix I – Survey Documents



Sorial Nilmoor	Serial Number:
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SURVEY ON OPINIONS OF EMPLOYERS ON MAJOR ASPECTS OF PERFORMANCE OF PUBLICLY-FUNDED FIRST DEGREE GRADUATES IN 2006

– Questionnaire –

Part I To be completed by the coordinator of this survey in your company

(A) Please provide information about the SAMPLED GRADUATE to whom this questionnaire refers:

Sex (Please tick) :	□ ₁ Male	2 Female
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Whether still working in company now (Please tick) :

 \square_1 Yes
 \square_2 No

 If no, please specify the length of service in company :

 \square_1 Less than 3 months

 \square_2 3 months or more

Present position in company or position before leaving company :

Whether a bachelor degree is the minimum qualification required for the position (Please tick):

|--|

□₂ No

Institution from which he/ she graduated (Please tick):

— v

- \Box_1 City University of Hong Kong
- \square_2 Hong Kong Baptist University
- □₃ Lingnan University
- □₄ The Chinese University of Hong Kong
- \square_5 The Hong Kong Institute of Education
- □₆ The Hong Kong Polytechnic University
- \square_7 The Hong Kong University of Science and Technology
- \square_8 The University of Hong Kong
- (B) Please provide information about the IMMEDIATE SUPERVISOR of the sampled graduate who will be requested to answer Part II of this questionnaire :

Name :	
Contact telephone number :	
E-mail address:	



Part II To be completed by the immediate supervisor of the sampled graduate.

- 1. Please provide your assessment on the performance of the SAMPLED GRADUATE in respect of a range of skills and knowledge shown below. Please indicate your assessment by putting a tick in the box on a 5-point scale:
 - 5 Performance always exceeds your required standard
 - 4 Performance sometimes exceeds your required standard
 - 3 Performance generally meets your required standard
 - 2 Performance sometimes fails to meet your required standard
 - 1 Performance always fails to meet your required standard

If the skill or knowledge is not required by the post of the SAMPLED GRADUATE or has not been tested, please tick the "Not Applicable" box.

- 2. Please also indicate your views on the importance of the skills and knowledge for the post held by the SAMPLED GRADUATE by putting a tick in the box on a 5-point scale:
 - 5 Very important
 - 4 Quite important
 - 3 Average
 - 2 Not quite important
 - 1 Not important at all

		<u>Q1.</u> Has the performance of the					Q2. For the post held by the						
			GRADUATE met your required						GRADUATE, how do you				
		sta	indard			owin	g	perceive the importance of					
		aspects?							the following aspects?				
		Always Not Always Generally fails to Appli-						Very			im	Not portant	
		exceeds		ets		meet	cable	importa	ant	Average		at all	
Α	CHINESE LANGUAGE PROFICIENCY	_						_					
a.	Expression of ideas (e.g. clear, precise, concise, logical, grammatically correct) in												
	(i) Written Chinese	5	4]3 [2	□ 1	9		4	3	2		
	(ii) Cantonese		4 []3 [_2	1	9		 4	3	2	1	
	(iii) Putonghua		4]3 [2	1	9		4	3	2	1	
b.	Comprehension (e.g. able to understand) in												
	(i) Written Chinese	5	4]3 [_2	1	9	5	4	3	2	 1	
	(ii) Cantonese	5	4]3 [_2	1	9	5	4	3	2	1	
	(iii) Putonghua	5	4]3 [2	1	9	5	4	3	2	1	

Please answer both Q1 and Q2 for each aspect



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		GRADUATE met your required standard in the following aspects?						Q2. For the post held by the GRADUATE, how do you perceive the importance of the following aspects?				
								Very importa	nt A	Average	im	Not oortant at all
В	ENGLISH LANGUAGE PROFICIENCY							-				
a.	Expression of ideas (e.g. clear, precise, concise, logical, grammatically correct) in											
	(i) Written English	5	4	3	2	1	9		4	3	 2	 1
	(ii) Oral English	5	4	3	2	1	9	5	4	3	2	1
b.	Comprehension (e.g. able to understand) in											
	(i) Written English		4	3	_ 2	1	9		4	3	 2	
	(ii) Oral English	5	4	3	 2	1	9	5	4	3	 2	1
С	NUMERICAL COMPETENCY							_				
a.	Comprehension of data (e.g. understanding the meaning and implications of data)	 5	4	□3	_ 2	1	9	5	4	□3	_ 2	 1
b.	Application of data (e.g. able to make use of data or statistical/ mathematical methods in drawing conclusions and making recommendations)	5	4	3	2	1	_ 9	5	4	□3	_ 2	□ 1
D	INFORMATION TECHNOLOGY LITERA	CY										
a.	Use of standard computer software (e.g. proficient in using software, such as word processing, spreadsheet, database, presentation kits, at work)	5	 4	□3	2	1	9	5	4	□3	_ 2	□ 1
b.	Adaptability to new software (e.g. able to use new software to facilitate work)	5	 4	 3	2	 1	9	5	 4	3	 2	 1
C.	Ability to make use of the Internet and Intranet to facilitate work and business	5	4	3	 2		9	5	4	3	_ 2	 1
d.	Locate, gather and organize information using appropriate technology and information systems	5	4	3	_ 2	1	_ 9	5	4	3	_ 2	 1

Please answer both Q1 and Q2 for each aspect



		<u>Q1.</u> Has the performance of the GRADUATE met your required standard in the following aspects?				Q2. For the post held by the GRADUATE, how do you perceive the importance of the following aspects?						
		Always exceed		Generall meets		Always fails to meet		Very import	ant	Average		mportant at all
Е	ANALYTICAL AND PROBLEM-SOLVIN	G AB	ILITIE	ES								
a.	Common sense (e.g. able to display a practical good sense in handling daily tasks)	5	4	□3	 2	 1	9	5	4	3	_ 2	 1
b.	Foresight (e.g. able to plan ahead/ foreseeing problems)	5	4	3	2	 1	9	5	4	□3	 2	 1
C.	Analytical mind (e.g. analyzing information logically and accurately)	5	4	3	_ 2	 1	9	5	4	□3	_ 2	 1
d.	Problem-solving ability (e.g. resourceful, able to identify problems/ recommend logical and practical solutions, able to assess if a solution works)	5	4	□3	_ 2	 1	9	5	4	□3	_ 2	 1
e.	Creativity (e.g. able to innovate/ put forward new ideas)	□₅	4	□3	_ 2	 1	 9		4	□3	_ 2	 1
f.	Ability to implement solutions and act on opportunities for improvement	5	4	3	 2	1	9	5	4	3	_ 2	1
g.	Judgment (e.g. able to assess situation and recommend direction or course of action)	5	4	3	2	1	 9	5	4	3	2	1
F	WORK ATTITUDE	-										
a.	Sense of responsibility and commitment (e.g. willing to take up responsibilities, accountable for the results, committed to organizational goals)	5	4	□3	 2	 1	9	5	4	□3	_ 2	 1
b.	Ability to work independently		4	3	_ 2		9		4	3	 2	
C.	Perseverance (e.g. able to cope with difficult work environment/ work pressure/ uncertainty/ meeting deadline, patient in completing complicated tasks)	5	4	□3	 2	 1	9	5	4	□3	_ 2	 1
d.	Initiative and drive (e.g. reacting to problems/ opportunities without being told, improving oneself and actively seeking new challenges)	5	4	□3	2	 1	9	5	4	3	_ 2	 1
e.	Receptivity and adaptability to new ideas and environment	5	4	3	_ 2	 1	9	5	4	3	_ 2	1
f.	Professional/ business ethics (e.g. aware of professional image building, having integrity, not acting with favouritism or vested interest)	5	4	□3	 2	 1	9	5	4	□3	_ 2	 1
			_									

Please answer both Q1 and Q2 for each aspect



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		Q1.Has the performance of the GRADUATE met your required standard in the following aspects?			Q2.For the post held by GRADUATE, how do y perceive the importance the following aspects							
		Always		Generall meets		Always fails to meet	Not Appli- cable	Very importa	ant	Average		Not portant at all
G	INTER-PERSONAL SKILLS											
a.	Inter-personal relationship (e.g. capable of building rapport with colleagues/ people outside the company, earning respect from others)	5	4	□3	_ 2	 1	9	5	4	□3	_ 2	 1
b.	Team work (e.g. able to cooperate with colleagues, willing to listen to/ accept other people's views, contribute positively to team work)	5	4	□3	_ 2	 1	9	5	4	3	_ 2	 1
C.	Negotiation and communication skills (e.g. able to present ideas and discuss with other parties and reach agreement in the best interests of the company)	5	4	3	_ 2	 1	9	5	4	3	_ 2	 1
d.	Able to accept and provide feedback in a constructive and considerate manner	5	4	3	_ 2	 1	9		4	3	_ 2	 1
e.	Able to manage and resolve conflict when appropriate	5	4	3	_ 2	1	9	5	4	3	_ 2	 1
Η	MANAGEMENT SKILLS											
a.	Organization of work (e.g. having good time management, able to prioritize based on objectives, planning work efficiently)	5	 4	3	_ 2	 1	9	5	4	□3	_ 2	 1
b.	Management of staff (e.g. able to guide and supervise subordinates)	5	4	3	_ 2	1	9	5	4	3	_ 2	 1
C.	Leadership (e.g. leading a group to achieve set targets)	5	4	3	_ 2	 1	9	5	4	3	_ 2	 1
d.	Able to motivate team-members	5	4	3	2	1	9	5	4	3	2	1
e.	Management of available resources and ability to seek resources and assistance	5	4	□3	_ 2	 1	9	5	4	3	_ 2	 1
	TECHNICAL SKILLS REQUIRED FOR	ΓHE J	OB									
a.	Technical knowledge		4	3	2		9		4	3	_ 2	
b.	Ability to handle technical demands in work	5	4	3	_ 2	 1	9	5	4	3	2	 1
C.	Ability to solve technical problems	5	4	3	2	1	9	5	4	3	2	1
d.	Ability to select and use appropriate tools and technology for a task or project	5	4	□3	_ 2	 1	9	□5	4	3	_ 2	 1
e.	Able to work to agreed quality standards and specification	5	4	3	_ 2	 1	 9	5	4	3	_ 2	 1
f.	Aware of occupational health and safety practices and procedures, and act in accordance with these	5	 4	3	_ 2	 1	9	5	4	3	_ 2	 1

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Education Bureau The Government of the Hong Kong Special Administrative Region

J	Please rate the competence of the	Very	Good	Average	Poor	Very Poor	No
	GRADUATE in the following aspects?	Good					Comment
a.	Knowledge of global issues and development	5	4	3	2	1	9
b.	Knowledge of work and profession	5	4	3	2	 1	9
C.	Knowledge of current affairs (local and international)	5	4	3	2		9
d.	Knowledge about China trade/ economical development	5	4	3	_ 2	1	9
e.	Knowledge about industry or business environment working in		4	3	_ 2		9
f.	Knowledge of technical developments related to own profession		4	3		 1	9
g.	Self-learning ability		4	3	2		9
h.	Ability to develop necessary new technical skills required for the job	5	4	3	_ 2	1	9
i.	Self-esteem	5	4	3	2	1	9
Κ		Very Satisfied	Quite Satisfied	Average	Quite Dissatisfied	Very Dissatisfied	No Comment
a.	Are you satisfied with the OVERALL performance of the GRADUATE?	5	4	3	2	1	9
L	There has been suggestions to improve the quality of first degree graduates IN GENERAL. Do you agree or disagree to these suggestions as follows:	Strongly Agree	Quit		Quite sagree	Strongly Disagree	No Comment
a.	To pass an assessment test on the following subjects before graduation:						
	(i) Chinese Language		 ,	4	2	 1	9
	(ii) English Language		<u> </u>	4	2	 1	9
	(iii) Information Technology			4	2		9
	(iv) Interpersonal and Management skills		<u> </u>	4	_ 2	 1	9
	(v) Communications skills						
b.			·	4	2	1	9
	Universities to enhance the relevance and quality of the undergraduate programmes by:		i	4		1	9
	quality of the undergraduate programmes	5	,	4	<u>2</u>		9
	quality of the undergraduate programmesby:(i) Involving employers in curriculum]	_ 2	□1 □1 npany willing to	9
	quality of the undergraduate programmesby:(i) Involving employers in curriculum	5]	□2 rtment/ con	□1 □1 Don't know/ I	□9 participate?
	 quality of the undergraduate programmes by: (i) Involving employers in curriculum development (i i) Arranging internship programmes in collaboration with companies/ 	5] Is your depa	□2 rtment/ con		□9 participate?
	 quality of the undergraduate programmes by: (i) Involving employers in curriculum development (i i) Arranging internship programmes in 	5	▶ <i>1</i> □₁ Yes □/	's your depa □_2 Nc 4	\Box_2 $rtment/ con \Box_9 L \Box_2$	Don't know/ I	□9 participate? Not sure
	 quality of the undergraduate programmes by: (i) Involving employers in curriculum development (i i) Arranging internship programmes in collaboration with companies/ 	5	▶ <i>1</i> □₁ Yes □/	's your depa □_2 Nc 4	□2 rtment/ con □9 □9 [□2 rtment/ con		□9 participate? Not sure □9 participate?



Μ	Please give your further suggestions, if any, for IMPROVING the performance of first degree graduates in the following major aspects:
	Language abilities:
	Numerical and information technology literacy:
	Work attitude:
	Inter-personal and management skills:
	Technical skills:
	Others:

☞ Thank you very much for your co-operation ∞

Appendix II – Estimation Method

Let P_{ijk} : Performance score (between 1 and 5) of ith graduate in jth attribute under

kth aspect.

- I_{ijk} : Importance score (between 1 and 5) of ith graduate in jth attribute under kth aspect.
- W_i : Weighting factor of ith graduate.
- n_{ik} : No. of attributes with both performance and importance scores rated as 1-5 of ith graduate in kth aspect.

a) Performance score of individual attribute ^[1]

Average performance score of attribute j under aspect k =

$$\overline{P}_{jk} = \frac{\sum_{i} P_{ijk} W_i}{\sum_{i} W_i}$$

b) Importance score of individual attribute ^[2]

Average importance score of attribute \mathbf{j} under aspect \mathbf{k} =

$$\overline{I}_{jk} = \frac{\sum_{i} I_{ijk} W_i}{\sum_{i} W_i}$$

c) Distribution of performance score of individual attribute [3]

Percentage of "Always exceeds required standard" (score 5) of attribute **j** under aspect **k** =

$$P_{jk}\% = \frac{\sum_{i} F_{ijk}W_{i}}{\sum_{i} W_{i}} \times 100\% \quad where \quad F_{ijk} = \begin{cases} 1 & if \quad P_{ijk} = 5\\ 0 & otherwise \end{cases}$$

d) Distribution of importance score of individual attribute ^[4]

Percentage of "Very important" of attribute \mathbf{j} under aspect \mathbf{k} =

$$I_{jk}\% = \frac{\sum_{i} F_{ijk}W_{i}}{\sum_{i} W_{i}} \times 100\% \quad where \quad F_{ijk} = \begin{cases} 1 & if \quad I_{ijk} = 5\\ 0 & otherwise \end{cases}$$

e) Performance score of each aspect ^[5]

Average performance score of aspect \mathbf{k} =

$$\overline{P}_{k} = \frac{\sum_{i}^{j} \frac{\sum_{j}^{j} P_{ijk} I_{ijk}}{\sum_{j}^{j} I_{ijk}} W_{i}}{\sum_{i}^{j} W_{i}}$$

f) Importance score of each aspect ^[5]

Average performance score of aspect \mathbf{k} =

$$\overline{I}_{k} = \frac{\sum_{i} \frac{1}{n_{ik}} \left(\sum_{j} I_{ijk}\right) W_{i}}{\sum_{i} W_{i}}$$

g) Distribution of performance score of each aspect ^[5]

Percentage of "4.01-5.00" of aspect **k** =

$$P_k \% = \frac{\sum_{i} F_{ik} W_i}{\sum_{i} W_i} \times 100\% \quad where \quad F_{ik} = \begin{cases} 1 & if \quad \frac{\sum_{j} P_{ijk} I_{ijk}}{\sum_{j} I_{ijk}} > 4\\ 0 & otherwise \end{cases}$$

h) Distribution of importance score of individual aspect ^[5]

Percentage of "4.01-5.00" of aspect \mathbf{k} =

$$I_k\% = \frac{\sum_{i} F_{ik}W_i}{\sum_{i} W_i} \times 100\% \quad where \quad F_{ik} = \begin{cases} 1 & if \quad \frac{\sum_{i} I_{ijk}}{n_{ik}} > 4\\ 0 & otherwise \end{cases}$$

Remarks:

- 1. Only count those questionnaires with performance score rated as 1-5 for that particular attribute.
- 2. Only count those questionnaires with importance score rated as 1-5 for that particular attribute.
- 3. Count all returned questionnaires, including those answered "Not applicable"
- 4. Only count those questionnaires with importance score rated as 1-5
- 5. Only count those attributes with both performance score and importance score rated as 1-5