



## **Analysis of Argumentation Techniques of Gifted Students by Investigating Their Live Scripts in the Public Examination on Liberal Studies**

### **Background**

In Hong Kong, there is a public examination leading to the Hong Kong Diploma of Secondary Education (HKDSE), the result of which would be an important criterion for university entry. HKDSE exam is held by Hong Kong Examinations and Assessment Authority (HKEAA) once a year.

Liberal Studies (LS) is a new compulsory subject in HKDSE starting from 2012. The subject demands students to respond to questions related to various contemporary social issues. Different thinking skills are supposed to be required, such as problem solving, analytical and critical thinking, provision of explanations, synthesis of arguments, and evaluation etc. In this regard, it is interesting to study the responses of gifted students to this kind of questions so as to understand their argumentation techniques.

### **Methodology**

The Hong Kong Academy for Gifted Education (HKAGE) is a non-beneficial organisation, providing research-based information and support to all gifted students aged 10-18. We aim to study the live scripts of our gifted student members attending 2015 HKDSE LS so as to attain more understanding about their performance characteristics in expressing their views and arguments when answering LS questions. It should be noted that HKDSE Examination classifies the performance of students in a subject into eight levels, namely: Level 5\*\*, Level 5\*, Level 5, Level 4, Level 3, Level 2, Level 1, and Level U/X. The study focuses at comparing the performance of our student members attaining the 'low level' of performance (i.e. Level 3 and Level 4) with those attaining Level 5 or above.

First, to facilitate the retrieval of live scripts, a file containing personal identities of our students aged 18 in 2015 who would likely to be candidates of 2015 HKDSE LS was sent to HKEAA. Totally, around 900 relevant students, whose 2015 HKDSE results were available, were identified. The numbers of these 900 students attaining different performance levels in LS were provided by HKEAA. Based on these numbers, the number of sample scripts randomly selected for each performance level was then determined so as to achieve an overall representative sample of live scripts for the study. Totally, 72 live scripts were sampled. The relevant figures are tabulated below for reference.



**Table 1: Total number of relevant live scripts and the corresponding number of samples selected from each performance level**

Performance Level	Total Number of Relevant Live Scripts	Number of Samples Selected
5**	87 (9.6%)	8 (11.1%)
5*	174 (19.1%)	12 (16.7%)
5	193 (21.3%)	14 (20.8%)
4	326 (35.9%)	28 (41.7%)
3	129 (14.2%)	10 (13.9%)
Total	909	72

HKDSE LS comprises two exam papers, namely Paper 1 and Paper 2. Paper 1 consists of three compulsory data-response questions, and Paper 2 consists of three extended-response questions. Candidates are required to answer only one of them.

For each of these 72 live scripts, the Paper 2's question and a question selected from Paper 1 were re-marked according to eight aspects. These aspects and its corresponding gradations are shown below.

- (i) *Understanding and application of relevant knowledge, key ideas and concepts of the subject (mark range: 1, 2, 3, 4, 5)*
  - Comprehensive knowledge, understanding of key ideas and concepts
  - Broad knowledge, understanding of key ideas and concepts
  - General knowledge, understanding of key ideas and concepts
  - Basic knowledge, understanding of key ideas and concepts
  - Elementary knowledge, understanding of key ideas and concepts
  
- (ii) *Handling of relevant information (mark range: 1, 2, 3, 4, 5)*
  - Generalize information
  - Analyse information



- Interpret information
  - Identify relevant information
  - Identify some basic and simple information
- (iii) *Interpretation and analysis of the interdependence among personal, local, national and global issues (mark range: 1, 2, 3, 4, 5)*
- Interpret and analyse coherently from different perspectives
  - Interpret and analyse from different perspectives
  - Interpret appropriately from different perspectives
  - Interpret briefly from some perspectives
  - Identify simple relationships from a few perspectives
- (iv) *Synthesis of opinions/ suggestions (mark range: 1, 2.3, 3.6, 5)*
- Synthesise their own opinions/ suggestions on the basis of logical arguments
  - Synthesise their own opinions/ suggestions with partly reasonable arguments
  - Elaborate on opinions/ suggestions from the sources with partly reasonable arguments/ with simple elaboration
  - Give irrelevant opinions/ suggestions and ungrounded arguments
- (v) *Evaluation (mark range: 1, 2.3, 3.6, 5)*
- Evaluate various viewpoints/ entities or assess impacts/ effectiveness/ relationships based on clear criteria/ standards
  - Compare viewpoints/ entities or explain the impacts/ effectiveness/ relationships without clear criteria/ standards
  - Explain various viewpoints/ entities separately or explain impacts/ effectiveness/ relationships by simple arguments
  - Provide one-sided arguments/ describe one of the entities/ pros/cons without comparison/ evaluation/ assessment
- (vi) *Consideration of values and views of others (mark range: 1, 2.3, 3.6, 5)*
- Show appreciation of different cultures/ universal values; or shows empathy/ open-mindedness/ tolerance towards a wide range of people/ incidents/ views / values in the formulation of arguments
  - Consider particular cultures/ universal values; or show empathy/ open-mindedness/ tolerance towards particular groups of people/ types of incidents/ views/ values in the formulation of arguments



- Show limited awareness of different cultures/ universal values, the concerns/ situations of different groups of people in the formulation of arguments
  - Elaborate on their own views based on their own/ values/ cultures; without sound justification
- (vii) *Respect for evidence (mark range: 1, 2.3, 3.6, 5)*
- Conceptualise evidence or use sufficient examples
  - Identify some evidence or use some examples
  - Identify limited evidence or use a few examples
  - Use irrelevant examples/ without examples or give little/ no evidence
- (viii) *Communication of ideas (mark range: 1, 2, 3, 4, 5)*
- Communicate concisely, logically and systematically
  - Communicate logically and systematically
  - Communicate in an organized manner
  - Communicate simple ideas
  - Express simple ideas briefly

HKEAA provided the live scripts of the students sampled and their paper scores, subject grade levels, together with their some demographic information, including gender, domain associated and active status in HKAGE. It should be emphasised that all personal identification information is eliminated from the information provided by HKEAA.

Four experienced LS exam markers were sourced to examine all these live scripts and give marks along each aspect specified above. To facilitate and monitor the marking process, an initial kick-off meeting was held to clarify the aims of the study and discuss the marking criteria and the corresponding rubric. The process was divided into three stages: (i) marking scripts of Level 3 or Level 5, (ii) marking scripts of Level 5\* or 5\*\* and (iii) marking scripts of Level 4. After each stage, a meeting was held to discuss the marks assigned by the markers so as to resolve any inconsistencies in marking. Thus, totally 4 meetings were held. The analysis results are presented in the following.

### **Quantitative Analysis: Paper and Aspect Scores, and their Group Differences**

For each student script, paper scores and scores of the eight aspects concerned are available. These scores were analysed and their differences across various groupings (i.e., grade level, gender, domain and active status) were investigated. The quantitative analysis results are



presented below.

*Paper Scores and their Group Differences*

The relevant summary statistics on paper scores and the corresponding group differences are tabulated below.

**Table 2: Summary statistics of paper scores (Full mark = 126) of sample scripts and their group differences**

Overall Summary Statistics :		Mean =72.79, Std Dev =9.97, C.V.=0.1370				
Group Difference						
Grouping	Mean 1 (N1)	Mean 2 (N2)	Std Dev 1	Std Dev 2	Difference (M1 – M2)	p-value ( one-side 2-sample t-test)
Low (L3/4) vs. High (L5 or above)	65.11 (38)	81.38 (34)	5.54	5.93	-16.27	<0.01**
Male vs. Female	70.54 (39)	75.45 (33)	9.89	9.53	-4.91	0.018*
^ Maths/ Sci vs. Hum/ Leadership	71.64 (44)	74.11 (27)	9.37	10.76	-2.47	0.16
Inactive vs. Active^^	69.42 (26)	74.70 (46)	10.48	9.24	-5.28	0.019*

Note: \*The difference is statistically significant at 5% significance level.

\*\* The difference is statistically significant at 1% significance level.

^ In the HKAGE, there were four domains for secondary students: (i) Mathematics, (ii) Sciences, (iii) Humanities and (iv) Leadership. It should be noted that one student, who was in multi-domains, was excluded in the compilation.

^^ Active students are those who have joined at least one programme or workshop in the HKAGE, and inactive are those who have never joined this kind of activities.

From the overall summary statistics and group differences presented in Table 2, the followings could be observed:

- i. Variation of paper scores of LS is quite mild, as its coefficient of variation is close



- to 0.1.
- ii. The difference in paper scores between low-level performance (i.e., Level 3/ 4) students and high-level performance (i.e., Level 5 or above) students was highly significant.
  - iii. A significant difference was found between male and female student members. This is in line with the traditional point of view that at secondary level females, in general, could articulate their explanations and arguments better than males.
  - iv. Besides, active student members in the HKAGE did performance significantly better than the inactive ones.
  - v. However, there was no significant different in paper scores between students from Math/Sciences domains and the ones from Humanities/ Leadership domains.

#### *Aspect Scores and their Group Differences*

Next, we examine the scores of the eight aspects specified above. Table 3 below shows the overall and group averages, and their differences. From Table 3, the followings could be observed.

- i. The low-order thinking skills (i.e., understanding, information handling, interpretation and analysis, communication) have mean scores higher than that of high-order thinking skills (i.e., synthesis, evaluation, cultural respect and provision of evidence)
- ii. Amongst high-order thinking skills, evaluation skills got the lowest scores.
- iii. With regard to group differences, only grouping according to grade level shows statistically significant differences.



**Table 3: Mean scores of the eight aspects concerned and their group differences**

	Under-stand	Handle Info	Interpret & Analysis	Syn	Eval	Cultural	Evidence	Comm
Overall Mean	4.10	4.15	4.04	3.74	3.39	3.46	3.79	4.18
High	4.32	4.40	4.19	4.07	3.73	3.73	4.08	4.39
Low	3.90	3.93	3.90	3.45	3.08	3.21	3.54	3.99
H – L	0.42	0.46	0.29	0.61	0.66	0.51	0.54	0.41
p-value (ANOVA)	<0.001**	<0.001**	<0.001**	<0.001**	<0.001**	<0.001**	<0.001**	<0.001**
Female	4.15	4.19	4.09	3.82	3.52	3.52	3.85	4.25
Male	4.06	4.12	4.00	3.68	3.27	3.41	3.74	4.12
F-M	0.09	0.07	0.08	0.14	0.25	0.11	0.11	0.13
p-value (ANOVA)	0.29	0.52	0.31	0.25	0.02	0.29	0.28	0.10
Active	4.15	4.21	4.09	3.82	3.48	3.52	3.85	4.23
Inactive	4.01	4.06	3.96	3.59	3.22	3.35	3.69	4.08
Act-InAct	0.14	0.15	0.13	0.23	0.26	0.16	0.16	0.15
p-value (ANOVA)	0.11	0.17	0.12	0.07	0.02	0.13	0.15	0.07
Maths/Sci	4.11	4.21	4.04	3.78	3.39	3.49	3.80	4.18
Hum/Lead	4.08	4.06	4.04	3.68	3.38	3.41	3.78	4.19
M/S –H/L	0.03	0.14	0.01	0.10	0.01	0.08	0.01	-0.01
p-value (ANOVA)	0.99	0.34	0.69	0.72	0.69	0.86	0.76	0.73

Note: \*\*The difference is statistically significant at family-wise 1% significance level after applying the Bonferroni correction (i.e. Type I error is set to  $.01/8 = .0013$  for the hypothesis testing)

MANOVA is designed to test any significant differences with respect to several dependent continuous variables (outcomes) simultaneously when considering the effect of an independent categorical variable (i.e. a grouping). It is particularly useful when there are too many outcomes to be examined, since the chance of committing Type I error for a set of family-wise tests could be controlled at a specific level, say 5% or 1%. Due to lacking of a strong support of the



assumptions for conducting MANOVA (e.g., homogeneity of covariance and multivariate normality), additionally a non-parametric version of MANOVA is attempted. These robust methods for MANOVA are based on ranking the data instead. Results of MANOVA and the robust version of MANOVA are shown in Table 4 below. It can be noted that both methods' results were quite consistent with each other.

**Table 4: MANOVA and Robust MANOVA results for different grouping effects**

Grouping	MANOVA			Robust MANOVA	
	Wilks' $\Lambda$	F	Pr(>F)	F	Pr(>F)
Grade level	0.4192	10.91	<.0001	34.4910	<.0001
Gender	0.8413	1.49	0.1807	1.4333	0.2389
Active status	0.9070	0.81	0.5981	0.4511	0.6007
Domain	0.9227	0.66	0.7242	0.2657	0.7266

There is a significant overall grouping effect of grade level (Wilks'  $\Lambda = .4192$ ,  $F = 10.91$ ,  $p < .0001$ ) affecting the outcomes of eight aspects. No significant effects could be found with respect to other groupings (i.e., gender, active status and domain).

To gain better understanding how the grouping effect of grade level affecting the outcomes, Linear Discriminant Analysis (LDA) is recommended as the follow-up test to MANOVA. Linear Discriminant Analysis is used to explore strength and direction of relationship between several outcomes and a group membership. It finds a linear combination of the outcomes so as to separate the group members in an 'optimal' way. The resultant scores derived using the optimal linear combinations are called discriminant scores. It is recommended that using standardized variables in LDA makes it easier to interpret the loadings in a linear discriminant function. The standardized version of an input variable is defined so that it has mean zero and within-groups variances of 1. Table 5a and 5b below show the corresponding results of LDA after standardization.



**Table 5a: Linear Discriminant Analysis results after standardization for the grouping effect of grade level**

Aspect	Separation	Discriminant Function Coefficient (Discriminant Score < -0.065 → high level Separation = 96.9867)	
		(A)	(B)
Understand	37.4126	-0.5749	-0.5749
Handle Info	26.3167	-0.1671	-
Interpretation & Analysis	14.8112	0.6971	0.6971
Synthesis	38.4827	0.4638	0.4638
Evaluation	69.5760	-1.2619	-1.2619
Cultural Respect	36.5989	0.2161	-
Evidence	41.7493	-0.01243	-
Communication	40.5274	-0.2726	-

**Table 5b: Classification results based on Linear Discriminant Analysis**

Group\ Classification	Classification based on discriminant scores	
	H(igh)	L(ow)
High-level Student	29	5
Low-level Student	3	35

The separation achieved by a variable is reflected using its between-groups variance divided by the corresponding within-groups variance. From Table 5a, separation using the discriminant scores was equal to 96.9867, which is much greater than any one of those using a single variable alone.

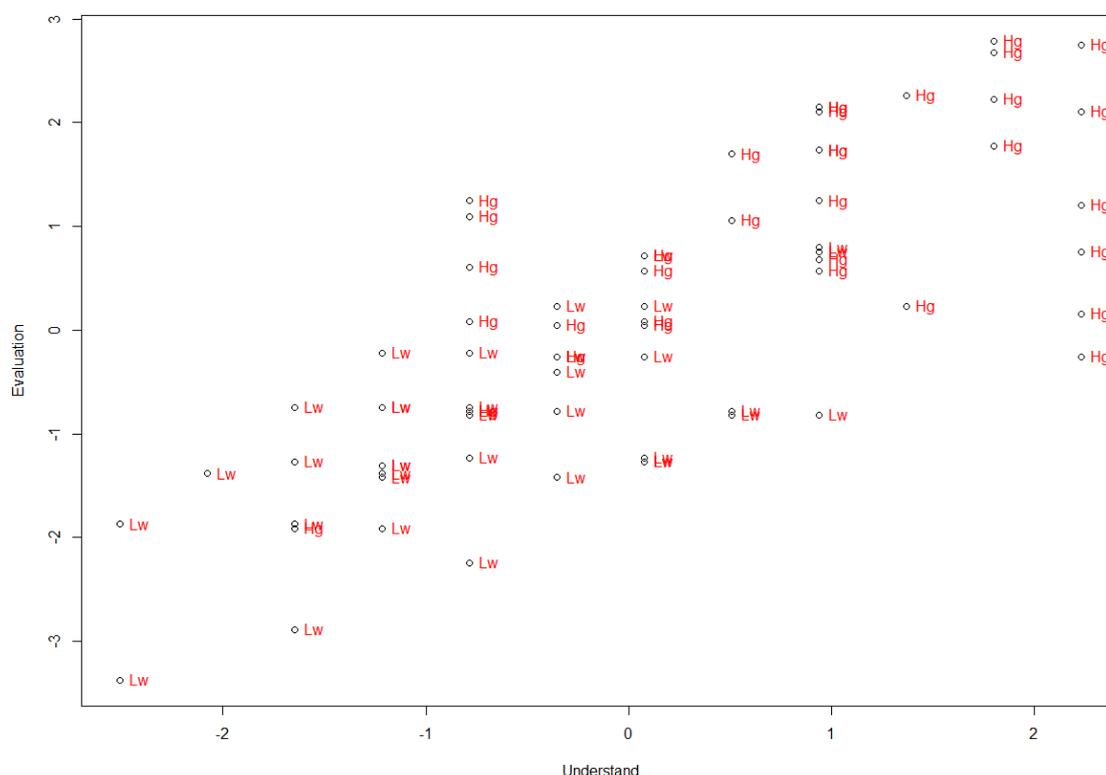
The corresponding loadings for calculating discriminant scores are shown in column (A) in Table 5a. Evaluation aspect had the highest separation value (69.5760) with respect to other variables. Thus, it got the largest absolute value of loading (-1.2619) in the discriminant function. Simply speaking, a student who got a high ability in evaluation skills would have a high chance to be classified as a high-level student.

The classification rule is that when the resultant discriminant score of a student is less than -

0.065, he/she should be classified as a high-level student; vice versa. The classification errors are shown in Table 5b. It can be observed that the accuracy of classification is quite high based on the training data set.

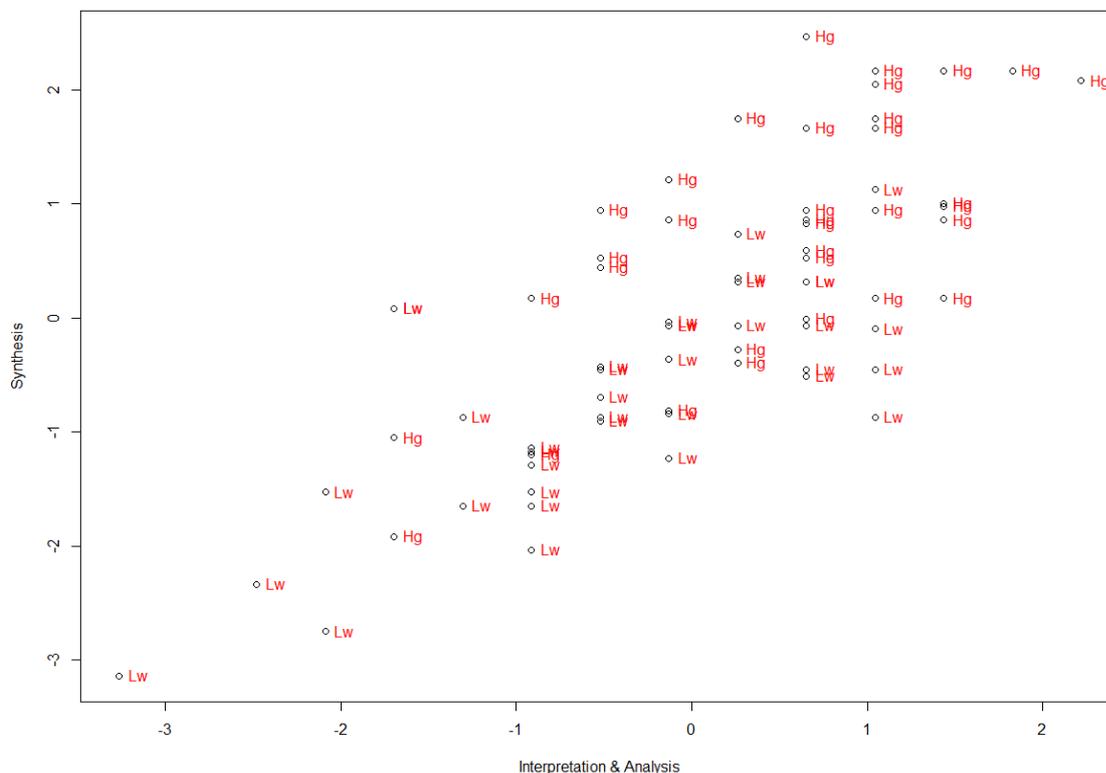
To simplify the interpretation, we ignore not so important contributors in the discriminant function; i.e., those aspects with discriminant coefficient values  $< 0.4$ . The resultant pattern is shown in column (B) in Table 5a. Only evaluation, understanding, synthesis and interpretation & analysis are the important contributors to the differentiation of low-level and high-level performance students. The discriminant function would be regarded as a linear contrast between the aspects of evaluation (-1.2619) and understanding (-0.5749), and the aspects of interpretation & analysis (0.6971) and synthesis (0.4638). The separation of the simplified discriminant function is equal to 90.7256, which is 93.54% of the full discriminant function. The corresponding scatter plots of standardized scores of these aspects showing the group labels are displayed in Figure 1a and Figure 1b below.

**Figure 1a: Scatter plot of the standardized scores of the aspects-  
Evaluation vs. Understanding**





**Figure 1b: Scatter plot with group labels of the standardized scores of the aspects -  
Synthesis vs. Interpretation & Analysis**

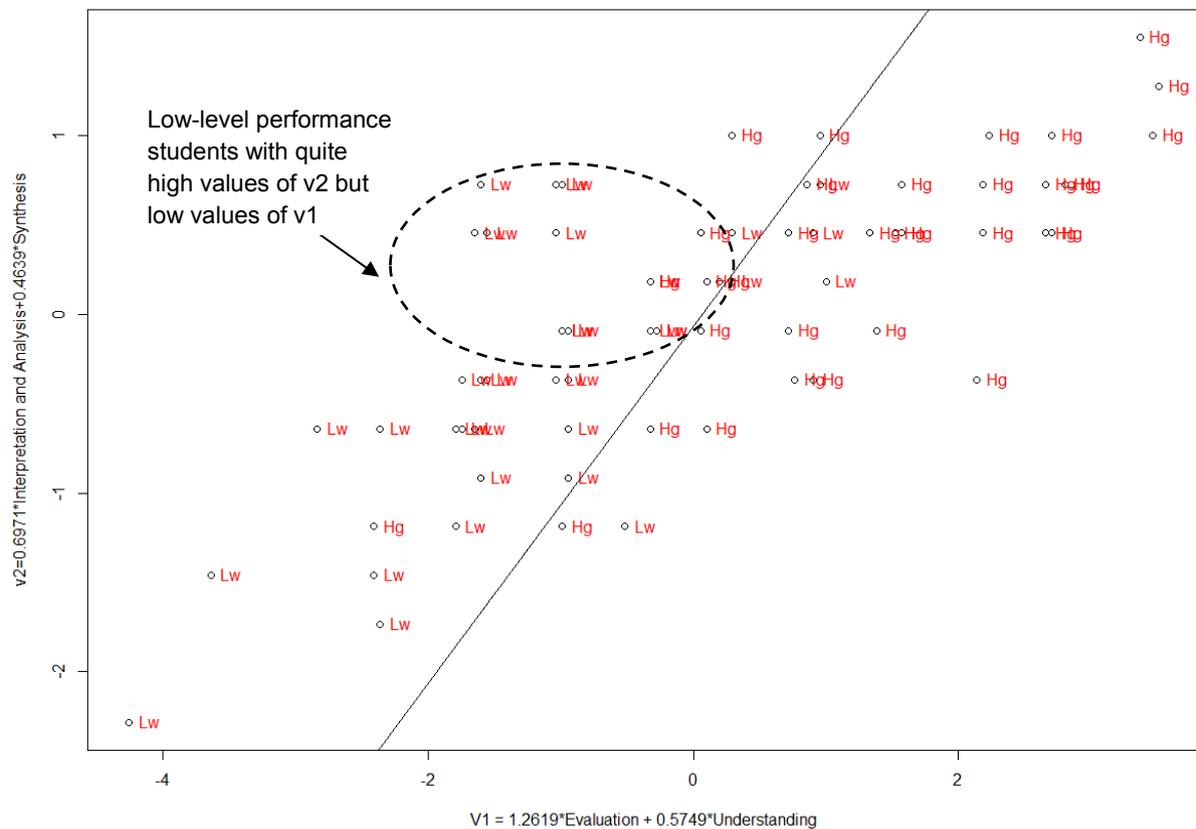


From Figure 1a, it can be observed that students of high-level and low-level performance were quite well separated with respect to the aspects evaluation and understanding (note: separation of the derived variable  $v1$  ( $1.2619 \cdot \text{std-Evaluation} + 0.5749 \cdot \text{std-Understanding}$ ) = 70.2915). In layman terms, it implies that it is not likely that low-level performance students could have a high level of ability with respect to these two aspects. On the other hand, these two groups were quite inter-mixed with respect to the aspects synthesis and interpretation & analysis (note: separation of the derived variable  $v2$  ( $0.6971 \cdot \text{std-Interpretation \& Analysis} + 0.4638 \cdot \text{std-Synthesis}$ ) = 26.7171). In layman terms, it implies that it is likely that low-level performance students still could have a quite high level of ability with respect to these two aspects.

We could display classification results of LDA graphically using the derived variable  $v1$  ( $1.2619 \cdot \text{std-Evaluation} + 0.5749 \cdot \text{std-Understanding}$ ) and  $v2$  ( $0.6971 \cdot \text{std-Interpretation \& Analysis} + 0.4638 \cdot \text{std-Synthesis}$ ) in Figure 2 below.



**Figure 2: Scatter plot of derived variables v1 vs. v2 with the group labels and the line:  $-v1+v2=-0.065$**



From the figure, the followings could be observed.

- i. It is rare that students, who were low in the ability of interpretation & analysis and synthesis, could have a high level of ability in evaluation and understanding. It suggests that relatively speaking, skills of synthesis and interpretation & analysis are low-order; while that of understanding and evaluation are high-order.
- ii. A number of students (the circle portion in the figure above), who had a quite high level of ability in synthesis and interpretation & analysis(i.e., his/her derived values of v2 close to or greater than 0); but only a low level of ability in evaluation and understanding, were labeled as having low-level performance

Simply speaking, the low-level performance students in LS exam did not do well in the aspects of evaluation and understanding; although quite a number of them were quite good at synthesis and interpretation & analysis. For these students, it is likely that they could have better exam results, if they had been equipped well with the skills in evaluation and understanding.



### **Qualitative Analysis: An Illustration of Student Performance of Various Grade Levels**

In the quantitative analysis, it is found that skills in evaluation and understanding (and application of relevant concepts) are important contributors to the differentiation of low-level and high-level performance students. In the following, examples from the live scripts of students are cited to illustrate the differences only in the evaluation aspect between these two groups of students due to limited space.

Question 2b in Paper 1 is used in the following illustration. The relevant question content and the corresponding marking guidelines are respectively shown in Appendix 1. The question concerns discussion whether the Hong Kong government should ban ‘medically unnecessary’ plastic surgery on under-18s through legislation. Definitely, there are two opposite views: One supports the ban and the other is against the ban. As mentioned in the marking guidelines, high marks could be gained through a detailed and critical evaluation with regard to different justifications for and against the ban and the use of appropriate concepts (e.g. self-perception, self-esteem, peer pressure, individual freedom, legislation) when formulating his/her arguments. Based on the information of the question provided, it is learned that plastic surgery is common amongst youngsters in Hong Kong.

“愈來愈多香港青年人進行整形外科手術。...”

Then two opposite views had been already presented in the question for discussion.

“我們關注到更多青年人以至家長會忽略這種手術的風險和後果。由於侵入性手術\*對發育中的青年人有潛在危險，因此有需要實施禁令。”

“然而，類似禁令的提案卻在廣州遭受批評。一位教育專家說：「培養18歲以下人士的個人成長是學校和家庭的責任，不應以法律限制青少年的自由。」”

*Q2b in Paper 1: Responses of High-level Performance Students (Level 5 or above) Related to Evaluation Aspect*

*Level 5\*\* (the question mark obtained was 23 marks out of 28):*

The stand of the candidate was clearly stated right at the beginning. He/she was against the ban.

醫療上非必要的整形手術是指無關生命需要、外貌美麗而進行的醫學性手術。而



我認為政府不應立法。

Next, the candidate gave relevant points against the ban. In the arguments, some relevant concepts were appropriately quoted, such as individual freedom and legislation. Besides, a number of examples were quoted to support his/her arguments.

從法治而言，**整形是個人權利自由**，不應加以干涉。香港**《基本法》及《國際人權公約》**列明只要不損他人利益，市民是有權追尋自我的人生自由，而改變外貌是屬其中一個無損他人的個人權利。

政府若立法禁止未滿 18 歲的青少年做個人外貌的手術**是侵害市民自我追求個人價值的權利，不符香港本來自由，政府不干涉市民私事的一般價值觀。**

再者，成立以後有反效果—政府立法禁止未滿 18 歲的青少年整形，加上以往有意實施強制青少年**驗毒的計劃**，令本來已深感政府以法律侵害個人自由的追求獨立的青少年再加不滿，到時社會爭議不斷，**青少年怨氣上升**，未必足以用法律可規限補救。

He/ she attacked the opposite views supporting the ban, namely: (i) legislation is essential to reduce the risk of ‘medically unnecessary’ plastic surgery, and (ii) legislation could change the value system of the youth. Examples were cited to support his/her arguments.

事實上，**立法不具廣泛性及有不少漏洞**。首先，以**墜胎**為例，本地未成年少年及有一定身孕月份的人墜胎是違法的。但近年因而往內地，如深圳墜胎的青少年人卻有增無減。可見即使本土立法，但青少年仍可到其他地方，如規管不嚴的內地進行手術，豈非把青少年推向其他更不多保障的地區做更無規管、更危險的手術。

再言，立法禁止外圍**「賭足球」**後，香港更出現不少黑市賭場及網站，可見，只要有一定市場，非法分子必定會從其他途徑提供手術，可見法律本身**對區域的涵蓋性低**，而且只有書面限制，但不能現實地確保成效…

**有言法律至少可營造社會不支持整形的價值觀**，使「從法」的青少年不跟隨此行為。然而，這是個謬誤。青少年之所以整形最大的因素是傳媒—外國的劇集、**明星效應對追求「偶像崇拜」的青少年才是主導因素**。…以佔中為例，政府不斷從各媒體滲透「遵守法治」的精神，但青少年仍按社交媒體主導，**不斷參加佔中**，…不如把資源**使用在價值教育上**，更具針對性，更具果效…



*Q2b in Paper 1: Responses of Low-level Performance Students (Level 3 or 4) Related to Evaluation Aspect*

*Level 3 (the question mark obtained was 14 marks out of 28):*

The stand of the candidate was also clearly stated right at the beginning. He/she was against the ban. The argument was that youngsters should have the right to choose. But no examples were provided to support his arguments.

我認為香港政府不應立法禁止。  
根據資料 B，教育專家認為政府不應以法律限制青少年的自由，因為首先，年青人亦有他們的人權和自由。他們有權利去選擇是否進行整形外科手術，法律不能限制青少年的自由…

Next, the student presented the benefits from plastic surgery to support his stand.

另外，年青人進行整形外科手術有助他們成長。因為當年青人進行了外科整形手術後，他們便會因而變得更美和更有自信。根據資料 A，美麗的外表能使他們變得更加有自信心和有自尊…

He/she mentioned, after the plastic surgery a person would become more beautiful and thus more confident. However, the risk and dangerous consequences of the plastic surgery were totally ignored.

Finally, the student presented the information about conflicting views already provided in the exam paper again. Then he stated that he preferred the view that youngsters and their families should take the responsibilities to make their choices instead.

根據資料 B，一位官員說侵入性手術對發育中的青少年有潛在危險，所以應實施禁令。而且近日有人在接受手術期間死亡，可見整形外科手術的風險很大，所以政府應禁止他們進行手術。但我不認同這說法，因為考慮風險是青少年自己及他們家庭的責任，不應由政府決定風險因素而去禁止他們進行手術。根據資料 B，一位教育專家說，培養青少年個人成長是學校和家庭的責任，不應以法律限制青少年的自由。



However, the student had never provided his own reason and supportive examples/evidences why banning the plastic surgery through legislation was not a good and effective measure.

### **Summary and Conclusions**

The HKAGE student public exam performance in LS relatively clustered at the ‘low level’ (i.e., Level 3 or Level 4). This phenomenon may partly due to the nature of LS questions. However, this may reflect some deficiencies of our students in particular attributes when expressing their views and arguments in the responses of LS exam questions.

For the study, the followings are concluded:

- i. The difference in paper scores between low-level performance (i.e., Level 3 or Level 4) students and high-level performance (i.e., Level 5 or above) students was highly significant.
- ii. A significant difference in paper scores was found between male and female student members. This is in line with the traditional point of view that at secondary level females could articulate their explanations and arguments better than males.
- iii. Besides, active student members did performance significantly better than the inactive ones, in terms of paper scores.
- iv. With respect to scores of eight aspects, only grouping based on grade level showed statistically significant differences.
- v. It is observed that the low-level performance students in LS exam did not do well in the aspects of evaluation and understanding; although quite a number of them were quite good at synthesis and interpretation & analysis.

Illustrations using examples extracted from their live scripts reflected how the low performance level students performed in the aspect of evaluation. The sampled scripts showed that Level 3 students did not attempt to argue against the opposite views in their responses at all. Moreover, with respect to the aspect of understanding, the sampled scripts showed that the low performance level students used the inappropriate/irrelevant concepts and/or used the concepts without any elaborations.



Q2 in Paper 1 of 2015 HKDSE Liberal Studies

2. 細閱以下資料：

**資料 A：**取材自 2011 年 2 月 14 日的報章新聞

愈來愈多香港青年人進行整形外科手術。一名 23 歲的大學女畢業生表示，在開始求職前，已花費港幣四萬元進行一項把眼睛擴大的整形外科手術。她年僅 17 歲時已把鼻子整形。她說：「小時候，我認為自己長得相當醜陋，我的外表一直被同學取笑，但我現時在社交場合中感到比較輕鬆自在。」她的一些朋友亦正考慮接受手術，並曾徵詢她的意見。

一位香港整形外科醫生說，有一個案例是一名 14 歲女童在家長支持下進行眼皮手術。他說，一些顧客選擇整形外科手術，是因為他們認為值得為自己的事業「投資」，另一些則希望看來較為西化。他說，名人宣傳整形外科手術有助令這種手術更能被人接受。

**資料 B：**取材自 2014 年 2 月 27 日的報章新聞

台灣已禁止為未滿 18 歲人士進行「醫療上非必要」的整形外科手術，衛生福利部表示，已禁止為未成年人士進行鼻子整形、隆胸及使眼睛看來更大的割「雙眼皮」等手術。基於有報道指一些小至九歲的兒童接受手術，而且其中一些手術失敗，政府遂採取行動。

在台灣實施禁令之前，若經家長或合法監護人批准，未滿 18 歲人士可以接受整形外科手術，但有衛生官員指有些人為了進行療程而虛報年齡。一位官員說：「我們關注到更多青年人以至家長會忽略這種手術的風險和後果。由於侵入性手術\*對發育中的青年人有潛在危險，因此有需要實施禁令。」隨著近日有人在接受整形外科手術期間死亡，人們更關注這種外科手術的安全性。

然而，類似禁令的提案卻在廣州遭受批評。一位教育專家說：「培養 18 歲以下人士的個人成長是學校和家庭的責任，不應以法律限制青少年的自由。」

\*侵入性手術是一種刺穿或割破皮膚或進入體腔的外科手術。

- (a) 就資料 A，指出及解釋愈來愈多香港青年人進行整形外科手術的**兩個**原因。 (6 分)
- (b) 參考所提供的資料及就你所知，香港政府應否立法禁止未滿 18 歲人士進行「醫療上非必要」的整形外科手術？論證你的立場。 (8 分)