Overview of Gainful Use of TSA 2020 Materials (GU)

Background of 2020 GU

- Impacted by the pandemic, the Education Bureau (EDB) announced on 25 February 2020 to suspend the Territory-wide System Assessment (TSA) 2020 (including all oral and written assessments)

- With a view to gainfully use the prepared TSA materials, the EDB, having consulted the school sector, decided to make use of these assessment resources, and supplemented with a questionnaire survey.

- The EDB tasked the Hong Kong Examinations and Assessment Authority (HKEAA) and the Hong Kong Education City (HKEdCity) to compile a set of assessment resources originally designed for the TSA 2019/20, covering the two language subjects (reading, listening and writing) and Mathematics at Primary 3 (P3), Primary 6 (P6) and Secondary 3 (S3).

Purposes of 2020 GU

- To enable schools, parents and the EDB to understand how class suspension upon the pandemic and various school-based arrangements on "suspending classes without suspending learning" have affected students' ability in Chinese, English, and Mathematics, and use the findings as the basis to enhance the assessment literacy of stakeholders

- To enable schools to understand students' learning progress and timely provide them with appropriate teaching resources and support

Features of 2020 GU

- To cater for different school contexts and needs, both the ***printed*** and ***online*** STAR versions were provided for schools to choose from and decide whether and how to use them based on their school-based situations

- As well as arranging printing, delivering and collecting of these assessment resources to/from schools, provision of marking services on writing papers by the HKEAA

Advantages

- To continue to provide data to participating schools for learning and teaching despite the setting of the COVID-19 pandemic

- Instant feedback of individual student/class performances from the STAR platform

- Performance analysis for participating schools (quantitative data of own school vs all participating schools as well as performance analysis descriptions among all participating students) provided by HKEAA

Source of Data

- Data from schools taking the STAR online assessment (Mathematics, Listening & Reading components of Chinese and English)

- Data from schools using marking services on Chinese and English writing scripts (pen-and-paper)

- Coverage of BC in STAR online assessment and writing assessment:

- all BCs in language subjects

- most BCs in Maths

- A good reference to indicate students' performance in terms of strengths and weaknesses as well as their learning progress

Limitations of 2020 GU

1. Sample not as representative as in ordinary TSAes
2. Lengthened Assessment Period
3. Dual Mode of Assessment
4. Difference in Motivation among students of different grade levels
5. How familiar students and teachers on STAR platform
6. Performance Analyses focus more on school-level feedback

Features of 2020 GU Performance Analyses

- Performance analysis for participating schools
- quantitative data (correct percentage of each item) of own school vs all participating schools
- qualitative data: performance analysis descriptions (including students' strengths and weaknesses) among all participating schools

Performance Analysis (Quantitative)

學校報告－數據分析

- 題目
- 正確答案
- 學校答對率
- 參與學校整體答對率

Hong Kong Examinations and Assessment Aut...
善用 2020 全港性系統評估材料分析
Analysis on Gainful Use of TSA 2020 Mater...

樣本

學校名稱:
School Name:

級別 Level:	中三 Secondary 3
科目 Subject:	數學 Mathematics
範疇 Dimension:	N.A.
卷別 Paper:	9M1
學生人數 Number of students:	221

Mathematics

題號 Item no.	題目 Question	正確答案 / 建議答案 Correct answers / Suggested answers	學校答對率 [1,2] School correct percentage[1,2] (%)	參與學校整體答對率 [3] Overall correct percentage of participating schools[3] (%)
Q01	以下是一位小販為以一位小數的乘算題，每個方格代表一個數字。下列哪項結果是不可能是該數學題的值？ $\square.5$ $\times \square\square$ A. 4 B. 4.35 C. 4.365 D. 4.8	C	66.5	75.0
Q02	利用下列各句子中應以率或比表示數量間的關係。 (i) 某班漲在最近跳蚤中，全年級自和獨黑的場次分別是 47 次和 37 次。 (ii) 某運動員以 3 分鐘完成仰臥起坐 114 次。 (i) (ii) A. 率 比 B. 比 率 C. 比 比 D. 率 率	B	91.0	75.0

備註：1. 學校有 5 個或以上學生參與該科各卷別的評估，方可獲相關數據。
2. 「學校答對率」是指學校學生作答該題的答對率。
3. 「參與學校整體答對率」是指所有參與學校的學生作答該題的答對率。由於參與學生數目及參與學校的概況可能與香港所有學校的整體情況不完全一致，學校應審慎解讀分析內的結果。
* 由於學生評估資源庫(STAR)的評估以網上形式進行，在不影響學生理解評估題目及答案的選擇下，部分評估題目及答案的表達形式或與派發予學校的紙本版本有所不同。

Performance Analysis (Quantitative)

數據分析 –
學校及所有參與學校

題目

學校

參與學校

樣本

Chinese Reading
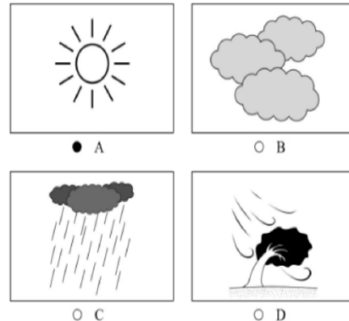
題目 Que...		正確答案 / 建議答案 Correct answers / Suggested answers	學校答... School ...ct percen...2 (...	...corre... percenta... particip... schoo... (...
Q01 *	下列哪一幅圖符合星期六的天氣? ● A　　　○ B ○ C　　　○ D	A	74.1	45.5
Q02	為什麼弟弟悶悶不樂? 因為 ● A. 爸爸不能陪他騎單車。 ○ B. 媽媽不帶他到公園玩。 ○ C. 媽媽不讓他玩遊戲機。 ○ D. 姐姐沒空教他做專題研習。	A	100.0	75.6

備註:1. 學校有 5 個或以上學生參與該科各範疇的評估,方可獲相關數據。

2.「學校答對率」是指學校學生作答該題的答對率。

3.「參與學校整體答對率」是指所有參與學校的學生作答該題的答對率。在模擬全港所有學校的分佈時,採用加權方法計算該百分比。

* 由於學生評估資源庫(STAR)的評估以網上形式進行,在不影響學生理解評估題目及答案的選擇下,部分評估題目及答案的表達形式或與派發予學校的紙本版本有所不同。

Performance Analysis (Quantitative)

School's correct percentage vs Overall correct percentage of participating schools

English Listening

香港考試及評核局
Hong Kong Examinations and Assessment Authority
善用 2020 全港性系統評估材料分析
Analysis on Gainful Use of TSA 2020 Materials

附　　件
Annex
機　　密
Confidential

SAMPLE

學校名稱:
School Name:

級別 Level:	小六 Primary 6
科目 Subject:	English Language
範疇 Dimension:	Listening
卷別 Paper:	6EL1
學生人數 Number of students:	92

題號 Item no.	題目 Question	正確答案 / 建議答案 Correct answers / Suggested answers	學校答對率 [1,2,3] School correct percentage [1,2,3] (%)	參與學校整體答對率 [4] Overall correct percentage of participating schools [4] (%)
P1A* Q01	1. Cecilia learns to dance _____. ○ A. at home ● B. at a dance school ○ C. at her teacher's home ○ D. in a modern building	B	90.2	75.0
P1A* Q02	2. When Cecilia says 'I may learn that too', she wants to _____. ● A. learn modern dance ○ B. learn ballet ○ C. be patient ○ D. be a teacher	A	72.8	75.0

Remark: 1. Schools with 5 or more students participating in each dimension in the subject are provided with related assessment data.

2. "School correct percentage" refers to the correct percentage of an item attempted by students in the school.

3. The "School correct percentage" in Period 1 would be adjusted after the review of answers for computer-marked "fill-in-the-blank" items by HKEAA's subject experts.

4. The "Overall correct percentage of participating schools" refers to the correct percentage of an item attempted by students of all participating schools. Since the numbers and profile of participating students and schools may not correspond adequately to that of all schools in Hong Kong, schools are advised to exercise prudence in interpreting the results in this analysis.

* Due to the design of the STAR platform, "Part" in the paper version is renamed to "Task" in the online version, e.g. Part 1A to Task 1.

1

Performance Analysis (Quantitative)

OWN SCHOOL VS ALL PARTICIPATING SCHOOLS

SAMPLE

English Writing
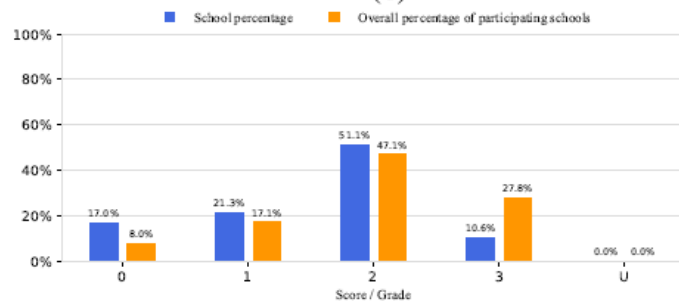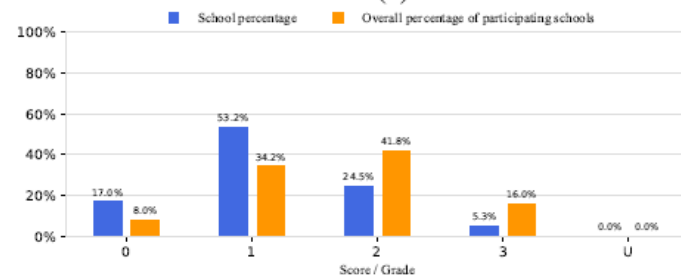
NEW: writing scores presented in bar charts

Performance Analysis (Quantitative)
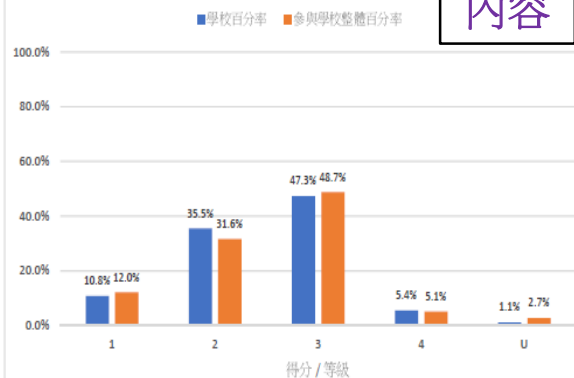
樣本

數據分析–學校及所有參與學校

內容

2a. 短文寫作：內容

結構

2b. 短文寫作：結構

文句

2c. 短文寫作：文句

詞語運用

2d. 短文寫作：詞語運用

錯別字

2e. 短文寫作：錯別字

標點符號

2f. 短文寫作：標點符號

12
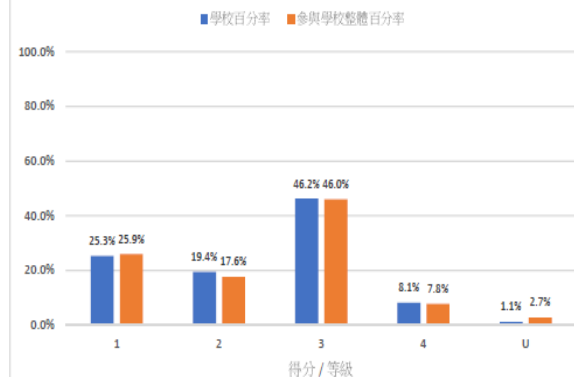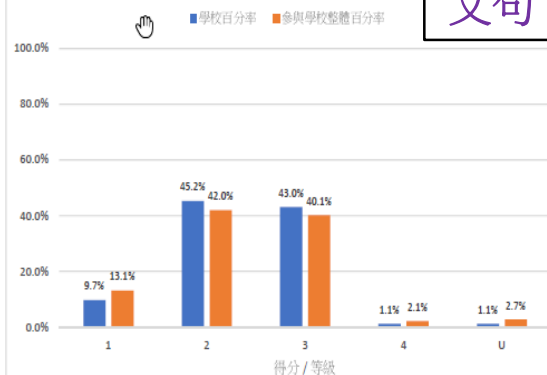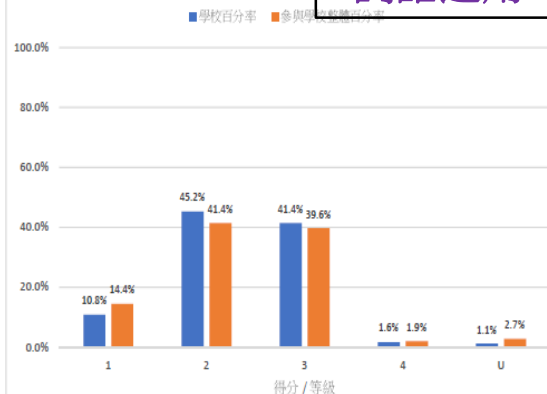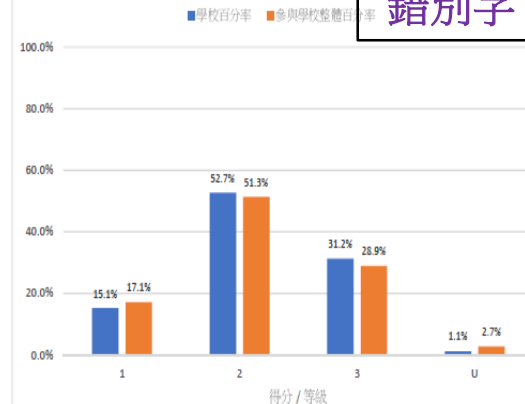
Performance Analysis (Qualitative)
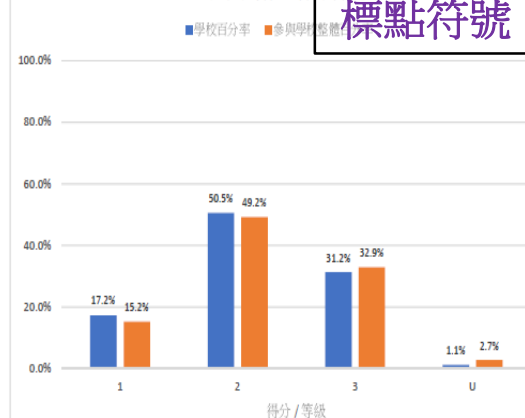
English Listening

SAMPLE

CONFIDENTIAL

Gainful Use
of
TSA 2020 Materials

Primary 6 Listening

Analysis of Students' Performance of
Participating Schools in
English Language

Hong Kong Examinations and Assessment Authority

November 2020

1. **Students' Performance of Participating Schools in Listening**

Table 1 and Figure 1 show the overall performance of Primary 6 students taking the listening paper.

Table 1 Overall Correct Percentage of Participating Schools in Listening

Paper: Skill	Overall Correct Percentage of Participating Schools (%)[1]
6EL1: Listening*	77.0%

Figure 1 Overall Correct Percentage of Participating Schools in Listening
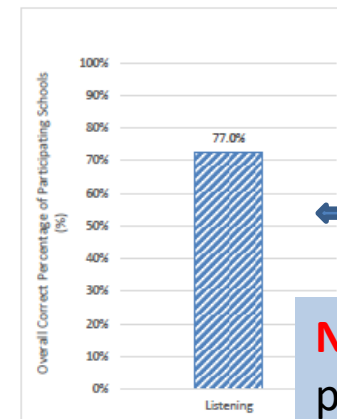
> Correct % of all participating schools

> **NEW:** figure presented in a bar chart

Remark: [1] The "Overall correct percentage of participating schools" refers to ... by students of all participating schools. Since the numbers and p... may not correspond adequately to that of all schools in Hong Kong... in interpreting the results in this analysis.

* Due to the design of the STAR platform, "Part" in the paper version is renamed to "Task" in the online version, e.g. Part 1A to Task 1.

Performance Analysis (Qualitative)

SAMPLE

2. General Observations

Skill	Observations
Listening	• Students generally performed better in shorter listening tasks with a relatively light listening load, e.g. 'Lunchtime Radio Show' (as a conversation) and 'Saturdays' (as personal descriptions), than they did in a longer task with a more substantial listening load, i.e. 'Magic Brush' (as a story). • The majority of students performed well in skills like interpreting intonation with explicit expression and understanding the connection between ideas. • The majority of students performed very well in extracting single pieces of straightforward information. However, some students had difficulty extracting multiple pieces of information. For example, in order to identify 'the prices are not high' as the thing Michelle 'likes most' about the department stores, students needed to extract 'best of all' and 'things are not expensive' from the spoken text. • Many students were able to identify the sequence of events and predict the likely development of the story 'Magic Brush'. This indicated that they were able to follow the development in the story and handle basic story elements such as characterisation, plot and setting. • Quite a number of students understood onomatopoeia expressions. They identified 'Whoosh' as the sound of something 'moving quickly' by referring to the textual clue, 'Suddenly...' in a spoken text. • Students had most difficulty in the note-taking task although it was a 'short' text. About half of the students had difficulty identifying the ordinal number 'fifth' for the date (5 July) and misinterpreted it as '15'. They were also unable to spell words like 'sunset'.

3. Data Analysis (See Annex)

The annex includes an analysis of school's correct percentage versus all participating schools' overall correct percentage for each item.

4. Conclusion

The performance of Primary 6 students in listening was good. They were able to extract a specific piece of straightforward information and understand the connection between ideas. They could discriminate between intonations where the expression was explicitly presented. They could also sequence events with the help of pictorial cues given as options and predict the likely development of a story. However, spelling has remained a major area of concern.

Overall Performance of all participating schools
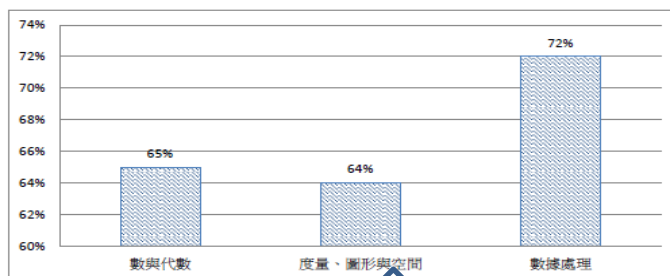
Performance Analysis (Qualitative)

文字描述 – 所有參與學校

Mathematics

樣本

1. 參與學校學生在數學科評估各分卷及學習範疇的表現

學生參與 2020 年中三級數學科評估，各分卷及學習範疇成績詳列如下。

表 1 各卷別及學習範疇的百分率

卷別：範疇	參與學校整體百分率(%)*
9M1: 數與代數	64
9M2: 數與代數	65
9M1: 度量、圖形與空間	68
9M2: 度量、圖形與空間	63
9M1: 數據處理	68
9M2: 數據處理	73

圖 1 各學習範疇的百分率

整體而言，中三級學生在各學習範疇的表現，以「數據處理」範疇的表現較佳，「數與代數」和「度量、圖形與空間」範疇的表現則稍遜。以下略述他們在各學習範疇的表現。

New: Overall correct % for each dimension in Maths and presented in a bar chart

2. 觀察

「數與代數」範疇

學生在「數與代數」範疇的表現一般。他們大致對有向數的概念及運算有基本的認識。學生亦初步能以代數語言建立問題，例如由簡易的情境建立簡易方程／不等式、從已知數個連續項的等差數列中寫出其後數項去描述數列的規律等，他們能掌握一元一次不等式的基本概念和可將一以科學記數法表示的數化為小數。

學生在「數與代數」範疇各學習單位中表現如下：

數與數系	• 有向數及數線：不少學生能利用有向數來表示八達通卡內的餘額和透支額，他們普遍能展示對整數在數線上的序的認識，並作有向數的簡單運算。
	• 數值估算：逾半學生能判斷在情境中所提及的數值是以估算或是計算準確值獲得，他們不少更能鑑定計算結果的合理性。然而，大部分學生未能根據題意估計數值並作出合理解釋，表現未如理想。
	• 近似與誤差：學生普遍能將一以科學記數法表示的數化為小數，惟不少學生未能把大於 1 的小數捨入至 2 位小數，或未能把小於 1 的小數捨入至 3 位有效數字。
	• 有理數及無理數：半數學生能在數線上標示某分數的位置，亦可展示出對 $\sqrt{a}$ 的整數部分的認識。
比較數量	• 百分法：過半學生能解簡單買賣問題，近半學生則能解涉及折舊及以複利息計算的問題，惟在涉及求年利率的單利息問題上，表現未如理想。
	• 率及比：不少學生能展示對率及比的差異的認識，並運用率及比解簡單現實生活中的問題，惟只有部分學生能從已知的比 $a:b$ 及 a 或 b 的值求餘下的數量。
觀察規律及表達通則	• 以代數語言建立問題：學生普遍能由簡易的情境建立簡易不等式，及從已知數個連續項的等差數列中寫出其後數項去描述數列的規律。逾半學生能將數值代入公式中求指定變數的值，及把題目情境改寫為代數語言，惟不少學生仍未能分辨 $(-2)^n$ 及 $-2n$ 的差異。
	• 簡易多項式的運算：過半學生能從代數式中分辨多項式，他們能處理單項式乘以二項式/三項式和多項式的加、減。然而，學生在處理二項式乘以二項式方面，及對多項式詞彙的認識尚有進步空間。
	• 整數指數律：不少學生能求 a^n 的值，惟他們普遍未能掌握 $x^{-n} = \frac{1}{x^n}$

Skeleton of 3 subject sub-sessions

- General performances of participating students in each sub-paper (i.e. Listening, Reading and Writing in language subjects as well as Mathematics)
- Students' strengths and weaknesses with illustrations of items and students' exemplars
- Quantitative data (for item level): Correct percentage of all participating schools

Skeleton of 3 subject sub-sessions

- GU performance analyses obtained by Participating Schools

	Individual school	All participating schools
Data analysis (Quantitative)	✓	✓
Descriptions (Qualitative)		✓