

# JSA

Junior Secondary Student Assessment

## 初中階段學生 學習進展測評



Assessment  
International  
評核國際(香港)有限公司

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# 初中階段 學生學習進展測評

## Junior Secondary Student Assessment (JSA)

自從香港的教育改革以香港中學文憑考試取代原來的中學會考及高級程度會考，從中一到中六，就再沒有一個有參照及診斷功能的考試。學生從中一到中六的學習，成了一個暗箱。老師們憑各自努力引領學生在文憑試中取得好成績。但由於參照的缺失，無法了解本校學生與校外學生的差異，也難以對學生的學習差異有一個切實的、有測評結果支持的診斷。有鑒於此，為更好地為前線老師及學生提供有用的支持，評核國際（香港）團隊設計及開發了“初中階段學生學習進展測評”工具。

### 快速導覽

如果您想瞭解評核國際（香港），  
請瀏覽網頁：[www.assessint.com](http://www.assessint.com)



# 研發團隊簡介

## 羅冠中教授

首席測評師



國際著名測評學家羅冠中教授於 1995 年取得 Murdoch University 的數學心理學博士學位。曾於本地測評機構任職多年，作為測評技術及研究總監，帶領團隊負責香港中學文憑考試標準參照成績報告 (Standard referenced reporting, SRR) 的設計及開發。在加入本地測評機構前，羅教授於中國內地、新加坡及澳洲多所大學擔任教授及客座教授等學術職位。

羅教授主要研究領域包括開發用於成就及態度測量的多種心理測量模型及參數估計演算法。此外，出版之刊物亦獲國際推崇，而羅教授帶領開發／共同開發的測試數據分析及處理的電腦程式更得到全球教育行業若干主要考試機構及學術研究人員廣泛使用。



## 馬健慶先生

學科專家：數學

馬先生為資深數學學科老師及測評專家。曾在本地測評機構任職多年，負責TSA數學科的測評工作。對中三及其它年級的數學測評有豐富的經驗。

## 劉偉康博士

測評師



劉博士於長春藤聯盟的康奈爾大學取得工程碩士、香港科技大學取得博士學位。曾於芝加哥的世界頂尖工程公司工作多年，具備美國專業工程師資歷。劉博士曾於香港科技大學、香港理工大學工作多年，於國際性會議及講座發表研究成果。他在數學、物理及大數據、人工智能方面有著豐富經驗。

### 劉啟彬 先生

學科專家：英文

劉先生為資深英文學科老師及測評專家。曾擔任香港教育局國際質素保證主任，負責英文科的督學工作。並在有關機構負責英文教材編撰。對中三及其它年級的英文測評有全面的掌握。

### 常蕤 博士

測評師，數據分析專家

常博士為資深數據分析專家。曾本地測評機構任職多年，負責大規模考試及評核的數據分析工作。

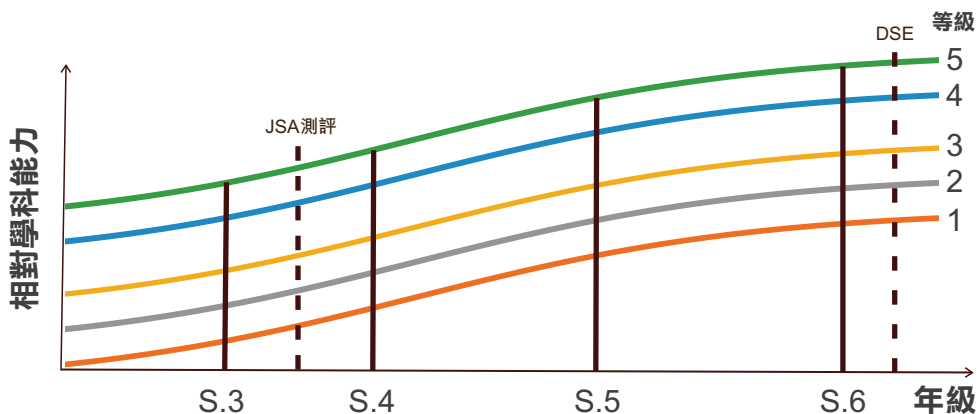


# 初中階段 學生學習進展測評(JSA)簡介

初中階段學生學習進展測評 (Junior Secondary Student Assessment, JSA) 是由國際著名測評學家羅冠中教授率領的評核國際 (香港) 團隊研發的一套獨家評核工具。目標是為有需要的辦學團體提供中三學生對初中主科中、英、數的專業測評，而所得出的學校及學生報告能有效地讓校方及老師進一步了解學生於全港之學業水平，並據此在後三年的學習中查漏補缺，使學生的學習能力得到有效的發揮，為文憑試 DSE 打下堅實的基礎。

# JSA 的優點在於：

- ① 運用現代測評技術，專業及科學地評估學習表現。
- ② 評估內容緊貼學校的教學安排及課程進度。
- ③ 試卷難度與題目區分度適中，比中三 TSA 更能準確測出學生的強弱項。
- ④ 採用標準參照報告學生成績，與 DSE 的水平參照報告模式接軌。評定等級為 1 (最低級) 到 5 (最高級)。不設 5\* 及 5\*\*，但報告學生在第五級中的百分位。
- ⑤ 學生及家長能掌握學習發展優勢及預測將來的 DSE 成績。為選科參考及精確分析為往後 DSE 作好準備。
- ⑥ 老師早於 DSE 之前三年了解整體及個別學生程度，方便因材施教及製定教學方向。
- ⑦ 校方自行決定資料及數據發放對象或形式，避免承受不必要的評論或壓力。



## 學校報告內容

- ① 全校平均成績；
- ② 全校在個學習範疇上的平均等級；
- ③ 全校在各題上的平均分；
- ④ 全校在各題上的平均表現與題目難度比較；
- ⑤ 全校在各學習範疇的強弱分析；
- ⑥ 全校學生修正謹慎度 (Modified Caution Index, MCI) 分析；及
- ⑦ 全校在各學習範疇上三年後的香港中學文憑試的成績預測。

## 學生報告內容

- ① 學生個人成績及等級；
- ② 學生個人在各學習範疇上的等級及比較；
- ③ 學生個人在各題上的答題細節，推算表現及錯誤原因分析；
- ④ 學生個人在各題上的表現與題目難度比較；
- ⑤ 學生個人在各學習範疇上的強弱分析；
- ⑥ 學生個人在各學習範疇上與本校其他學生表現的比較分析。



立即報名



# 英文測評

The English Assessment includes three papers and there is no break between each paper. The details of these three papers are summarized as the follows:

	Reading	Writing	Language Form and Meaning
Time Allowed	30 minutes	30 minutes	20 minutes
Question Format	30 multiple choice questions (choose from four options)	1 writing task (approximately 120 words)	20 multiple choice questions (choose from four options)
Assessment Competency	<ul style="list-style-type: none"><li>• General</li><li>• Vocabulary</li><li>• Syntactic</li><li>• Textual</li></ul>	<ul style="list-style-type: none"><li>• Grammatical</li><li>• Organisational</li><li>• Textual</li><li>• Syntactic</li></ul>	<ul style="list-style-type: none"><li>• Lexical</li><li>• Cohesive</li><li>• Morphological</li><li>• Syntactic</li></ul>
Grading	Level 1 to 5, an overall assessment level and an assessment level for each competency.		

# 數學測評

數學評估只包含一份試卷，分為三個部分。問題總數為 41 題，作答時間為 65 分鐘。試卷語言提供**中文或英文版本**選擇。

數學評估試卷三個部分的詳細信息總結如下：

<b>甲部</b> (佔40分)	20 條多項選擇題 (每題2分) 本節中的每條問題都有四個項目。學生只能選擇一個答案。
<b>乙部</b> (佔30分)	15條短題目 (每題2分) 本節中的每條問題要求簡短答案。沒有步驟或方法分數。
<b>丙部</b> (佔40分)	5條長題目(每題6分)，另一條綜合挑戰題目(10分) 本節中的每條問題要求步驟、方法及答案。步驟、方法或答案將給予部分分數。

## 評估範疇和主題

### 數與代數

- 算術
- 代數

### 度量、圖形與空間

- 幾何
- 坐標幾何
- 三角學

### 數據處理

- 統計應用
- 概率

## 成績等級

等級 1至 5，總體評估水平及提供每種能力的評估水平

# 等級水平的釐定與保持

初中階段學生學習進展測評 (JSA) 的能力水平將在 2021 年第一次釐定。以後每年將以同一標準來評定考生的能力水平 (1 至 5 級)。這樣，學生年與年的水平可以直接比較，從而了解不同年份之間學生的水平表現。



## 與中三TSA評估的比較

初中階段學生學習進展測評 (JSA) 與中三全港性系統評估 (TSA) 同樣採用標準參照設計，因此年與年之間的成績可以直接比較。但是，中三 TSA 評估的目的是學生的基本能力 (Basic Competency)，採用的題目都比較淺易，題目難度不能很好地將學生的水平區分開來。相反地 JSA 包含不同題目難度的全面覆蓋，設計了有良好區分度的測試階梯。同時採用香港中學文憑試 (DSE) 的評級方法，所以對群體而言，能比較好地預測學生將來在 DSE 的表現。

此外，中三 TSA 評估沒有學生個人成績報告而 JSA 可向有需要的學生家長提供學生的個人成績報告。

## 測試報告的發放及使用

測試及評卷工作完成後，學校報告將直接發送到學校，由學校決定學校報告的使用。學生的個人報告，將直接發送到學生家長。



# 其它測評服務



## 網上學習及測評系統

BOnLine School 為集合題庫、線上評測、智能分析及系統性學習進度報告的應用平台。目前，來自全港近 170 所中小學校的近 20,000 名學生註冊並參與了 BOnLine School 應用平台項目的先導計劃。如有興趣參與，可登入 <https://school.bonline.com.hk/teacher-registration> 或與我們聯絡。



## 中一入學前階段 學生學習進展測評 (Pre-S1 System Assessment)

該評核工具正在研發階段。並計劃在小學五年級下學期施測。測評針對小學階段學與教的特點，同樣採用水平參照報告設計，目的是將小學階段與中學階段學生學習進展測評貫通，提供學生從小學到中學的學習能力及智力發展的縱向發展圖 (vertical development map)。測評科目為中文、英文及數學。



## 其他年級學生學習 進展測評

在上述測評完全實施以後，測評國際（香港）還計劃繼續開發為其他年級學生使用的測評配套，使不同年級的學生，都能對自己的學習情況有更加適時的掌握，老師也能根據測試提供的分析報告及數據，更好的調整教學，使每一個學生都能盡量發揮長處，盡快的克服短板，取得優異的成績。

# Junior Secondary Student Assessment (JSA)

Since the **Hong Kong Diploma of Secondary Education Examination (HKDSE)** was launched in 2012 to replace the former **Hong Kong Certificate of Education Examination (HKCEE)** and the **Hong Kong Advanced Level Examination (HKALE)**, HKDSE became the main credentials for university admission in Hong Kong. During the six-year secondary school education, there is no major assessment and evaluation over the whole six years. While teachers strive to help students achieve satisfactory results from HKDSE, it is difficult to evaluate the performance difference between their students and the students from the other schools and assess students' academic abilities.

Therefore, the Assessment International team has designed and developed the **Junior Secondary Student Assessment (JSA)** to provide additional assessment result and analysis to support both teachers and students.

## Quick tour

Please visit our website at [www.assessint.com](http://www.assessint.com) to learn about Assessment International.



# Our Team

## DR LUO GUAN ZHONG

CHIEF ASSESSMENT SCIENTIST



Dr Luo obtained his Doctor of Philosophy in Mathematical Psychology from Murdoch University in 1995. He had been serving the local assessment organisation for many years as the Director in Assessment Technology and Research. Prior to his service at the local assessment institution, Dr Luo had worked in various universities in the mainland of The People's Republic of China, Singapore and Australia as professor and adjunct professor. His research interests include the development of various psychometric models and parameter estimation algorithms for achievement and attitude measures. His publications are globally recognized, and the computer programmes for test data analysis developed by him and his colleagues are used by numerous major examination organisations and academic researchers worldwide.



## MR. ANTHONY MA

MATHEMATICS SCHOLAR

Mr. Ma is an experienced Mathematics teacher and an assessment expert. He worked in a local assessment institution for many years and was mainly responsible for the assessment of TSA Mathematics for S3 and the other grades.

## DR IVAN LAU

ASSESSMENT SCIENTIST



Dr. Lau received his master's degree from Cornell University, one of the prestigious Ivy League schools, and his doctoral degree from the Hong Kong University of Science and Technology (HKUST). When he worked in a world-renowned engineering company in Chicago during his early career years, he became a licensed U.S. professional engineer.

Dr. Lau has worked on his researches at both HKUST and the Hong Kong Polytechnic University. During his years at universities, he has published his research findings in several international conferences and seminars. Dr. Lau has extensive knowledge and practical experience in Mathematics, Physics, Big Data analysis and Artificial Intelligence.

## MR. PAUL LOU

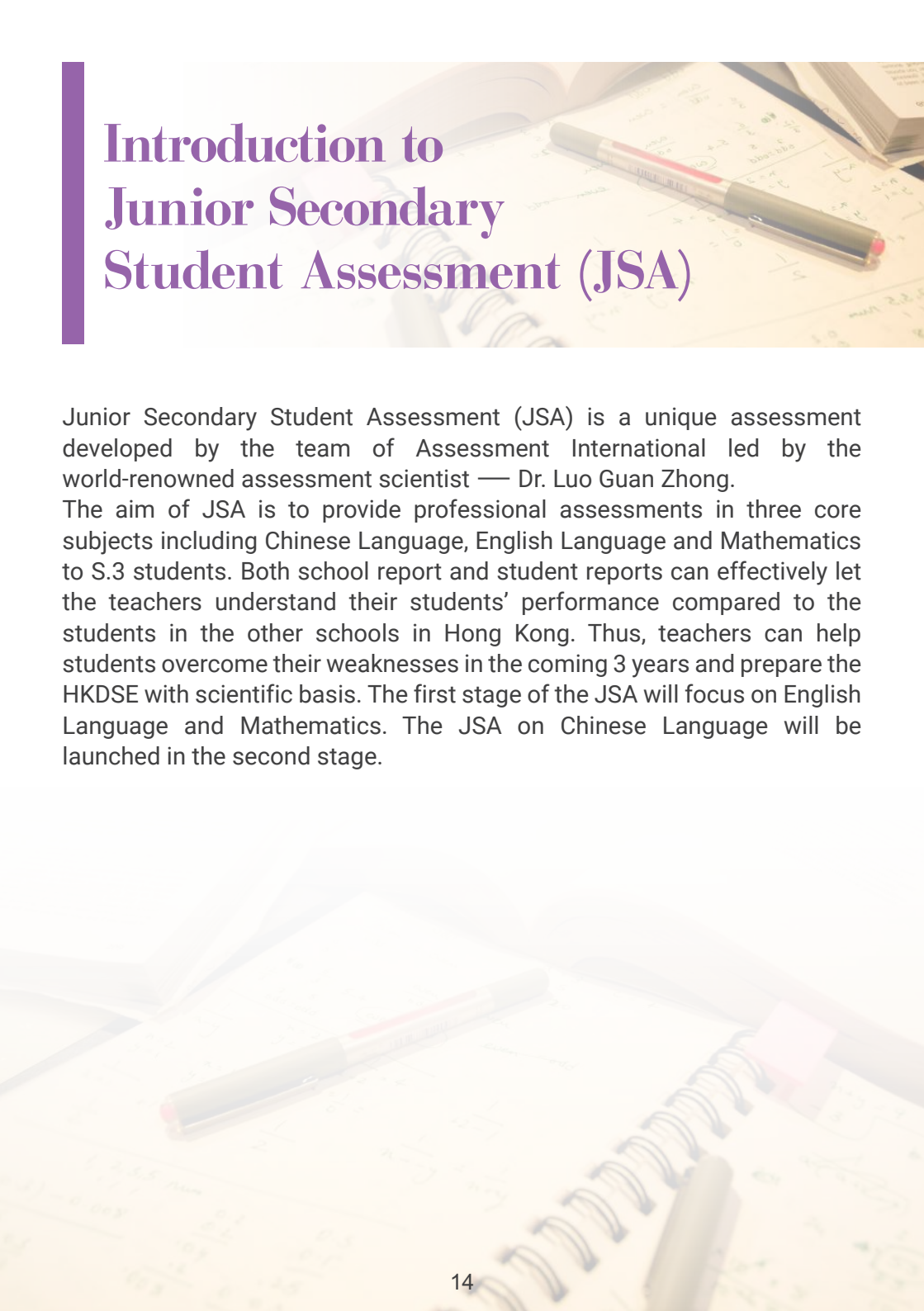
ENGLISH SCHOLAR

Mr. LOU is an experienced English teacher and assessment expert. He worked as a Quality Assurance Officer in Hong Kong Education Bureau and was responsible for the supervision of English subjects. His job also included the compilation of English teaching materials. He is knowledgeable in English assessment not only in S.3 but in other grades as well.

## DR. CHANG RUI

ASSESSMENT SCIENTIST & DATA ANALYST

Dr. Chang is an experienced data analysis expert. She served in the local assessment organisation for many years and was responsible for data analysis of large-scale examinations and assessments.



# Introduction to Junior Secondary Student Assessment (JSA)

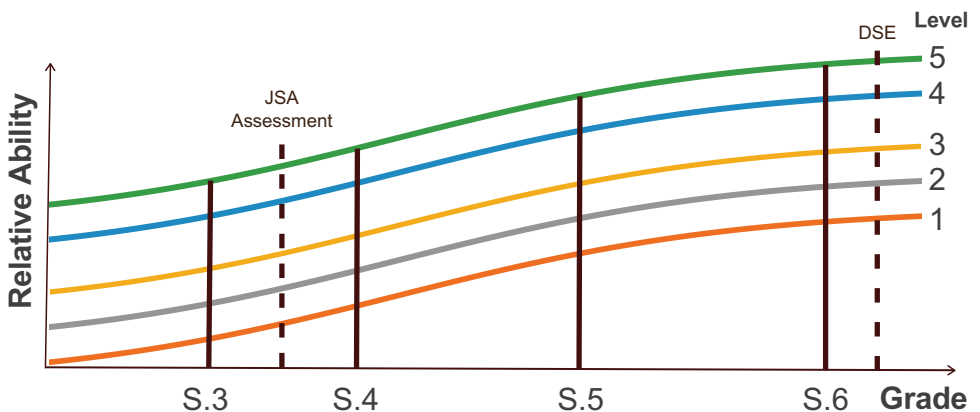
Junior Secondary Student Assessment (JSA) is a unique assessment developed by the team of Assessment International led by the world-renowned assessment scientist — Dr. Luo Guan Zhong.

The aim of JSA is to provide professional assessments in three core subjects including Chinese Language, English Language and Mathematics to S.3 students. Both school report and student reports can effectively let the teachers understand their students' performance compared to the students in the other schools in Hong Kong. Thus, teachers can help students overcome their weaknesses in the coming 3 years and prepare the HKDSE with scientific basis. The first stage of the JSA will focus on English Language and Mathematics. The JSA on Chinese Language will be launched in the second stage.



# Benefits of JSA

- ① Academic performances are scientifically assessed with modern assessment techniques.
- ② Assessment content are designed and tied closely to teaching progress.
- ③ Compared to TSA in S.3, students' strengths and weaknesses can be assessed with higher accuracy due to the optimized range of question difficulties and topics.
- ④ Through applying similar technique of DSE, each student performance is reported and directly referred to a predicted DSE level. The assessment level of JSA is ranging from 1 (the lowest) to 5 (the highest). The rank percentage of student within level 5 will also be reported for the evaluation of level 5\* and level 5\*\*.
- ⑤ Students and parents can receive a scientific based prediction for the DSE results, which can provide reference for the selection of elective subjects and prepare their future DSE.
- ⑥ Teachers can adjust teaching methods and materials in accordance with students' abilities and potentials for the DSE exam preparation.
- ⑦ Schools can disclose the assessment data and results under their full control and therefore prevent the unnecessary critics or pressure.



## School Report Contents

- ① School's average subject performance
- ② School's strand performance in each subject
- ③ School's performance on every question
- ④ Performance comparison with item difficulties
- ⑤ Strength and weakness analysis of school strand performance
- ⑥ Analysis of Modified Caution Index (MCI)
- ⑦ Level prediction of strands in the future DSE subjects

## Individual Student Report Contents

- ① Student's overall performance and predicted level
- ② Student's strand performance in each subject
- ③ Student's performance on every question including details in answering, predicted performance and reasons for wrong answers
- ④ Comparison between performance and item difficulties
- ⑤ Strength and weakness analysis of student strand performance
- ⑥ Comparative analysis with the other students in JSA



Enroll Now

# English Assessment

The English Assessment includes three papers and there is no break between each paper. The details of these three papers are summarized as the follows:

	Reading	Writing	Language Form and Meaning
Time Allowed	30 minutes	30 minutes	20 minutes
Question Format	30 multiple choice questions (choose from four options)	1 writing task (approximately 120 words)	20 multiple choice questions (choose from four options)
Assessment Competency	<ul style="list-style-type: none"> <li>• General</li> <li>• Vocabulary</li> <li>• Syntactic</li> <li>• Textual</li> </ul>	<ul style="list-style-type: none"> <li>• Grammatical</li> <li>• Organisational</li> <li>• Textual</li> <li>• Syntactic</li> </ul>	<ul style="list-style-type: none"> <li>• Lexical</li> <li>• Cohesive</li> <li>• Morphological</li> <li>• Syntactic</li> </ul>
Grading	Level 1 to 5, an overall assessment level and an assessment level for each competency.		

# Mathematics Assessment

The Mathematics Assessment has one paper with three sections. The total number of questions is 41, and the time allowed is 65 minutes. The details of the three sections are summarized as the follows:

<b>Section A</b> (40 points)	20 Multiple Choice Questions (2 points each) Each question in this section has four items. Students should choose only one answer.
<b>Section B</b> (30 points)	15 Short Questions (2 points each) Each question in this section requires short answer(s). No mark for steps or methods.
<b>Section C</b> (40 points)	5 Long Questions(6 points each) and 1 Comprehensive Challenge Question (10 points) Each question in this section requires steps, methods and answers. Partial marks may be given for steps, methods, or answers.

## Assessment Strands and Topics

### Number and Algebra

- Arithmetic
- Algebra

### Measures, Shape and Space

- Geometry
- Coordinate Geometry
- Trigonometry

### Data Handling

- Statistics
- Probability

## Grading Criteria

Level 1 to 5, an overall assessment level and an assessment level for each competency

# Determination and Maintenance of Grading Levels

The determination of ability levels of the Junior Secondary Student Assessment (JSA) will be carried out for the first time in 2021. The student ability levels will be assessed using the same standard (Level 1–5) for the following years. This arrangement enables the direct comparison of the student performance in different years.

## Comparison with the TSA Assessment in S.3

Both TSA in S.3 and JSA are adopting the criterion-reference, so the results obtained in different years can be directly compared. However, as the purpose of TSA is to assess the basic competency and the questions are generally easy, the results cannot effectively differentiate the levels of student performance. Unlike TSA, JSA attempts to distinguish students' abilities in different levels with an optimal range of topics and question difficulties. By adopting the similar grading approach as HKDSE, JSA is comparatively more effective in predicting student performance in DSE in the coming years. Unlike TSA which provides only school reports, JSA can provide student's individual reports upon request.

## Release and Use of Assessment Report

After the assessment and marking process are complete, the school report and the purchased student reports will be delivered to each participating school directly and the student reports will be distributed in school.



# Other Assessment Services



## Online Learning and Assessment System

BOnLine School is an online assessment platform with question database to analyze student performance and produce learning progress reports.

At present, approximately 20,000 students from 170 primary and secondary schools in Hong Kong have registered and participated in the pilot program of the BOnLine School. If your school is interested in participating, please register at <https://school.bonline.com.hk/teacher-registration> or directly contact us.

## PRE-S.1

### Pre-S1 System Assessment

This Assessment tool is in the development phase and it is planned to be carried out in the second term of P5. The assessment is based on the characteristics of learning and teaching at the primary school stage and designed with a standards-referenced reporting. The purpose is to evaluate students' learning progresses at upper primary school level and provide a vertical development map towards their studies at junior secondary school level. The assessment subjects include Chinese Languages, English Languages and Mathematics.



### Assessment for the other grades

Assessment International will continue in developing assessment packages for the other grades so that students can keep track on their own learning progresses. Teachers can efficiently adjust their teaching based on the results of assessment reports. The aim of the assessments is to let students maximize their potentials and overcome their weaknesses, so that they can achieve satisfactory results in their future exams.



# 聯繫我們

## Contact Us

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