



基本能力評估 Basic Competency Assessment



有關評估資源的詳細資料，可瀏覽以下網頁。

Further information about assessment resources can be obtained from the websites below:

<http://www.edb.gov.hk/index.aspx?nodeID=2410&langno=1>
<https://www.bca.hkeaa.edu.hk/>
<http://wlts.edb.hkedcity.net/tc/home/index.html>

weaknesses against specific Basic Competencies. They help schools and teachers to enhance their plans on learning and teaching.

The Student Assessment (SA) also provides schools with an additional assessment tool. Teachers can conduct this assessment according to their student needs and learning progress. The assessment can be flexibly used with other assessment tools at schools so that the effectiveness of student learning would be further enhanced. The features of the Student Assessment include:

1. Web-based central assessment item bank
2. Online assessments
3. Computer marking and instant reports on students' performance

Based on the online assessment results and their knowledge about the students, teachers can provide appropriate follow-ups to enhance student learning. To enhance learning and teaching effectiveness, the Education Bureau also provides Web-based Learning and Teaching Support (WLTS) for schools according to assessment results and analysis of SA and TSA.

如何善用豐富的診斷性評估數據作有效的回饋？

How to use the rich diagnostic assessment data for effective feedback?

研究項目的重要性 The importance of research projects

我們進行個案研究，以深入了解學習困難及驗證學習需要等問題，從而制定有效之支援策略和製作適切的網上教材。在學校進行研究，加上有大專學者及教育局課程主任的參與，對培訓教師善用評估數據以促進學與教十分有幫助。請參閱內頁中、英、數三科的研究結果舉隅。

Case studies are conducted to investigate the causes of the learning problems and verify the learning needs in order to formulate effective support strategies and produce useful learning materials. With the expertise of tertiary academics and EDB officers, research work conducted in the school context also serves to build teachers' capacity in using assessment data to enhance learning and teaching. Please find examples of the research findings in Chinese Language, English Language and Mathematics as follows.

近期研究結果舉隅

Examples of Recent Research Findings

中國語文科

近期一項重點研究計畫，名稱為「以評估資料提升小學閱讀能力和運用理解策略的能力」，首席研究員為羅燕琴博士（香港大學教育學院副教授）。

國際有關小學閱讀表現的研究指出學生在高小階段，閱讀能力的差異開始擴大。課堂上，學生可以藉着教師的生動和詳細講解，理解文意，可是，學生課外或在考試時閱讀文章，理解問題就會出現。從分析小六TSA閱讀評估數據顯示，學生特別在綜合文意這個閱讀弱項，能力較弱的學生固然不能連結句與句間或段與段間的關係，歸納文意，找出文章的主題；就算是中、高能力的學生，遇到較複雜或富深意的文章，也不一定能夠歸納文章的主旨。學生可能只運用教師教授的答題策略而找對答案，當然這些答題策略有時奏效，但有時亦成為錯誤的指引。

學生能否理解較艱深的文章內容，關鍵在於他們能否在閱讀過程中，運用有效的閱讀策略，準確地推出句與句間或段與段間的隱藏信息，並能夠進一步綜合文意，理解作者的寫作目的。小學中文課程明確指出教授學生閱讀策略可以提升學生閱讀的能力；但是，如何有效教導學生閱讀策略以綜合文意和理解文章深層的文意，不少教師仍遇到困難。研究指出教師採用傳統的講解文意的教學方法教導學生閱讀策略，成效不大。教師需要運用示範、提問、給予回饋等教學策略，靈活引導學生逐步掌握不同的閱讀策略，並鼓勵學生在合作學習的環境中，主動運用這些策略解決閱讀的困難。

本研究根據學生在小六TSA閱讀評估測卷的作答表現，設計一套具本土特色的「相互教學法(Reciprocal Teaching)－閱讀策略教學」，通過訓練學生掌握四種閱讀策略（澄清、撮要、提問及預測），提升學生的閱讀能力，尤其是閱讀能力較弱學生的基本閱讀能力水平。結果顯示本研究設計的「相互教學法－閱讀策略教學」，能有效提升學生中文理解能力，印證了藉著具思考的師生對話、學生與學生的對話，能夠有效幫助學生掌握閱讀策略，並能夠運用閱讀策略綜合文意和理解文章深層意思。有關本研究的報告可到「網上學與教支援」網站瀏覽。

建基於本研究的結果及教師的建議，2011年開展了另一個新研究計畫，設計一個名為「師生互動閱讀策略課程」及重新編寫具體的教學材料及評估建議。新研究計畫同時設計教師培訓課程，讓參與學校的教師有系統地掌握「師生互動閱讀策略課程」的竅門，提升教學的成效。本局預期2012年底會發布新研究計畫結果及相關教學材料。

ENGLISH LANGUAGE

A study named Using Assessment Data to Enhance Learning and Teaching (English Language Education) was conducted in 2009 to examine the 2008 TSA Reading papers and students' performance data (P3, P6 & S3) to identify prospective students' learning problems, and the dimensions in which weaknesses in students' performance are manifest. Subsequent research work then took place in the school context to empirically verify some students' key reading problems observed. The principal investigator is Dr Anthony K.K. Tong of The University of Hong Kong.

The key findings include the following:

(1) Vocabulary size

Many weaker students participated in the study have too small a vocabulary to cope with the TSA reading tests given to them at their levels. Some even did not know up to 10% of the words in a text and the loss of words learnt was alarming. In the long run, direct, explicit teaching and learning of some high frequency words at the primary and junior secondary levels will benefit students in their development of reading abilities.

(2) Text type knowledge

Students' knowledge of common text types should be enhanced to understand some key messages in texts. This means that the teaching of reading can be organised not only around reading skill types, such as scanning, skimming, locating specific information, gist-getting, etc, but also the specific structure of some common text types such as stories and poems. In particular, structural elements of various text types need to be taught explicitly.

Some Web-based Learning and Teaching Support (WLTS) units have been newly developed to address such learning needs. Action research would be conducted in a cluster of schools to strengthen the use of the support materials. Further details about the research reports and relevant WLTS materials can be accessed at the WLTS website.

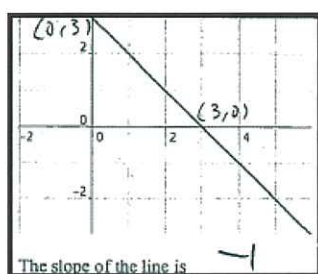
數學科

學生在全港性系統評估關於應用斜率公式及平行線與垂直線的斜率關係等題目中表現持續欠佳。於2009年我們與香港大學教育學院李文生先生合作進行了一次研究，利用較詳盡的評估課業，診斷學生對斜率的量度及其相聯的圖像與幾何特徵的理解。

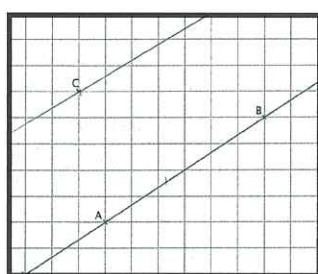
在訪談中，我們發現學生只能記憶斜率公式，而對斜率的幾何意義欠缺了解。例如求圖一的直線斜率，他們要先找出直線上兩點的坐標，才能利用斜率公式計算直線斜率，而並不知道只需利用方格數出直線的水平及鉛垂變化，就能計算直線斜率。

學生對繪畫平行和垂直線亦感到困難。雖然他們大都知道（但不能解釋）平行線的斜率相等，但他們並不能以此繪畫平行線（圖二）。他們對如何在方格紙上準確地繪畫垂直線更茫無頭緒（圖三），甚至有人將「垂直」與「鉛垂」混淆。

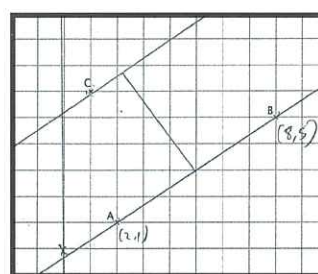
針對研究所得的學生學習需要，我們設計了一套學與教材料，希望能改善學生對相關概念的掌握。有關教材及詳盡的研究報告可在我們的「網上學與教支援」網站下載。



圖一 Figure 1



圖二 Figure 2



圖三 Figure 3

MATHEMATICS

The TSA results reflect students' consistent weakness in using the slope formula and relating slopes in parallel or perpendicular lines. In 2009 we conducted a study with Mr Arthur Lee of The University of Hong Kong to further understand students' difficulties in learning this topic, by using a set of more elaborated assessment tasks to diagnose students' understanding of the connection between the slope as a measurement and its graphical/geometric characteristics.

We found in the interviews that in general students only memorized the slope formula without understanding its geometric significance. For example, in Figure 1 they had to identify coordinates of two points on the line in order to use the slope formula to find the slope. They were not aware that the slope could be found by counting the horizontal and vertical changes using the square grid.

Students also have difficulties in drawing parallel and perpendicular lines. Although many students knew (but were unable to explain) that parallel lines have equal slopes, they did not make use of this relation to draw the parallel line (Figure 2). Furthermore, they had no idea how to draw perpendicular lines correctly on square grid (Figure 3). Some students even mixed up "perpendicular" with "vertical".

Based on the findings of learning needs of students on the concept of slope, a set of materials was designed to improve students' conceptual understanding. The materials, together with the detailed study report, are available in the WLTS website.

「網上學與教支援」

Web-based Learning and Teaching Support

「網上學與教支援」是「基本能力評估」計畫的一部分，目的是為學生及教師提供支援，以幫助學生掌握所需的基本能力。此資源網因應所辨識出的學習困難，建議相應的跟進措施及提供互動的學與教活動/材料，並適當地附以相關的示例供教師選用或參考。

Web-based Learning and Teaching Support (WLTS) is an integral part of the Basic Competency Assessment (BCA) project. To support teachers in providing timely assistance to students to achieve the Basic Competencies, this online resource offers suggested follow-up actions and interactive tasks/materials for teachers to use in addressing the learning problems.



焦點推介 What's Hot

中文



ENGLISH

A cluster of units on vocabulary building skills:



數學 MATHEMATICS

