

## **Provision of Service on the Study of Using Assessment Data to Enhance Learning and Teaching (English Language Education) Phase II**

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### **I. Introduction**

This document reports the implementation and findings of Phase II of the Study of Using Assessment Data to Enhance Learning and Teaching (English Language Education) (hereafter referred to as the Study). It will not repeat the analyses and findings of Phase I of the Study (hereafter referred to as the Phase-I Study) although they will inform some of the discussion and findings in this paper. The report will begin with the specific objectives of the work conducted for the Study. It will then describe the participating members and the methodologies used. Findings of the Study have implications for the teaching of reading in both primary and secondary schools, and especially in teaching students reading skills which may enhance their performance in reading, with specific reference to the Territory-wide System Assessment (TSA) reading papers. The report will end with observations for TSA item writers' consideration and a recommendation to the Education Bureau (EDB) for further research and development projects in the context of schools.

### **II. Objectives of the Study (Phase II)**

One objective of this Study was to empirically verify some students' key reading problems observed in the Phase-I Study. For this Study, diagnostic tests were constructed and implemented in some Primary 3 and Primary 6 classrooms in two of the three pilot schools. The original 2008 TSA Reading paper was also administered in the third school with some Secondary 3 year students. The purpose of implementing these assessments was to empirically verify the projected reading difficulties, which in turn, inform us prospective students' reading problems.

The Study also involved interviewing selected students from the pilot schools and their teachers. The purpose of these interviews was two-fold. First, these interviews were conducted to ascertain causes of reading difficulties for the students while they were reading. The teacher interviews, on the other hand, aimed to gain teachers' perception of the TSA in addition to an understanding of how reading had been dealt with in the English language classrooms in the participating schools.

The third objective of the Study was to make use of what has been observed from the tests and interviews data to inform and enhance the teaching and learning of reading in the pilot schools. This part of the work includes observing teachers teach in their classrooms, and providing the teachers with ideas and suggestions at the stages of designing, revising and developing learning materials, and/or implementing their lessons for enhanced learning effectiveness.

A total of three pilot schools, including some of their teachers and students, participated in this phase of the Study. These schools are WP School, AB School and NP School. The two former are primary schools, and the third school is a secondary school. (All school names are pseudonyms.)

### **III. Research Questions**

The Study at this phase aimed to answer two umbrella questions regarding the enhancement of students' reading abilities for TSA:

- (1) What were the causes of reading difficulties which candidates experienced with the 2008 TSA Reading paper?
- (2) What are some of the teaching and learning strategies to enhance TSA candidates' reading abilities?

Research Question (1) is an extension from the observations made in the Phase-I Study. The Study aimed to verify empirically the projected causes of students' reading difficulties. Findings from the answers to this research question were also used in this Study as knowledge bases to inform the answers to Research Question (2). Research Question (2) was asked because the Study also aimed to yield pedagogical suggestions, in addition to the try-out of some collaborative work with the teachers in one of the participating schools. This work also required that the researcher conducted classroom observations to understand the specific contexts of the school and to examine the impact on the learning in the classroom through the collaborative work with the teacher participants.

### **IV. Methodology**

This section will report the methodology used in the Study, the links between the data collection methods and the research questions. It will also describe the participants and the nature of their participation.

### A. Data collection methods

Four different kinds of data collection methods were used for the Study:

- (i) Diagnostic tests;
- (ii) Student interviews;
- (iii) Teacher interviews;
- (iv) Classroom observation.

In addition to the above, the Study also included the provision of feedback to participating teachers on lesson design and materials development. Table 1 specifies the uses of the different data collection methods.

Table 1: The relationship between data collection methods and the research questions

Data collection methods	The specific use of the data	Relevance to the Research Question
(i) Diagnostic tests	To confirm or disconfirm <i>quantitatively</i> some of the key observations made from the Phase-I Study regarding possible causes of TSA candidates' reading problems	Research Question (1)
(ii) Student interviews	To confirm or disconfirm <i>qualitatively</i> some of the key observations from the Phase-I Study regarding the possible causes of TSA candidates' reading problems  To understand students' attitude towards English learning and English reading	Research Question (1)
(iii) Teacher interviews	To establish rapport with the school teachers  To understand teachers' positive experiences and concerns in teaching reading	Research Question (2)  The interview elicited teachers' perceptions of the TSA
(vi) Classroom observation	To understand what goes on in the English reading classrooms (before and after giving teacher the feedback to their lesson(s))	Research Question (2)
(v) Feedback to teacher's lesson plan and classroom materials	To engage teachers in pedagogical exchanges for the enhancement of learning and teaching with specific reference to develop students' reading skills	Research Question (2)

### B. Participants in the Study – Phase II

A total of three pilot schools took part in the present Study, including some of their English teachers and their students. Tables 2 and 3 present the numbers and types of participants.

Table 2: Numbers of students taking part in the Diagnostic Tests

School	No. of students participated in the diagnostic test
WP Primary School	202 Primary 2 and Primary 3 students
AB Primary School	123 Primary 6 students
NP Secondary School	60 Secondary 3 students <sup>+</sup>

<sup>+</sup>The original TSA Secondary Reading Paper was used with no alterations.

Table 3: Number of students and teachers taking part in the group or individual interviews.

School (All school names are pseudonyms.)	No. of students interviewed*	No. of teachers interviewed
WP Primary School	11 students of Primary 2 and Primary 3	4 teachers (including the English Panel Head)
AB Primary School	12 students of Primary 6	5 teachers (including 2 English Panel Heads)
NP Secondary School	9 students of Secondary 3	2 teachers (including the English Panel Head)

\* These interviews primarily consisted of probing questions eliciting students' reports of their thinking and reasoning processes in their attempts to answer the comprehension items in the diagnostic test which they were given either during the interview or immediately after taking it.

## V. Findings

The key findings of the Study are summarised as follows:

- 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. 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) Harder items: The harder questions in the papers tend to demand a heavy processing load from the students, and weaker students who did not have sophisticated enough

reading skills and linguistic knowledge were not be able to cope with these items. In particular, comprehension difficulties were often caused by items that required inferencing and the processing of several texts to yield the answer, or the interpretation of a chunk of text longer than a clause.

- 3) 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 (i) processing types, such as global, local, and inferencing, and (ii) reading skill types, such as scanning, skimming, locating specific information, gist-getting, etc, but also (iii) the specific structure of some common text types such as stories and poems.
- 4) Talk about text: The data collected via the student interviews tend to suggest that the interviewer interacting with a weak student in a talk about the text can enhance the student's motivation to read, cue the student's appropriate use of background knowledge, resulting in the likely enhancement of the student's reading interest and skills.

The following will focus on detailing the points summarised above while Part B will present a discussion on the relevance of this study to TSA administrators and test-writers.

- 1) Vocabulary size: Many weaker students participated in the study had too small a vocabulary to cope with the TSA reading tests given to them at their levels. 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.

Researchers have suggested that a text for students' reading comprehension should not contain more than 5% of unknown words (Nation, 2001, P. 146; Laufer, 1989, cited in Nation 2001; Laufer, 1998). This Study has found that quite a portion of the TSA candidates simply did not have large enough vocabulary to cope with many of the texts in the TSA 2008 reading paper at the levels of P3, P6 and S3. For example, in one of the participating schools, a total of nine Secondary 3 students were asked to report in their interviews their knowledge of the words in the text entitled "A Traditional Chinese Wedding". The text contains a total of 220 words excluding the 25-word rubrics. Some weaker students whom we interviewed did not know up to 22 words in the 220-word

text, which is about 10% of the coverage of the text. The following words were reported as unknown by a student who completed the S3 Diagnostic Assessment for us:

*traditional, custom, combing, ceremony, performed, ride, groom, wedding, allowed, couple, relatives, candles, joss sticks, pomelo leaves, pyjamas, brand, reciting, blessings, close, knit, dumplings, symbolize*

In a 134-word poem authored by Mai Tai in the Secondary 3 TSA 2008 paper, students in the participating school reported up to 22 unknown words. These words were:

*caterpillar, leaf, shell, flit, float, grassy, middle, flutter, creature, stare, dash, flicks, darts, hide, flees, wondrous, brings, field, flight, rest, middle, nature, leaf*

Other reading comprehension issues also include testees' insensitivity towards common polysemes or homonyms such as "custom", "leaves", or "shell". Take the Secondary 3 interviews as examples. Of the nine students interviewed, one student (Student S3A No. 40) confused the word "custom" as a cultural practice with "customs", as a law enforcement department at the borders. Two students interviewed could not differentiate "leaves" as "departures" or "approvals for not being there" from "leaves" as a part of a plant (Student S3C No. 24; Student S3A No. 40). Two other students in the interviews interpreted "shell" as "the outer part of a crustacean or a snail" (Student S3A No. 28; Student S3B No. 27), but failed to see that the word could also refer to the protective covering of an insect such as a butterfly.

When considering a learner's knowledge of a word, we must also consider the width and depth of this knowledge. For reading purposes, very often the recognition of the word is enough. On the other hand, in some cases, background or world knowledge can be activated to aid comprehension even though the exact meaning of a word cannot be determined by a reader. For example, when reading the poem written by Mai Tai in the TSA 2008 P6 paper, the following motion verbs may not be known to a reader, but given appropriate use of background knowledge, it would suffice if a reader can infer that these are motion verbs: "flits", "floats" "flutters", "dash", "flicks" "darts", "flees", and "flies".

The lack of vocabulary knowledge has prompted low Facility Indices (FIs) also because some testees failed to understand words which were given in a test item. For example, in Part 2 of the P6 Diagnostic Tests, students achieved low FIs because they did not know the following words or word groups in the stem of the items: "*during his spare time*" (Item No

1 in Part 2) (Interview with Student 6D-13); “exhibition” in Part 1 (Item No. 2) (Interviews with Student 6B-36 and Student 6C-01); “*get back to his school*” (Item No. 4, Part 4) (Student 6A-05).

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) Harder items: The harder questions in the papers tend to demand a heavy processing load from the students, and weaker students who did not have sophisticated enough reading skills and linguistic knowledge were not able to cope with these items. In particular, comprehension difficulties were often caused by items that (i) required inferencing, (ii) the processing of several texts to yield the answer, or (iii) the interpretation of a chunk of text longer than a clause.

Evidence for this observation has come from several places in either students’ performance in the two Diagnostic Assessments or their explanations of their choices during the interviews. Because of space, only three examples will be given here.

*Example 1*

Part 2 of the P6 Diagnostic Test contains a newsletter written by a principal to the students in a school. The newsletter contains, in three different text boxes, three short texts about three teachers new to the school in the new school year. The item on this text which required students to compare information in different texts yielded very low facility indices (FI= 38%). The cue of Item No. 4 reads: “Who has been teaching the most number of years?”). The interview data with Student 6A, No. 05 (Lines 137-165) indicates that she was bogged down by this item requiring her to process information in different texts.

*Example 2*

Item No. 3 in Part 1, P6 Diagnostic Test required the testees to synthesize information from two different locations in the same text (Location One: “*One show each day between 5 July and 8 July 2008*”; Location Two: “extra show at 8:00 pm on 7 July”.) The interview with Student 6A No. 17 showed that the student failed to infer the correct answer because he ignored the cue at the second location. The same was found in the interview with Student

P6A No. 34 (Lines 42-74) when the student tried to figure out the total number of shows for the play.

*Example 3*

Item No. 3 in Part 1 of the P3 Diagnostic Test required that the testees should infer from a relatively longer text to arrive at the key (B: all morning). The text reads: “*When the sun came up, the three frogs started to jump. Jump, jump, jump. They only got to the top of the hill when the sun was high up in the sky.*” Interview with Student 3C No. 14 showed that she failed to infer the correct answer because she interpreted that “the sun was high up” was an indication of a new day, and so the distractor that “the frogs jumped all day”, rather than the key, was chosen.

In sum, the examples given above suggest that students in general found greater comprehension difficulties with items that require them to i) process multiple texts; ii) make meaning at discourse level and iii) synthesize information coming from different locations in a text.

- 3) Text type knowledge: Students’ knowledge of common text types should be enhanced to understand the key messages in texts. This means that the teaching of reading can be organised not only around (i) processing types, such as global, local, and inferencing, and (ii) reading skill types, such as scanning, skimming, locating specific information, gist-getting, etc, but also (iii) the specific structure of some common text types such as stories and poems.

Knowledge about text types can be used by a reader at two levels. The first level is the reader’s ability to eye-ball the text and tell whether it is a story, a play, a postcard, a telephone conversation, or to be able to tell if a text comes from a book, a magazine or a newsletter. The second level, which is more challenging to most students, is to understand the specific functions of the different structural elements in a given text type. Knowledge at the first level is important but not enough; in order to provide answers to some of the harder items in the TSA Reading Test, knowledge of texts at the second level would be more useful.

There was some evidence from the interviews and from the students’ current textbooks that they had been given the exposure to different text types such as stories, poems, tables of contents, and email messages, but the interviews also indicate that text type knowledge in

many testees was not always stable (Student P6B No. 20, Lines 21-30; Lines 89-93; Student P6C No. 1, Lines 1-5). This means that although some students were able to recognise the text type of a text (e.g. postcard, play, poem), many of them were not aware of specific functions of the various structural elements in a text. More importantly, because of lacking in this knowledge, many testees in the TSA Reading papers often failed to comprehend the key message in a text. Some of the gist (global) questions in the Secondary 3 Diagnostic Test, for example, proved to be too difficult for many students because students were not aware of the specific function of the last stanza in a narrative poem. The narrative poem in Part 2 of the S3 Diagnostic Test reads as follows:

A caterpillar on a leaf no longer.  
Free of its shell, it's ready and stronger.  
It flits and floats over grassy green,  
A lovelier creature I have not seen.

It flutters in the middle of the street.  
It dances away from happy children's feet.  
I stop to stare, it's almost eight.  
I don't care if I'm late.

Children dash to catch it, hands ready.  
Too bad - it's gone already.  
It flicks its wings and darts away.  
In one place it will not stay.

It flees and flies to fields of flowers,  
Hides in trees from birds for hours,  
Rests its wings in the warm sunlight,  
As it plans for a long, long flight.

And I stand here,  
Breathing dirty city air,  
Hoping to see brightly coloured wings,  
All the wondrous beauty nature brings.

*By: Mai Tai*

The two gist (global) questions which yielded low FIs among testees with this poem were Item No. 6 and Item No. 8. The tallies of responses in the actual TSA 2008 Secondary 3 are given below.

6. In stanza 5, lines 17-20, what does the writer want to see?

- |                     |             |
|---------------------|-------------|
| A. more trees       | 9.3%        |
| B. a clean city     | 54.1%       |
| C. beautiful things | 30.2% (Key) |
| D. more people      | 5.2%        |

8. What is the best title of this poem?

- |                               |             |
|-------------------------------|-------------|
| A. Dancing in the Street      | 31.7%       |
| B. My Summer Travel Plans     | 11.3%       |
| C. The Joy of Nature          | 49.3% (Key) |
| D. Hungry Birds: Good Hunters | 7.0%        |

*Secondary 3 ERI\_TSA 2008*

A review of the testees' performance and the student interviews data has led to the following observations regarding these two difficult items:

- i. With Item No. 6, it was quite easy for many students to fall into the trap set up by the distractor B (54.1%), 'a clean city' because of the expression 'dirty city air' in the text.
- ii. Among those who did not score this item, quite a number of them (31.7%) were confused by the imageries of motions and movements depicted in the poem and opted for 'Dancing in the Street' with Item No. 8.
- iii. Item No. 8 tests Secondary 3 readers' understanding of the key message of the whole text, and the message of the text is in fact about nature rather than a butterfly. Although we learned from testees' responses to Item No. 1 that the majority of the testees (about 59.4% of them) were able to say that "This poem is about a butterfly" [Note that the word *butterfly* never appears in the poem itself], still fewer testees chose the key (49.3%) for Item No. 8. While this suggests that many of the Secondary 3 students did not understand the key message of the poem, it also means that they were not aware that the message of this narrative poem text, conveyed in the last stanza, is not the same as its topic, a butterfly.

Labov (1972), in his seminal work of the spoken narratives of American Black English, defined the narrative as "one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which (it is inferred) actually occurred." (p. 359) He observed that "[N]arrative, then, is only one way of recapitulating this past experience; the clauses are characteristically ordered in temporal sequence;..." (p. 360). He also pointed out that a fully-developed form of narrative often contains *evaluation*, an important element among others such as *abstract*, *orientation*, *complicating action*, *resolution*, and *coda* (Ibid., p. 363). Indeed, it is

noted that not all English poems are in the form of a narrative, but as described in the CDC (2004) *English Language Curriculum Guide (Primary 1 – 6)*, most poems at the primary as well as junior secondary levels tend to appear as narratives, and narrative poems have its own distinct structure. If TSA testees understand the typical structure of a narrative poem, it is likely that they stand a much greater chance to answer correctly items such as No. 6 and No. 8 above.

An analysis of the stanzas of Mai Tai's Butterfly poem would indicate that while the other stanzas in the poem primarily, as Labov observed, serve to “use sequence of clauses” to “describe the sequence of events which actually occurred” (Labov, 1972, p. 359) (e.g., *It flees and flies to fields of flowers / Hides in trees from birds for hours / Rests its wings in the warm sunlight / As it plans for a long, long flight*), the very last stanza of a narrative poem often has two distinctive features which are often absent in other stanzas. These two features are listed in the table below.

Table 4: Distinctive features of the last stanza in a narrative poem

Distinctive feature of the concluding stanza of a narrative poem		Explanation of feature with reference to the “Butterfly” text by Mai Tai
1.	It contains a relatively stronger interpersonal element	The interpersonal element: While in the first four stanzas the writer is seemingly interested in giving a report of a sequence of events, in the concluding stanza, the writer seems to have made the sudden turn and start saying something directly to the audience!
2.	It is different from the other stanzas because it tends to introduce to the readers an evaluative perspective in order to give the key message of the text;	The key message of the poem: While the topic of the poem in the first four stanzas seems to be the butterfly, the last stanza tends to pass on to the reader that the key message is the happiness which nature brings to people.

In order to see the descriptive power of such an analysis, two other narrative poems used also in the 2008 TSA Reading papers at Primary 3 and Primary 6 levels are listed below.

### At the Farm

*Meow, meow, meow,  
Baa, baa, black,  
Moo, moo, moo,  
Flap, flap, quack.*

*Cats and sheep,  
Ducks and cows,  
These are the things,  
I see now.*

*We go home as the sun goes down,  
Sit on the bus and look around,  
Soon there are tall buildings, streets and noise,  
Back at home, I see my games and toys.*

*Brmm, brmm, brmm,  
Beep, beep, beep,  
The sounds of the streets,  
Can't stop my sleep.*

*Dreaming now,  
Of sheep and cows,  
Ducks swimming,  
Cats sleeping.*

*Baa, moo, quack,  
The end of my day,  
I dream of the animals,  
And the things they say.*

By Tom Smith

(Adopted from TSA 2008 Reading for Primary 3)

*Climbed a hill  
And got to the top  
I walked around  
But nobody was found*

*On the way  
I saw them fighting  
Lots of feathers flying  
Then nothing*

*I sat under a pine tree  
There was a lot to see  
The pond was as blue as the sky  
And I jumped into it*

*As I put my bike away  
Dad turned to me to say,  
“What did you do today?”  
“Oh,” I said, “I played.”*

(Adopted from TSA 2008 Reading for Primary 6)

As it can be seen again, the last stanzas of both these two narrative poems share the same features in that (i) it carries a stronger interpersonal element when compared to other stanzas in the same text; and that (ii) it also makes explicit the key message of the poem. In fact, both last stanzas express, in similar manners, the joyous, happy experience the child has just had. In sum, it is argued that leading students to see the distinctive structure of a narrative in general, and the communicative functions of the last stanza in particular, will facilitate students' comprehension of narrative poems as this knowledge will enable the testees to cope better with items such as No. 6 and No. 8 in the 2008 TSA Secondary 3 Reading paper.

- 4) Talk about text: The data collected via the student interviews tend to suggest that the interviewer interacting with a student in a talk about the text can enhance the student's motivation to read, cue the student's appropriate use of background knowledge, resulting in the likely enhancement of the student's reading interest and skills.

Social interaction plays a fundamental role in a child's development of cognition, and this development is often facilitated by the novice child interacting with an adult or an expert (Vygotsky 1962, 1978). Researchers following a socio-cultural theory have shown how 'talk about text' can enhance a child's cognitive development (cf. Wells 2001, 2007). One of the purposes of interviewing students in this Study was to explore strategies adopted by a teacher or an adult which can enhance students' abilities in reading. It was observed that in several of the episodes in their interviews, students through interacting with the researchers in the interviews tended to gain not only a better understanding of the text but also greater confidence in dealing with texts. The episode in Extract 1 shows how the researcher cued a Primary 3 student to infer in order to get to the correct answer which was prompted by the speech bubbles from three different people in the comic strip.

Extract 1 (Primary 3A; No. 32; Line 65) [Translation]

- [Student gave the wrong answer of "four people" previously to Item No. 1, Part 5, in her test paper.]
- R: ...this picture here [R points at the comic strip text for the item], how many people live in this house? Four people. How did you get this? Four people. You could see only three, right?
- [S points at the first speech bubble in the picture.]
- S: Because of what is said here.
- [The first speech bubble comes from a boy on the top floor of a house saying "I sleep here with my brother!"; the second speech bubble comes from a woman on the second story of the house saying: "Dad and I sleep here!"; the third speech bubble comes from an old man on the ground floor of the house saying "I am the only one here!"]
- R: Exactly. What about this one below? What is the woman saying?
- [R points at the second speech bubble.]
- S: She says that there are two.
- R: That's right. What is the number of people so far if you add up?
- S: Four.
- R: Four. Then is there still anyone living downstairs?
- S: Yes.
- R: How many?
- S: One.
- R: So altogether how many people live in the house?
- S: Five.
- R: Five. Yes, you see, your answer now is perfect. **Okay...**

Key: R=Researcher; S= Student 3A, No 32

Note: The original conversation was conducted in Cantonese; however, words in bold were uttered in English.

It is an established observation that a reader often has to rely on common sense, background knowledge or cultural knowledge to process a text in a top-down manner. Extract 2 below shows how a Secondary 3 student could be cued to call on her background knowledge in a top-down processing to interpret unknown words. This particular student did not know the English term “Joss sticks”, yet she did know for a fact that in many Chinese rituals, people use candles and joss sticks, and not only that, she also knew that the common practice in the rituals would be to use specifically TWO candles and THREE joss sticks. The researcher utilized this cultural knowledge in his cues to help the student to guess the meaning of the term “Joss sticks”.

Extract 2 (Secondary 3; Student 3B No. 05, Line 54)

- R: ... it is okay that you cannot guess this one. Let's continue. **Candles**, do you know the word **candles**?
- S: Yes, it means candles.
- R: What about the term **Joss sticks**? **Joss sticks**.  
[Student shakes head.]
- R: You don't know? Okay, see there are two candles.  
[R points at the text which reads: “When the time is right the relatives light two red candles and three joss sticks.”]
- R: Three what? What are these when Chinese worship gods?
- S: Oh, these, these, these, these are joss sticks.
- R: You are right. **Okay**, right if you only use a bit of common sense, you will get the term. You don't really need to know every word to understand it.
- S: Yes.

Key: R=Researcher; S= Student 3A, No 32

Note: The original conversation was conducted in Cantonese; however, words in bold were uttered in English.

It has been explained that inferencing items tend to be more challenging to the students because they may require a reader to read and interpret information from different locations in a text. The episode in Extract 3 shows how the researcher led the reader to understand that he would need different bits of information in the text to get the answer for an item.

Extract 3 (Primary 6; Student 6A, No. 13; Line 23)

R: ... What is item No. 2 about?  
[Item No. 2 reads: “*How much should Chris bring if he wants to do fishing that day?*”]  
S: [silence]  
R: Please tell me, could you please let me know.  
S: How much money to bring, I’d say, I’d say.  
R: How much to bring? This is not= it’s not just asking you how much to bring.  
What does the question ask? If=, it’s saying, if Chris wants to do what?  
S: If he wants to go on this trip.  
R: Pardon me.  
S: How much to bring if he wants to go on this trip?  
R: Yes, but it is not just asking you how much for him to bring.  
[R reads aloud the item cue.]  
R: **“How much should Chris bring if he wants to do fishing that day?”**  
What does this question mean?  
S: Well, fishing.  
R: Yeah. So how much to bring? Well, how much did you say he should bring just now.  
S: Thirty dollars.  
R: Thirty dollars, thirty dollars. Why does he need to bring thirty dollars?  
S: That’s for lunch.  
R: Yes, but now the question is not asking how much to bring for lunch. It asks how much to bring if he wants to do fishing.  
S: He has to pay forty dollars, including the ten dollars for fishing.  
R: So now you have got the answer, haven’t you? You just have to spend time thinking about this in order to get the right answer. If you do the items in a rush, you could easily make mistakes. You have to learn to be more careful. Okay....

Key: R=Researcher; S= Student 3A, No 32

Note: The original conversation was conducted in Cantonese; however, words in bold were uttered in English.

Some inferencing items require the reader to use linguistic knowledge at discourse level — to go beyond a clause or the surface of a text. The episode in Extract 4 shows how a student is led to the understanding that it took the three frogs the whole morning to get to the hill top. The intent of the researcher in the interaction was to make clear to the student that the answer did not come from a word explicitly given in the text; the meaning had to be inferred from a stretch of language longer than a clause.

Extract 4 (Primary 3, Student 3C No. 02; Line 63)

- R: ... why don't you try to read on? Because with your skills, if you keep thinking about it, you will get the answer. Here it says that the sun is out and the three frogs started jumping. Jumped, jumped, jumped until they got to the top of the hill, **top of a hill** meaning that they got to the top, "**got to**" means arriving at; "**got to**", **When the sun was high up in the sky**, this means=, "**high up in the sky**", do you know what it means? It means... well, what was the position of the sun? Where was it?
- S: Well, it was up high in the sky.
- R: You are right. Well, when did they start jumping?
- S: At noon.
- R: Yeah. Did they start jumping at noon? Or did they start in the morning?
- S: Early in the morning.
- R: Early in the morning, as soon as the sun rose, right? So for how long have they been jumping? Did they jump together? Or were they jumping throughout the morning?
- S: They jumped throughout the morning.
- R: Right you are. ...

Key: R=Researcher; S= Student 3A, No 32

Note: The original conversation was conducted in Cantonese; however, words in bold were uttered in English.

The episodes given in the extracts above demonstrate that strategies can be used by a teacher to cue students, either in one-on-one interactions or in small group discussions, and to lead students to deciphering the linguistic elements in a text. In the process, the students are encouraged to not only attend to local details in the text and decode information which is relevant to the item under discussion, but also make guesses using appropriate background and cultural knowledge, and evaluate and synthesize information coming from different texts or different locations in a text. In sum, the engagement of the child to "talk about text" is a genuine teaching act — the provision of scaffolding. That a teacher rendering help to a child so that the child can get something done now is an important teaching-and-learning step to move the child to the next stage in which he can get the same things done without any help (Vygotsky, 1978).

## **VI. Recommendations to the EDB**

[For internal reference only]

## **VII. Conclusion**

The present Study is a continuation of the Phase-I Study. With specific reference to the 2008 TSA reading papers, the Study deployed an array of data collection methods to verify empirically the causes of reading comprehension difficulties of three groups of students from three participating schools at the levels of Primary 3, Primary 6 and Secondary 3. Findings of the Study include the exploration and suggestions of teaching strategies and interactional techniques which can be used by teachers to assist in students' reading development. The Study draws observations for the consideration of the TSA administrators and test-writers, and makes the recommendation to the EDB for collaborative research and development projects in the context of schools.

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