

Tracking Students' Learning through Enhancing Assessment Literacy

School

PAOC Ka Chi Secondary School

Background

The school is situated in Tuen Mun area with students coming from very diverse backgrounds. The student body has a diverse language background. The spectrum of English learning needs in school is huge and challenging. Students have different levels of English foundation knowledge, hence, very different learning struggles and are motivated by different levels of learning challenges.

Teachers had challenges in tracking students' learning. Assessment designs in the past could benchmark our students' English levels, but they may not reflect the learning progress of the less able learners efficiently. The overall mark data are too general to reflect class-based needs. Learning-Teaching-Assessment (L-T-A) cycles could be better aligned to address students' needs in different phases of learning.

With the above challenges in mind, the school decided to focus on the review and improvement of internal assessment designs in the first semester and try out item analysis for understanding students' learning difficulties and needs in the second semester.

Level

Secondary 2

Strategies Used

To track students' learning through assessment literacy practices, the following strategies were adopted.

1. Review of Internal Assessment Design

The grammar and usage paper of the first term examination paper was selected for experimentation by the revision of several areas. This was intended to enhance the face validity of the paper.

Score boxes in the question and answer section of the usage paper was revised. The existing mark box was divided into two smaller sections, which would provide more specific data to inform learning and teaching.

The design of the revised mark box allowed teachers to have specific information on the performance of students in particular sections, grammar items in most cases. Teachers were then able to better manage and make use of the assessment data collected for feedback purposes. See *Appendix 1* for the original design of mark box in question and answer book and *Appendix 2* for the revised design of mark box in question and answer book.

The improved design of mark box facilitates adjustments of teaching plans and revision of teaching strategies. The mark box provides more specific information on the learning difficulties that students were having.

Teachers also worked on improving the clarity of instructions for the assessment paper.

The face validity of the assessment paper has improved with added instructions. See *Appendix 3* for the original assessment paper without instructions and *Appendix 4* for the revised assessment paper with clear instructions.

2. Backward Planning

Learning-Teaching-Assessment cycle was strengthened through backward planning practices.

The backward planning practice was adopted in the design of the assessment task for item analysis. Knowing the learning diversity among classes, as well as within the same class, it was crucial to decide on the precise items to be taught, and agreed among all S2 teachers.

In-depth discussion on grammar items to be assessed and hence the selection of core items to be taught, took place at the same meeting. This discussion was carried out at the planning stage of the teaching.

The exercise covered detailed planning of the testing points and level of difficulties of the assessment task in question. Questions set covered all levels of difficulties, which aligned with the syllabus to be covered that was agreed upon by teachers of all classes. Figure 1 shows the results of the discussion.

Figure 1: Mark distribution of questions of different levels of difficulties

STRENGTHENING OF LEARNING-TEACHING-ASSESSMENT CYCLE

Discussion among teachers before the quiz

Reflexive pronouns (15 marks)
[each answer: appropriate choice of reflexive pronoun 0.5 m + correct spelling 0.5 m]

Mark Distribution / Testing Point	7 marks (easy)	5 marks (average)	3 marks (challenging)
Basics	Reflexive pronouns table (4 marks)	/	/
Application	myself; himself; herself (3 marks)	themselves; ourselves; yourself; itself;	singular plural nouns; yourself; yourselves;

Teachers then had a teaching and assessment syllabus that aligned. The syllabus clearly and precisely lays out the levels of difficulty of the items. They could also reflect students' ability and adjust what level of difficulty of the items should be taught or practiced with their students.

The difficult points that students in different streams (classes) could be having was a major focus of the discussion. Teachers agreed on the mark distribution based on question difficulty, and the assessment tasks were circulated back and forth among teachers to seek feedback from each other.

3. Trial on Item Analysis of an Assessment Task

To build on the experience gained on the review of internal assessment design which took place in the first semester, teachers decided to trial item analysis to track students' learning difficulties in order to improve further teaching and future teaching of the grammar item.

Class schedules and routines were greatly affected due to school suspension and the change of teaching mode, which left teachers limited space to collaborate on a large-scale trial on the practice. As a result, teachers resolved to conduct a trial on a small scale. A number of questions for an assessment task were chosen.

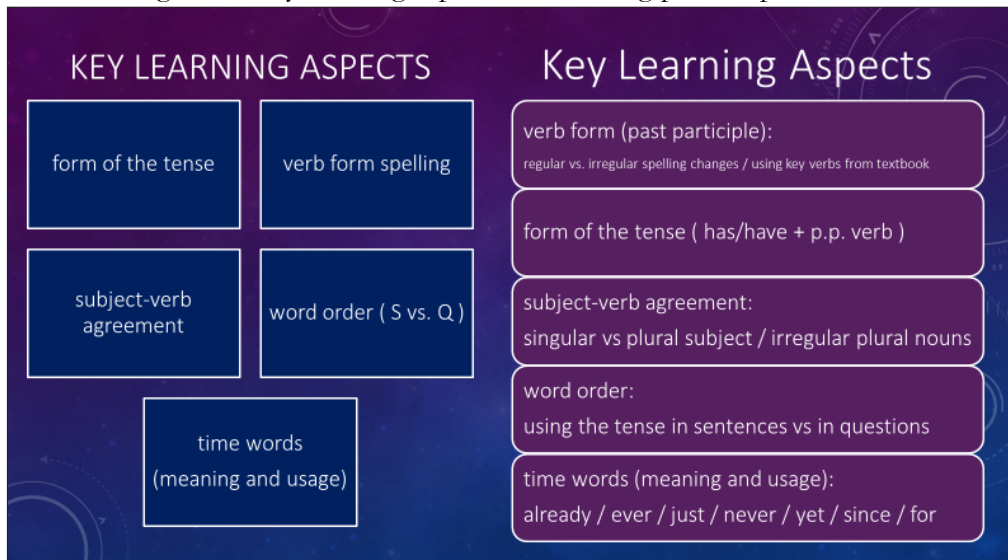
Reflection on the results of the students to feedback learning and teaching were carried out. *Figure 2* indicates stages in the backward planning process of the exercise.

Figure 2: Item analysis: From planning to evaluation

ITEM ANALYSIS FOR GRAMMAR LEARNING AND TEACHING		
PHASE	TASKS	Goals
PLANNING AND TEACHING	<ul style="list-style-type: none"> Lesson Preparation: L&T Objectives Online Teaching Online Grammar Quiz 	<ul style="list-style-type: none"> Define key learning aspects Define scope of Teaching Select assessment goals Set Quiz Design
EVALUATION AND REVIEW	<ul style="list-style-type: none"> Item Analysis Finding Reflection 	<ul style="list-style-type: none"> Observe students' performance Review test quality Identify learning difficulties and needs Suggest remedial work and teaching

Figure 3 shows the results of discussion on the key learning aspects of teaching present perfect tense during collaboration meetings. The aspects agreed on defines scope of teaching and serves as the basis of the core syllabus, in which teachers of individual classes would modify teaching to suit the class they are teaching.

Figure 3: Key learning aspects of teaching present perfect tense



Teachers set different learning goals for students of different abilities. Figure 4 illustrates the assessment goals and designs.

Figure 4: Assessment goal and design for learners at different levels

ASSESSMENT GOALS		QUIZ DESIGN		
LVL	GOALS	TYPE	No. of Question	Mark allocated
1	Spell verbs in past participle form correctly	Spelling	6	6
2	Recognize the correct form of present perfect tense	MC Questions	10	10
3	Correct choice of time word for the sentences	Fill in the blanks	6	6
4	Write present perfect tense correctly in form and spelling	Proofreading	6	12
5	Correct word orders in present perfect tense in sentences / questions			

Figure 5 to Figure 11 depict the process of the item analysis exercise carried out by the teachers.

Figure 5: Assessment questions selected for items analysis

QUESTIONS FOR ITEM ANALYSIS		
PART	QUESTION	Observation
B (MC)	B3. I'm hungry. I ____ for the whole day! a has not eaten b have eaten c have not eaten d has eaten	Can Ss recognize the correct form of present perfect tense? Can Ss observe the meaning of the sentence correctly?
C (Fill in the blanks)	C1. All of us _____ (forget) to hand in our homework!	Can Ss write present perfect tense correctly in form and spelling?

Figure 6: Overall performance of S2 students

OVERALL PERFORMANCE							
No. of Students: 60							
Class Level: Stream 1, 2, 3, 4							
Duration: 20 minutes							
Mode: Online question paper; written answers on paper							
PART	A (/6)	B(/4)	C(/4)	D(/5)	E(/12)	Total(/33)	Total(/100)
AVG	4	2	2	3	3	14	42
MAX	6	4	6	5	10	31	94
MIN	0	0	0	0	0	0	0
MED	5	2.5	1	3	2	11	33
BEST	**			*			

Figure 7: Distribution of answers according to class (streams)

FINDING				
B3. I'm hungry. I ____ for the whole day!				
a has not eaten				
b have eaten				
c have not eaten				
d has eaten				
<ul style="list-style-type: none"> • Most Ss have correctly answered C have eaten x28 (correct form, correct meaning) • 1st Most chosen mistake: B Have eaten x9 (correct form, <u>wrong meaning</u>) • 2nd Most chosen mistake: D has eaten x5 (<u>wrong aux</u>, <u>wrong meaning</u>) • 3rd Most chosen mistake: A has not eaten x5 (<u>wrong aux</u>, correct meaning) 				
ANSWER	Stream 1	Stream 2	Stream 3	Stream 4
A has not eaten	1	2	1	1
B have eaten	1	1	4	3
C have not eaten *	16	13	6	6
D has eaten	0	0	2	3
No. of Ss	18	16	13	13

Figure 8: Finding of the item analysis of question B3

FINDING OF QUESTION B3:

When spelling, correct aux and correct p.p. verb are presented:

- Students most commonly made mistake on the meaning (B+D). (12 in total)
- Students also commonly made mistake on the aux (A+D). (9 in total)
- Small group of student made mistakes on both the aux and meaning (D) (5 in total)

Figure 9: Distribution of answers according to class (streams)

FINDING

- C1. All of us _____ (forget) to hand in our homework!
- Missing aux (has / have) x31
- Wrong pp (past tense) x 16
- Missing pp x 1
- Wrong pp (present tense) x5
- Wrong aux x3
- Wrong pp (confused word 'forgiven') x1

ANSWER	Stream 1	Stream 2	Stream 3	Stream 4
Correct:	7	6	3	0
Correct pp:	10	9	6	1
Correct aux	10	8	5	1
Wrong pp:	8	5	6	7
Forgot	6	3	4	1
Forget	1	1	0	3
Forgiven	0	0	1	0
Forgotten	0	0	1	2
Fogotten	1	0	0	0
Forgeted	0	0	0	1
Forgoted	0	1	0	0
Wrong aux:	1	1	0	2
Missing aux:	7	6	8	10
Missing pp:	0	1	1	4
wrong form:	7	6	8	11
No. of Ss	18	16	13	13

Figure 10: Finding of the item analysis of question C1

FINDING OF QUESTION C1:

Among students' mistakes:

- Students most commonly show (1) neglect of aux verb and (2) confusion of past tense verb as the past participle verb.
- Students showed attempt to provide an answer similar to a past tense answer.
- Most frequent mistake made by Stream 1 & 2 students: wrong p.p. (esp. past tense).
- Most frequent mistake made by Stream 4 & 5 students: missing aux verb.

Figure 11: Teachers' reflection of the item analysis exercise

REFLECTION

Difficulties:

- Past participle verb spelling (unfamiliar/easily confused)
- Syntactic relationships: applying multiple grammar rules at the same time
- Handling irregular changes (spelling and meaning)

Learning and Teaching Needs:

- Consolidate spelling and knowledge of the tense from the most basic level.
- Build awareness and sensitivity to syntactic changes in present perfect tense.
- Diversify practice examples/questions to heighten factors that can affect the form of present perfect tense so that the irregular changes can also be more familiar to students.
- More basic revision for related grammar items (e.g., subject-verb agreement)

The exercise has given teachers very specific information on student difficulties with the use of present perfect tense. This is valuable feedback to enhance learning and teaching needs. It helps the strengthening of the learning-teaching-assessment cycle.

Actions Taken

Needs analysis was conducted prior to the commencement of the collaboration to determine the target area for improvement on learning and teaching. School documents, which include internal and external assessment paper and reports, were collected. Findings were shared with the panel as the basis of area to be focused on for the needs of the learning and teaching practices of the English Language Panel.

Workshops on Assessment Literacy for all teaching staff were conducted. The purpose is for teachers of other key learning areas to enhance assessment literacy.

School suspension due to COVID-19 has greatly affected the teaching mode, teaching schedule and assessment arrangement. The final examination of S2 was cancelled and hence, the planned item analysis was unable to be carried out.

Impact

1. Student Level

With the revised assessment design, students were found to have enhanced motivation and confidence in attempting the assessment paper.

A teacher did cite an example that he used the findings of the item analysis to inform his class of their strengths and weaknesses when compared to other classes, some students in the class said they understand much more about their own learning progress. The more ambitious students in the class were motivated to draw up learning plans to set goals for their own learning.

Teachers stated that it was hard to make more detailed observation when the academic year and assessment tasks have been affected by school suspension several times during the year. The online lesson arrangement in the second semester has added some difficulty to seeing if there have been any changes so far.

2. Teacher Level

Teachers found the collaboration through discussion and cooperation among the team, fruitful. Assessment literacy has touched upon practical issues of how to improve assessment designs and evaluation.

Teachers treasured the professional exchanges among colleagues, of their thoughts about the existing assessment and assessment practices.

Teachers felt the collaboration was successful, despite the many challenges related to the school suspension. It was effective in the sense that the team had reviewed the entire Learning-Teaching-Assessment cycle, in particular the 'assessment' components. After the collaboration, teachers have thought more about how to set and arrange an assessment in detail.

Through the discussion and collaboration, some teachers mentioned learning how to better set a paper for students with differing learning needs. They also found data analysis to be a good way to find out the learning difficulties of the students in spite of the extra time this required.

In addition, each section could be divided into two tasks, easy and difficult in order to help less able students and simultaneously provide opportunities for more able students to challenge themselves.

Teachers have learned more about the question level analysis and item analysis and would certainly incorporate both into their future teaching planning.

The different suggestions on the assessment tasks, e.g., 'List Five Things' and 'Admit Slip', are both practical and convenient for use in daily teaching. Teachers had the tasks modified and tried out in their classes.

3. Curriculum Level

Collaboration with colleagues and the School Development Officer helped the teachers to review their formal assessment routines and areas that could be improved at form level and department level.

The most effective strategies were backward planning and item analysis. Both helped to give more clarity to teachers in understanding learning and teaching needs.

Teachers had wished to plan to work on the following aspects in the final exam paper in the second semester. This was to enhance face validity by adding line numbers in reading comprehension and improved consistency of the paper layout. Suggestions on providing clear instruction, explanation and examples for students would also be given to teachers.

A trial analysis of level of difficulties of quiz question are good practice. This shall be carried out in selected future assessments in S2 of the next cohort. In the paper setting stage, the questions would be tiered with different levels of difficulty to cater for learning diversity. This practice enhances the content validity of the assessment, as the questions set would be more carefully thought out thereby strengthen the alignment of learning, teaching and assessment.

3. Departmental Level and School Level

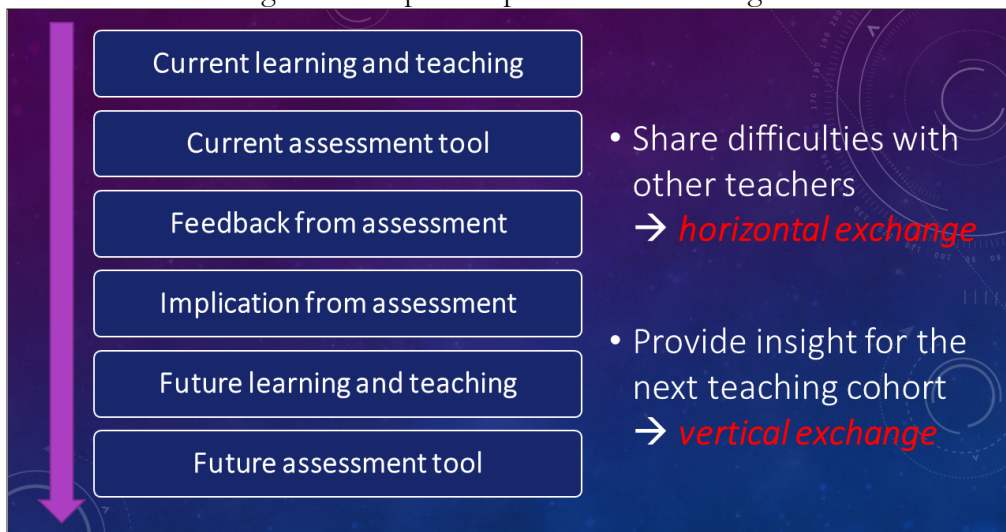
Being one of the teachers collaborating in this assessment literacy project, the involvement of the English Language Panel Head played a vital role in the departmental level dissemination of the experience gained and assessment for learning practices tried out.

The process of item analysis was helpful in enhancing teachers' understanding of how students performed in a particular assessment task, and in what specific ways their performance was hindered.

The panel shall carry out some more trials and applications at different form levels in order to show wider implication of the assessments.

The following slide was shared by the school at the CEAL Territory-wide Dissemination in June 2020. It sums up how, through the exercise in tracking students' learning through assessment for learning practices, the English Language Panel sees the importance of horizontal and vertical professional exchanges in enhancing learning and teaching effectiveness.

Figure 12: Impact of professional exchanges



Way Forward

To improve their overall effectiveness, the English Language Panel will look into the following aspects of its work in the coming academic year.

Learning:

- incorporation of more formative assessment tasks
- strengthen the link between learning experience and assessment tasks

Teaching:

- increase horizontal and vertical professional exchanges among teachers to enhance effectiveness of learning and teaching

Assessment:

- review existing formal assessment designs
- use item analysis on selected core topics

If the readers are interested in learning more about assessment literacy, the following bookas are useful references.

Bachman, L. F., & Palmer, A S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford University Press.

Fisher, D., Frey, N., & Hattie, J. (2016). *Visible learning for literacy, Grades K-12: Implementing the practices that work best to accelerate student learning*. Corwin.

Tileston, D. W. (2004). *What every teacher should know about student assessment*. Corwin Press.

Appendixes

Appendix 1: Original Design of Mark Box in Question and Answer Book

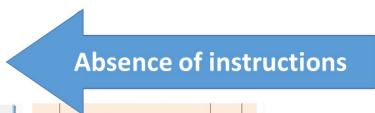
Full Mark: 100							Parent's _____ Signature	
Part A							Part B	
A	B	C	D	E	F	A2	PART B1	PART B2
/10	/10	/5	/5	/4	/6	/30	/30	/30

Appendix 2: Revised Design of Mark Box in Question and Answer Book

Subject Code: 2121						Parent's Signature: _____
Full mark: 100 marks						
Question-Answer Book						
	Part A1	Part A2	Part B1	Part B2	Total(A+B)	
Marks						
	/40	/30	/30	/30	/100	

Appendix 3: Original Assessment Paper without Instructions

A. Places in a shopping mall (4 marks)






(1) _____




(2) _____




(3) _____



(4) _____



(5) _____

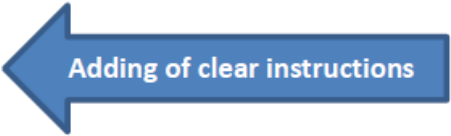


(6) _____

Appendix 4: Revised Assessment Paper with Clear Instructions

Task 2 Words about Family Problems and Feelings

Fill in the blanks with suitable words. (4 marks)



Adding of clear instructions

- a. Mary seldom talks to her parents. She usually reads books when her parents use their mobile phones. They lack _____.
- b. John's flat is very small. He always works in the library. He lacks _____.
- c. John has lost his job for a long time. Now he has _____ problems.
- d. I will not go to that restaurant again because their staff was quite _____.