Assessment for Learning:
Enhancing Writing through Learning Stroke of English Alphabet (SEA)

Lai Tak Fai, Larry

1. Introduction

English letters are always used in daily life, such as classes, bus number, grade, exit of MTR station and so on. Additionally, alphabet is an important element in learning English. However, most of my students still can not read and write twenty-six letters. Students were required to write English letters from A to Z in the past few years. Some teachers believed that students could write well by tracing the letters, which led to extremely structured and boring written work. Our children with moderate mentally handicapped. It is a normal outcome of most children that they do not know how to write and read English letters. However, we discovered that such kind of guided tracing exercises destroyed students' interest. As a result, they can only trace the letters on worksheets. They have not developed the stroke concept to write the letters. In view of the weak performance in writing letters, teachers sought to improve students' concepts and skills in writing letters by implementing formative assessment into learning stroke of English alphabet.

2. Rationale & Planning

2.1 School background

My school is a special school which serves children with moderate mentally handicapped. Children also have different kinds of disabilities, such as autism, dyslexia, developmental coordination disorder, visual spatial perceptual disorder, no speaking ability and so forth. With very limited usage to English letters in their daily life, most students have poor result in letter writing and recognizing. They have difficulty in writing letter without letter tracing worksheet. In daily practice, the teacher introduces a letter, shows children how it is formed, and explains the sound or sounds it makes. This letter becomes the focus for most of the activities during the week (Walmsley, S. A. & Walmsley, B. B., 1996). For example, if it is "A", children may bring in show-and-tell items beginning with "A", mark objects beginning with "A" on worksheets, and do things related to the letter(eat Apple, trace the letter "A", cut the shape "A" and colour Apples). Furthermore, my school only has one English lesson per week. My students can hardly learn twenty-six letters in a year.

2.2 Objectives of the Implementation Plan

In this action learning project, I teach my students to learn the English letters, by using the "strokes of English alphabets" (SEA) approach. Many children in my school still can not recognize twenty-six letters. However, some teachers still believed that students should do writing exercises to drill the letter writing from A to Z progressively. Students trace the letters without stroke concept in their mind. Moreover, it is little value to give them a grade as they are not guided by insight to know what was good or bad about their letter writing. Hence, I believed that my students may write the letters correctly when they got the stroke concept of alphabet. The stroke can be the base unit of the letter. Therefore I designed a new learning approach to help children in learning letters. We may discover that the letters are made up by limited strokes, such as horizontal line, down stroke, diagonal line and curve. They are required to construct the stroke concept of alphabets. "SEA" is a strategy for improving students' letter learning. To ensure students learn letters correctly, I will also adopt on-going assessment into the teaching and learning process (see Appendix 7). It is to promote learning by providing information about learners' achievements in relation to the learning targets and objectives, thereby helping learners and teachers understand learners' progress and enabling them to plan for further improvement. My aim of this project is to find out the

extent that can observation, peer and self-assessment can enhance students' learning English alphabets. My study is going to enhance students' writing through learning stoke of English Alphabet

3. Data Collection

3.1 Implementation Design and procedure

Altogether, there were two double lessons taught for this investigation. Six students (see Table 1) were required to learn the strokes of English alphabet in the first double lessons. The teacher first taught them how to read four kinds of strokes. Students also learned to sing the Stroke Song as well (see Appendix 5). Moreover, the teacher tried to use gesture to visualize the strokes. Next, they learned and practiced the strokes by writing, singing, gesturing. During the lessons, I observed students learning based on their responses and writing. Then I gave feedback to the students whether they write the letter strokes correctly or not. If the students can not control their handwriting, they are required to do some worksheets about four kinds of strokes (see Appendix 5).

In the second doubled lessons, students were invited to make a guess of the letter stroke when the teacher demonstrated the letter calligraphy (base on the sequence of SEA approach, see Appendix 7).

Then students were asked to write and recognize nine groups of letters gradually (see Appendix 7). Students tried to write out the letter while reading the stroke. For example, student should say "橫、直、橫 (horizontal line, down stroke, horizontal line)" to make up the letter "F". Some of them may use gesture instead of reading the stroke if they had difficult in pronunciation. After that, they took turns to observe their peers' writing on the white board.

For students to do peer observation, the teacher needs to explain the focus on different letters which are composed of different strokes. This was to make sure that students understood what they had to observe.

Table 1: Children Level

Lower level	Sunny (Class E), Jane(Class F)
Intermediate Level	George(Class I), Ada(Class F)
Upper Level	Kitty(Class I), Kai(Class E)

3.2 Peer observation and teacher observation

I observed six students' writing performance from three ability groups (see Table 1 and Appendix 6). The simplest type of observation sheet is a blank piece of paper. To make a record of my observation, I took notes of anything relates to the SEA after the lesson. I also had discussion with them before and after the lesson. While doing the informal observation during lessons, I also observed how the students learnt the letters with stroke concept. Informal methods of observation

involve the teacher in collecting information while working with children as part of their normal learning relationship, but it is on the basis of often very short interactions teachers make judgments about a child's thinking (Cavendish *et al.*, 1990). Students were invited to observe their peers and just concentrate on writing the stroke. Both teacher and student who could be the observers would share their views about the same lesson.

3.3 Conferencing with colleague

I interviewed the former curriculum development mistress to discuss about the SEA approach, students' performance and the feasibility of using peer and self-assessment in learning. She gave me valuable feedback about how to improve the SEA approach for teaching and learning (see Appendix 2).

3.4 Interview with parents

Three parents were invited to participate in this experiment at home. They also feel difficult while teaching their children English letters before. After the phone conferencing, they adopted the SEA approach to observe their children letter writing and recognizing (see Appendix 2).

4. Findings

4.1 Students' performance

During the lessons, all students can use gesture to interpret four kinds of strokes (horizontal line, down stroke, diagonal line, and curve). They may internalize the stroke concept in constructing the letters. Five of them (about 83 percents) can use the strokes to describe how to form a letter (see Appendix 5). For example, the student explained that letter "F" is composed by "horizontal line + down stroke + horizontal line". They showed their understanding that different letters can be made up with certain of strokes. All of them liked to sing the stroke song with gesture (see Appendix 5). They can use their body language to interpret the letter writing. It is much entertaining than tracing or coping the letter on worksheet only.

The teacher did not provide students a checklist form because there are only two items for students to assess themselves in SEA learning. To facilitate learning and teaching, it is advisable to integrate formative assessment into the daily learning and teaching process and focus on 1 or 2 learning targets and objectives each time (CDC, 2004). Hence, most students understood how to do the self-assessment. Two of them were able to find out the errors and make corrections to themselves and their peers. According to the successful criteria (see Table 2), some students claimed that they were able to find out and correct the stroke gesture.

Kitty and Kai felt confident to demonstrate the correct stroke gesture. They were eager to be assessors to their peers because they really understood the successful criteria. Less able students (Sunny and Jane) did not have any response when doing the self-assessment while the more able ones did not have any difficulty.

In daily practice, it is seldom for the students to do peer-assessment and correct peers' errors. One third of them enjoyed doing it. This activity allowed them to read other's writing and so that they could learn from each other. About one third of students could find the errors from their peers' writing and helped them to do amendments. For example, Kai said the letter "F" should not have a "tail" (他的意思：字母 F 的直劃過長，而且底部彎起了像有一條尾). Hence they put more effort on finding and correcting the errors. I found this was very interesting, as I never had thought they can do it before.

It was found that more able students could understand the criteria quite well but the less able students still needed help from the teachers. Students could discuss the errors with teacher and their partners. It provided opportunities for students to clarify the strokes/letters what they wrote.

Table 2: Successful criteria

Successful Criteria	Achieved	Successful Percentage
Pupils can read four strokes (with gesture)	6	100%
Pupils can use strokes to describe their letter writing	5	83%

Table 3: Students' Performance

Name	Writing Performance
Sunny	He can write eight uppercase letters independently.
Jane	She can write five uppercase letters independently.
George	He can write twenty-three uppercase letters without prompting.
Ada	She can write twelve uppercase letters without prompting.
Kitty	She can write all uppercase letters without prompting.
Kai	He can write all uppercase letters without prompting.

4.2 Parents' feedback

All parents said that they do not know how to assist their children learning in letter writing before. When we talked about the letter learning (SEA approach) by phone, they also agreed that their children need to have a new approach in learning letters. They also found SEA approach useful and let them clearly understand different letters with different strokes. Some of them reflected that they can readily assist their children in writing when they observe and assess their children's writing methodically (see Appendix 1, 3 and 4). Learners' strengths and weaknesses can be identified more easily at an early stage and provision of timely feedback becomes more manageable to teachers and more focused for learners (CDC, 2004).

One parent reflected that his child (Sunny) did not equip with prewriting skills. Sunny can not hold a pencil properly and control his fine motor easily when he wrote the curve, such as the letter "B" and "G". Hence, I proposed that Sunny should start with the category of "horizontal lines and down strokes". Sunny's father agreed that the children should learn the letters step by step. We should finally focus on the most difficult "letter combinations" (curve category, see Appendix 7).

4.3 Colleague's feedback

Most students have difficult in writing and recognizing the English alphabet. In fact, the teachers felt difficult to follow up students' performance without a systematic record yearly. For example, some students may recognize the printed letters but can not write more than half letters (see Appendix 3 and 4). Some students can not read and write more than half letters for several years. She suggested that I may try the SEA approach in specific classes or individuals to get some successful experiences next year. It is not time available in a whole school trial by myself only. When the teachers are using the SEA observation form to observe students' performance, they may easily look for which group of letters (i.e. stroke type) is most difficult to individuals (see Appendix 7). As a result, SEA observation is provided certain information for reviewing the teaching and learning. SEA assessment benefits students, teachers and parents, when the data is collected and interpreted for the purpose of providing quality feedback on how to improve alphabet learning performance. This is the main purpose of assessment for SEA approach (see Appendix 2).

5. Discussions and Implications

5.1 How do teacher, peer and parent observation work in SEA learning

We may be able to go further, and analyze samples of children's performance in letter writing (see Appendix 6) in order to create profiles of children. It provided detailed and reliable information. The teacher collected evidence in a recorded form which is useful in providing information to colleagues, parents or children themselves (see Appendix 7). The assessment can also predict how well students will cope with the word use afterward. Fortunately, the assessment of SEA can be a diagnostic test with predictive validity.

Peer observation is key strategy to involve students in taking more responsibility for their own learning. While the benefits may not initially be obvious to students, this process offers a means of enhancing the learning experience and developing key capabilities in students. When introducing this strategy, make sure that students become aware of the benefits for them. When teachers compromise that peer observation is not for accuracy and we can remind students of their mistakes afterwards.

Parents may also concern about the time taking for carrying the observation. In my point of view, after parents get used to focus on certain stroke of letters, the time used will be decreased. In order to help parents develop their ability on doing the assessment, I suggest having common criteria for the task to prevent putting too many new criteria into it at one time. It is not advisable to assess too many

learning targets and objectives through an assessment task for formative assessment (CDC, 2004). The earlier the parents identify their children's difficulties, the timelier it is for parents to help their children to overcome the writing difficulties. Parents can follow the schedule by observing children to learn the combinations of letters. Someone may worry about the accuracy of observation. Again this can be overcome if the parents understand the value of SEA observation. Parents are responsible to diagnose their children's strengths and weaknesses and to identify what letters they know or not (see Appendix 1). Their observation can be the diagnostic test. If the diagnostic test found out that the child can not write some strokes properly, he or she should practice by tracing the strokes, copying them and writing them on worksheets (see Appendix 5).

5.2 The limitations and feasibility of self and peer assessment at my school

Students can do self assessment and peer assessment orally. Students may feel difficult to fill in the formal peer assessment form or checklist. Therefore, I let students observe themselves and their peers in a small area. I think self or peer observation can be the element of self or peer assessment. The different between observation and assessment is written or not. Some people may argue that it is not reliable by self or peer observation. The important point is that student can better understand what they have learnt. When the learners involved in self or peer assessment, they should have a clear understanding of what they should be able to

do in order to achieve the learning objectives. Learners could be involved in setting the success criteria so that they could have a greater sense of ownership and commitment (CDC, 2002). Therefore, peer or self assessment can help learning because students become more aware of their own level of skills and knowledge and what they need to do to improve. It can be motivating as it involves students more directly in their learning and they feel that their own opinions have value. It recognizes that students have a share of responsibility for their own learning.

Black et al. (2003) pointed out that assessment can be productive if children are trained in self assessment. Hence they can understand the main purpose of their learning and thereby grasp what they need to achieve. This view was well reflected in my investigation. The criteria of the success in SEA learning were stated clearly and explained to students. Most of them understood and reflected on their learning. I realized that students recognize what they are aiming could enhance their learning and develop them a strong sense of ownership of their learning.

In my investigation, I also found that peer-assessment not only enhanced students' learning but also enhanced their social skills. More able students (Kai and Kitty) started to accept and appreciate comments for others.

Within these two double lessons, peer and self-assessment did work well in the classroom. It allowed me to identify the linkage between assessment and learning. The more the students get involved in the assessment, the more they become motivated in and responsible for their own learning.

6. Conclusion

After my investigation, I realize that students learn effectively if they have a clear stroke concept for what they are going to write. What I have to learn is that it is still very difficult to our pupils without special learning strategy. If I still fall into habitual practices in teaching letters, their difficulties in writing still can not be solved at the end. When the teacher emphasized the stroke characteristic and applied the SEA approach in teaching, the students could recognize and write letters systematically. Hence, the teacher can easily observe the stroke that students failed to grasp from the stroke of different letters groups. The teacher may also provide timely guidance and feedback to students. Then, the students may improve and review their writing themselves with concrete feedback by peers, teacher and parent. The assessment is not merely helping students to grasp the characteristic of different letters, it can also enhance student interest in writing. From now on I have confidence and strategy in adopting observation for letter teaching.

References

The Curriculum Development Council (CDC). (2002). Basic Education Curriculum Guide: Building on strengths. HK, Government Logistics Department.

The Curriculum Development Council (CDC). (2004). Promoting Assessment for Learning in English Language Education at Primary Level. HK, Government Logistics Department.

Cavendish, S. J., Galton, M., Hargreaves, L. and Harlen, W. (1990) Assessing Science in the Primary Classroom: Observing Activities, London, Paul Chapman.

Walmsley, S. A. & Walmsley, B. B. (1996). Kindergarten Ready or Not? A Parent's Guide. US, Heinemann.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). Assessment for learning: Putting it into practice. Maidenhead: Open University Press.

Appendix 1
英文識字親子課業學習指引：

家長可根據以下學習英文字母筆劃(SEA)的策略，幫助學生學會正確書寫大楷和小楷英文字母，學習次序是先學習大楷，然後才學習小楷，字母筆劃會被分為三類，第一類是「橫和直」；第二類是「斜」；第三類是「彎」，按著每類的先後次序學習，學生便可以循序漸進地學會書寫及辨認英文字母。

從大楷和小楷英文字母列表中，我們會發現「橫和直」筆劃類別內有較少組的字母，而「彎」筆劃內的有較多組的字母，因此建議先學「橫和直」，然後學「斜」，最後學「彎」的相關字母組別。另外，我們亦會發現學習「斜」筆劃類別前要先掌握「橫和直」的基礎，而學習「彎」筆劃類別字母前要先掌握「橫和直」及「斜」筆劃類別的技巧。因此，由「橫和直」筆劃類別內的字母學到「彎」筆劃類別內的字母是有學習層次及優先次序，有助學生達到預期的學習效果。

書寫及認讀的字母（大楷英文字母 **Uppercase alphabet letters**）

筆劃類別 **Stroke Types**	字母組別 **Letter Combinations**（分組有先後次序）
橫 和 直	① I, F and E ; ② L, T and H
斜	① X, V and Y ; ② N, Z and A ; ③ K, M and W
彎	① D, P and B ; ② R, J and U ; ③ C, G and S ; ④ O and Q

書寫及認讀的字母（小楷英文字母 **Lowercase alphabet letters**）

筆劃類別 **Stroke Types**	字母組別 **Letter Combinations**（分組有先後次序）
橫 和 直 (+點)	① l, t and i;
斜	① v and w ; ② x and y ; ③ z and k
彎 (+點)	① j and f ; ② r and n ; ③ h and m ; ④ s, c and o ; ⑤ e, u and a ; ⑥ q, g and d ; ⑦ b and p

預期學習效果：
1. 家長和老師能協助學生掌握相近字母的筆劃特徵。
2. 學生能在家校協作下建構字母筆劃概念，有系統地學習書寫字母。
3. 家長和老師同樣地把二十六字母分為三種筆劃類別，清楚找出學生未能掌握那組字母筆劃，方便家長和老師跟進和加強學生未能學會的字母組別。

筆劃類別及書寫方法：
橫線：—（由左至右）
直線：｜（由上至下）
斜線：／（由右上角至左下角）；＼（由左上角至右下角）
彎線：⊂（由左彎向下）；⊃（由右彎向下）
　　　∪（由下彎向上）；∩（由上彎向下）
　　　︵︵（由上至下的垂直連續曲線）
　　　○（向左打圈）

Appendix 2 : Conferencing with parents/colleague

備註：我並不懂得翻譯，擔心把原先談話內容翻譯成英文後會遺失部份內容，因此我只有把廣東話口語轉化成中文書面語。

Conferencing with parents

Date: 11-06-2006　　　Time: 18:25-18:35　　　　　Parent: Ada's mother

Contents: 從一組一組筆劃來學習英文字母，家長發現其女兒原來寫「橫」劃時是由右至左，容易更正個女寫錯英文字母筆劃，亦感覺到這樣一步一步學習和評核學生在書寫字母和認讀字母方面會較有系統，學生現在已經可以記得「橫和直」那組字母的筆劃特徵了。

Date: 11-06-2006　　　Time: 18:40-18:50　　　　　Parent: Jane's mother

Contents: 家長開始了解其女兒學習字母筆劃所遇到的困難，贊成把字母歸成不同組別來學習較容易幫助其女兒看到相近字母的分別。

Date: 15-06-2006　　　Time: 19:50-20:15　　　　　Parent: Sunny's father

Contents: 家長反映他曾多次帶兒子參加過校外志願團體舉辦的英文字母班，在本校學了字母三年以來仍 未學會所有英文字母，家長贊成學習筆劃有助學生逐步學寫英文字母。家長坦白地告訴我他沒有認真看過課業指引，他只有按以往學習英文字母方式教導兒子學習字母。他亦告訴我練習了三天，他的兒子感到無興趣再學下去。我因此向家長推介和解釋字母筆劃學習方法 (SEA approach)，他亦贊同這個方法在以往未曾嘗試過，可以一試。他亦憂慮他的兒子未能掌握寫筆劃的方法，我便建議先讓孩子練習「橫、直、斜和彎」的寫法，然後才開始按步就班學習字母。

Conferencing with colleague

Date: 07-06-2006　　　Time: 16:30-17:00

因事前與她商議不在會談時錄音，因此我只有筆錄我們當中的對話內容，因談話內容較多，只好把重點分類列出。

1. 學生學習：

1.1 字母是我們學生的生活所需，然而部份學生會識講唔識寫字母，亦可能識指認唔識讀字母，有部份又唔識講和唔認得字母，在跟進學習字母方面較有難度

1.2 SEA 應用在高組能力的學生會更容易見到成效，下學年可以找部份班別試行，讓成效顯注後才全校推行

1.3 學生有不同的學習類型，如聽覺型，視覺型、實作型等，運用五官來學習有助加強學生記憶。

1.4 下年度可嘗試以個別學生和個別班別形式試行 SEA approach 學習英文字母，一方面可顧及教師工作量，而數據亦會更準確，並請一些有心的家長作試行計劃

2. SEA 學習策略：

2.1 SEA 讓老師更容易找出學生在甚麼類型筆劃遇到困難，加強訓練相關字母筆劃會更有效

2.2 字母工作紙不宜有太多線可能會混亂學生，然而適量的線條是有助學生掌握字母的大小和高矮。

2.3 在教授字母重點筆劃時，老師可用螢光筆強調某些易錯筆劃，讓學生更容易掌握不同字母的寫法和定形。

Appendix 3 : 英文字母字體

印刷字母和書寫的母的分別，印刷字母是根據電腦常用字型
「Arial」和「Times New Roman」，而書寫字母主要參考字型
「Arial」和「Comic San MS」作標準。

（大楷印刷字母）A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

（大楷書寫字母）A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

Appendix 4 : 英文字母字體

印刷字母和書寫的母的分別，印刷字母是根據電腦常用字型「Arial」和「Times New Roman」，而書寫字母主要參考字型「Arial」和「Comic San MS」作標準。

（小楷印刷字母）a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z

（小楷書寫字母）a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z
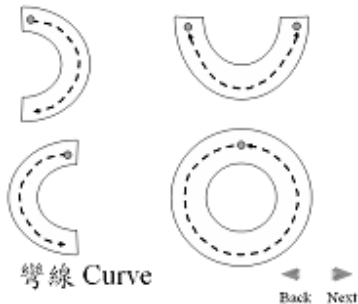
Appendix 5 : SEA Learning Materials

Stroke Song

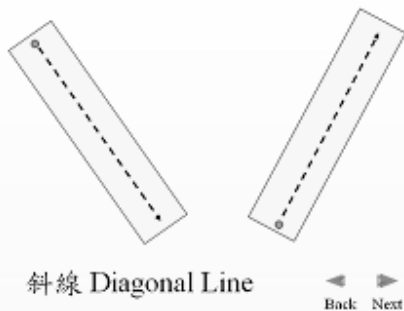| Musical Note	d	m	s	l	r	r	m
pithy formula	橫	直	斜	彎	你	要	知
Musical Note	s	d	r	m	r	t	m
pithy formula	組	成	字	母	好	容	易

目的：把筆劃集中在一首歌中，讓學生容易記得筆劃的名稱及其特徵，加強學生對字
母是由筆劃組成的概念。

Four kinds of strokes

Use finger to trace the curve

彎線 Curve   ◄ ► Back Next

Use finger to trace the horizontal line

橫線 Horizontal Line   ◄ ► Back Next

Use finger to trace the diagonal line

斜線 Diagonal Line   ◄ ► Back Next
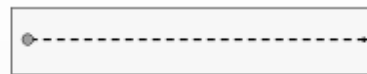
Use finger to trace the down stroke

直線 Down Stroke   ◄ ► Back Next

Stroke Worksheets

Appendix 6 : Students' Writing Sample

Sunny

Jane

George

Ada

Kitty

Kai

Appendix 7 : Letter Writing Performance Record

Class：__E,F,I__　　Level：_1,2,3_　　Assessment Date：_01/06/2006_　　　　Teacher：_Lai Tak Fai, Larry_

橫和直①			橫和直②			斜①			斜②			斜③			彎①			彎②			彎③			彎④		分組評估結果 正確量(正確率)			跟進	姓名
I	F	E	L	T	H	X	V	Y	N	Z	A	K	M	W	D	P	B	R	J	U	C	G	S	O	Q	橫和直	斜	彎		
✓	✓	✓					✓						✓		✓	✓		✓								3/6(50%)	2/9(22%)	3/11(27%)	橫和直	Sunny
							✓						✓		✓	✓				✓						0/6(0%)	2/9(22%)	3/11(27%)	橫和直	Jane
✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	5/6(83%)	8/9(89%)	10/11(91%)	橫和直②	George
✓	✓	✓	✓			✓							✓		✓	✓										4/6(67%)	6/9(67%)	2/11(18%)	橫和直	Ada
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6/6(100%)	9/9(100%)	11/11(100%)	NA	Kitty
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6/6(100%)	9/9(100%)	11/11(100%)	NA	Kai

評估準則：　✓　—　能獨立書寫出正確的字母
　　　　　　留空　—　未能獨立書寫出正確的字母

達標要求：
每組(橫和直；斜；彎)正確率要超過 70%成績才爲之達標，學生需按分組未達標優先次序重新學習該組字母(次序：1 橫和直 → 2 斜 → 3 彎)。如果各組均達標，便只需跟進個別字母或該字母組別，如 B 或彎①。

計算方法：
該組正確數量÷該組字母總數 x 100%＝分組評估結果