

## Modular Curriculum for Chinese Language in Primary Schools

Previous policy: All P1 to P4 students follow a common Chinese Language (CL) syllabus. At P5 they are differentiated into 3 courses accordingly to ability.

In 2006, a modular CL curriculum was piloted at 25 schools. Under this structure, all students take the same core modules from P1 – P6. Supplementing the core modules are bridging and reinforcement modules for P1 – P4 students with little or no prior exposure to CL, and enrichment modules for P1 – P6 students with the higher ability and interest. The new approach enables the teaching of CL to be better customised to students' ability and home language background.

### OVERVIEW: SINGAPORE'S BILINGUAL POLICY

Singapore's bilingual policy originated as early as our independence in 1965. English, for pragmatic reasons, was chosen as the working language of Singapore. A bilingual policy was adopted so that citizens would keep their mother tongue and stay connected with their cultural heritage. Amidst the sweeping political changes, this was especially reassuring for those educated in non-English medium schools, who viewed language as key to their personal and cultural identity.

The learning of mother tongue was made compulsory in schools in 1979 and the bilingual policy has undergone many revisions since. Two major reviews of the Chinese Language (CL) syllabus were conducted, in 1991 and 1999. This case study focuses on the third major review conducted in 2004, which introduced the most radical changes yet to the CL syllabus.

### DETAILS OF PREVIOUS POLICY

Before the review in 2004, all primary school students from P1 – P4 followed a common CL syllabus. At P5 they could opt to do one of three different CL syllabuses according to their CL ability and interest: -

- (1) CL – the mainstream syllabus. Recommended teaching time is 4 hours a week.
- (2) HCL (Higher Chinese Language) – The HCL syllabus at Primary level has developed more as a CL-plus syllabus, covering a greater number of characters and idiomatic phrases than CL, but not differing much from CL in terms of learning approach. The recommended teaching time of HCL is 5 hours a week. In some SAP schools, students take HCL from P1.
- (3) Basic CL is what is taught to students with exceptional difficulty in learning CL. Basic CL emphasises oral communication and the recommended teaching time is 2 hours a week.

## FEBRUARY 2004 – FORMATION OF THE CHINESE LANGUAGE CURRICULUM AND PEDAGOGY REVIEW COMMITTEE (CLCPRC)

The Ministry of Education (MOE) forms the Chinese Language Curriculum and Pedagogy Review Committee (CLCPRC) to conduct a comprehensive review of the teaching and learning of CL in schools. It is led by Mr Wee Heng Tin, the former Director-General of MOE, with the Minister of State for Education, Mr Chan Soo Sen as Advisor, and comprises teaching professionals such as principals and heads of department for mother tongue, academics and Ministry representatives. A resource panel consisting of additional resource persons such as the media, examination professionals, planning and policy officers and foreign academics is also set up to aid the Committee's work.

With English fast becoming the dominant language spoken at home, it is likely that many Singaporeans will lose the CL fluency they have built up in school upon entering the workforce. This may be economically disadvantageous to Singapore in the light of a rising China. Hence one of the committee's main aims is to introduce a CL pedagogy that influences students to continue reading and using Chinese even after leaving school.

### RESEARCH FINDINGS – CURRENT CLIMATE

A survey was commissioned on the teaching and learning of Chinese, involving 4,500 students, 4,600 parents, 320 school Principals and 1,000 CL teachers.

#### Survey Findings

##### A. Use of Chinese Language at Home and in Social Settings

The findings point to a generational shift in language use at home among students – an increasing use of English over time and corresponding decrease in use of Chinese.

#### Home Language Background of P1 Chinese Students

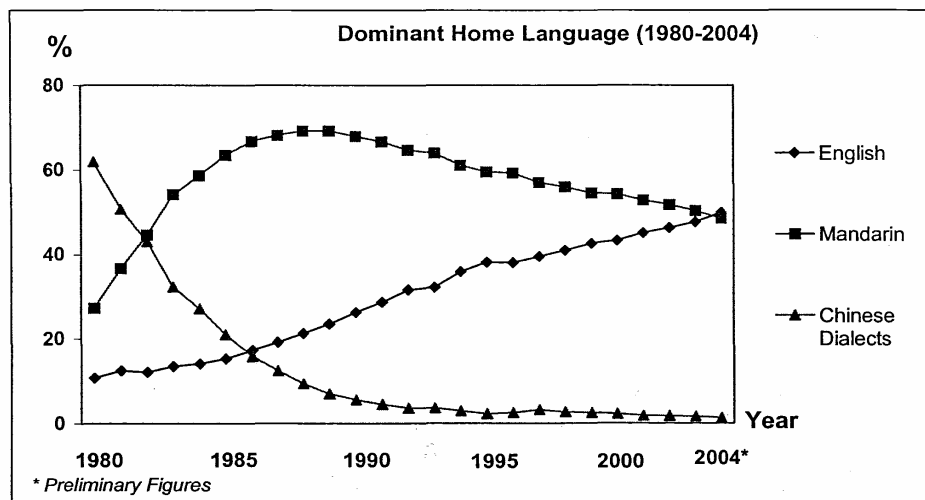


Table 1

% of parents who reported speaking to their child in	Level				
	P2	P4	P6	S2	S4
English	25.7	23.5	21.5	24.4	17.6
English and Chinese	33.0	27.4	29.6	21.8	19.6
Chinese	37.3	44.8	44.1	50.2	59.1

S2 = Secondary 2, S4=Secondary 4

The proportion of parents who speak to their child in Chinese declined with the age of their child, from 59% at S4 to 37% at P2<sup>1</sup>. This is matched by a higher proportion of parents who speak to their child in English - 18% at S4 versus 26% at P2, or in both English and Chinese - 20% at S4 to 33% at P2 (See [Table 1](#)).

Students' responses give a similar picture of the declining use of Chinese. The proportion of students who reported speaking to their mother in Chinese, or using Chinese with their siblings and classmates, decreased over time.

### B. Difficulty in Learning Chinese

The analyses by home language indicate that home language influenced students' perceptions of the difficulty of Chinese and English.

More students from English-speaking homes found Chinese difficult, compared to those from Chinese-speaking homes. At P4, 61% of students from English-speaking homes found Chinese difficult, compared to 40% of students from Chinese-speaking homes. This increased to 77% and 36% respectively at P6. On the other hand, more students from Chinese-speaking homes found English difficult, compared to those from English-speaking homes. (See [Table 2](#))

Table 2

Home Language	Level			
	P4	P6	S2	S4
% of students who found Chinese difficult				
English	60.5	76.9	69.3	75.8
English and Chinese	45.8	50.3	48.0	53.3
Chinese	40.1	35.6	38.8	32.0
% of students who found English difficult				
English	14.8	21.8	31.9	30.1
English and Chinese	25.9	33.7	40.2	44.8
Chinese	40.8	52.2	56.8	63.3

<sup>1</sup> These findings are quoted from the *Report of the Chinese Language Curriculum and Pedagogy Review Committee*.

### C. Views of Teachers

The percentage of teachers who reported that their students were interested in learning Chinese was higher amongst JC teachers (63%) and secondary school teachers (57%), compared to those from the primary level (53%).

While more than three-quarters of teachers felt that the instructional materials provided by MOE for teaching Chinese were of an appropriate level, fewer felt that they were useful or interesting (See Table 3).

Table 3

% of teachers who reported that the instructional materials provided by MOE for teaching Chinese were	Level		
	Pri	Sec	JC
Of appropriate level	80.0	78.5	75.2
Useful to students	74.7	70.4	71.2
Interesting to students	45.1	28.5	43.8

## **RESEARCH FINDINGS – BILINGUALISM**

MOE also conducted its own research, which questioned the level of proficiency that one could expect from bilinguals. Academic studies had shown that bilinguals rarely developed equal fluency in both languages as fluency was driven by usage. Few people had occasion to use both languages equally often, and when they did, did not use all the four components (speaking, listening, reading and writing) in equal proportion. Adult Singaporeans were more likely to converse (speaking and listening) in Chinese than to read Chinese, and more often read than wrote Chinese.

It would be more important to focus on developing language skills that would be more frequently used in adult life, including those that enable students to access Chinese culture and news and thus encourage them to remain in contact with the language after leaving school. The importance of writing in Chinese could be downplayed given the availability of Chinese word processing software.

The standard of CL would not necessarily be lowered by focussing on oral communication, as all four language skills are mutually reinforcing. In fact the effectiveness of CL teaching in schools could be further enhanced by ordering emphasis on each language skill according to natural development patterns. When learning a language, children pick up oral skills first before acquiring literacy skills.

## **JULY 2004 – CLCPRC DECIDES TO ADOPT THE MODULAR APPROACH**

The survey findings and academic research challenge the existing model of teaching CL. Changing patterns of language use at home demand new approaches and greater customisation in the way CL is taught to effectively bring all students up to a

minimum CL standard. This would manifest itself in both the syllabus structure and pace, as well as the teaching and learning approaches.

The CLCPRC decides to use a modular<sup>2</sup> approach to teach CL to lower primary students. Modules enable customisation of teaching methods to match students' needs, while avoiding the need to introduce different syllabuses at the onset. For students with no or little prior exposure to CL, bridging modules that focus on oral communication and reading skills will be introduced at P1 and P2 before they progress to regular textbooks. At the same time, more advanced learners can take enrichment modules in preparation for HCL later. The modular approach could be used even at P5 and later to cater to their varying abilities, instead of streaming them. Students with greater aptitude and ability could take modules with a greater emphasis on writing.

The bridging modules will be extended to P3 and P4 for students who need additional support. While the P1 and P2 bridging modules aim to bring up the competency level of young learners to the core module standard, the P3 and P4 modules are intended for reinforcement.

As CL now places emphasis on oral communication and reading, there is a natural differentiation from HCL, which will place equal emphasis on all four language skills.

The changes are manpower-intensive and rely mostly on teachers trained to implement the new approaches. To this end, the committee proposes the following steps to strengthen the CL teaching force

- a review of NIE training and more structured and deliberate in-service training for CL teachers to include the new pedagogical approaches
- Widening the pool from which to draw CL teachers, including looking to polytechnics as a potential source<sup>3</sup> and offering the Language Elective Programme to more junior colleges to facilitate this purpose
- Making the career paths of CL teachers more attractive, for example, through postgraduate training opportunities

## **22 AUGUST 2004 – NATIONAL DAY RALLY SPEECH**

PM Lee Hsien Loong first announces the impending changes to CL teaching, noting that details will follow soon.

“...we've got to teach the language as a living language, not as an academic subject, not like a dead language like Latin. So, this means focusing on spoken – 听, 讲, listen and speak – less emphasis on writing, a little bit more emphasis on reading. Still learn to write and the Higher Chinese people will learn to read and write equally, but for the people who are going to use it in their daily lives, listening and speaking, I think, is easier, is achievable and we should shift the weight so that more of the weight is on listening, speaking and

<sup>2</sup> This would be a modified modular approach compared to a “true” modular approach where students can start and end at different modules according to their abilities or interest. In this case all students are required to complete the core modules.

<sup>3</sup> In 2005, Ngee Ann Polytechnic offered a Diploma in Chinese to this end.

reading, less on writing. And I think we will have a better result that way....

....So, I think what we need and what MOE is going to do is a modular approach, have different modules for different students. Everybody will do the core module, that's standard. If you are a weak student, we will give you additional foundation modules, bridging, reinforcement... If you have the skills, if you want to go further... any student who has that language skill, let him do it, have enrichment modules, advanced modules, he can learn more... With a tailor-made system... "因材施教" – adapt your teaching to the talent you have... I think we'll have a better result and a more effective outcome. "

While many members of the public embrace the move as a "quantum leap from the old system of rote-learning", some worry that this will lead to a decline in Chinese language standards.

## CONSULTATION AND FEEDBACK

### Dialogue session by Minister Mentor

The CLCPRC presents key proposals to Chinese Community Leaders and gathers their feedback before submitting the White Paper in Parliament. Clan association and trade union members, teachers and media editors are invited to a 2-hour dialogue chaired by Minister Mentor Lee Kuan Yew on 11 October. He prepares the ground for the upcoming changes by first acknowledging that mastering two languages equally is not possible and that the enforced learning approach has negative effects.

"My friends tell me, including Mr Lim Kim San that if my children had not become bilingual, this problem would not become so serious. Because I thought they could do it, well other people's children should be able to do it. Even though it may not be to the same level." .....

"Most important is do not turn the student off, which is what we have succeeded in doing, by forcing them to achieve the standard, we have turned off one generation. Which is a great pity, they are fed up, they are forced by their parents, they are forced by their schools. They hate it. They want to have nothing more to do with it, which I think is a tragedy. I never considered that point, because I did not come across such people, but it was happening."

However, bilingualism was reinforced as a policy key to Singapore's survival as a hub.

"I brought the other language groups to assure them that we are not going back to Chinese... we will do whatever we are doing for the Chinese, for the Malays, for the Indians, for the others. And as a cosmopolitan hub, we must have the ability to reach out to China, to India, another very big growing economy and to the region around us."

More of the CLCPRC recommendations are revealed at this dialogue session; four broad strokes are outlined, viz:

- Making the teaching of Chinese more flexible, allowing schools to take into account students' home language background and aptitude
- A modular approach allowing teaching to be customised for different students
- Moving away from writing and memorising of characters, to emphasise reading, speaking and listening
- Changing examinations to reflect the new emphasis

### Media reports

There is also wide coverage of the CL review in the media – exploring the need for the review and the current and proposed approaches to teaching, interviewing various people for views and highlighting the significance of MM's personal hand in the matter. *The Straits Times* also interviews students from English-speaking home backgrounds, and illustrates the need for Singaporeans to continue using Chinese after leaving school. There is a cautious acceptance by CL-advocates of the CLCPRC recommendations:

"The devil is in the details – and implementation. Nothing wrong with teaching each child according to his capability and tailoring the courses to fit, they say. But it must not be allowed to mutate into another version of streaming akin to the EM1/2/3 system."....

...."The one thing that most of those interviewed remain firm on: No matter what the changes, standards must not slide any further."

These moves prime the public for the White Paper parliamentary debate at the end of the month and give them time to feed views back to their MPs.

### **15 NOVEMBER 2004 – GOVERNMENT ACCEPTS THE FINAL RECOMMENDATIONS OF THE CLCPRC**

The report of the CLCPRC is released. In its executive summary, it clarifies the aim of teaching CL – which is to stimulate an interest in the Chinese language and motivate students to use it long after they leave school. To do this, a differentiated approach is needed from the outset, to customise CL learning for students with different home language backgrounds and aptitudes. The focus should also first and foremost be on listening, speaking and reading skills.

The recommendations of the CLCPRC are accepted by MOE. System-wide implementation of the new curriculum is planned for 2008.

### **24 -26 NOVEMBER 2004 – PARLIAMENTARY DEBATE**

A lively debate ensues over the CL review. Key issues debated are:

### That CL teachers and those proficient in Chinese should be given more recognition

...“the Government and the Chinese community should enhance the importance of the bilingual and bicultural talents among us... With the emergence of the Chinese economy, bilingual and bicultural talents will gain importance and take on increased roles in our nation's progress. Hence it is urgent for us to cultivate more such talents and accord them their due respect and esteem.”

- Ms Penny Low

“The Government should appoint bilingual civil servants and promote them to important positions so that their bilingual talent could be put to optimal use... if the Government can set an example, then we will know that people with a good knowledge of Chinese can not only work in the teaching profession and the media, but they can also have good career prospects in other professions and sectors as well.”

- Dr Ong Seh Hong

...“we have to respect the professionalism of the Chinese teachers. If we do not have enough teachers in the schools, we should use ways and means to employ more Chinese teachers to teach Chinese. Apart from raising their salaries and remuneration, we should also attach more importance to the recruitment of Chinese teachers.”

- Mr Ang Mong Seng

### Whether the new curriculum would lead to a lowering of Chinese standards

“First, there is some concern among the Chinese language professionals that the proposed changes will result in further decline in the standard of the language. They perceive these changes as a compromise solution to ease the pressure on our children. Are we in reality adjusting our standard to the lowest denominator? If so, then the question is whether this will be the start of a vicious circle and the standard will continue to slide as time goes on.”

- Mr Gan Kim Yong

“But I firmly believe that if we allow our children to learn according to their own pace, even if they may not be able to master many proverbs or classical poems, so long as they have this interest in the language, they will be able to build on that foundation and to learn more. But if we turn them off and they do not have this interest for Chinese, then we are actually the killer of the Chinese Language here.”

- A/P Koo Tsai Kee

### That the modular curriculum would degenerate into a form of streaming

“The concern is that this system will result in another form of streaming, this time at an even earlier age. Some students may be slow starters and they may benefit from the Bridging and Reinforcement Modules. However, if they are able to catch up later on and even do well in the Chinese Language, will there be sufficient lateral flexibility to allow them to switch over to the Enrichment Modules?”

- Mr Gan Kim Yong

There is agreement in principle, but questions about implementation and details...

...“in practice, the examination system has a great influence on the behaviour of schools, students and parents. The format of the examination needs to be revamped to be in line with the objectives of the new approach. I am glad that the Committee has proposed to do so over time. However, we must ensure that teachers are... ready and are able to help their students to be ready for the new (examination) format.”

- Mdm Cynthia Phua

...“ CL learning seems to be converging with the learning of the other subjects as schools move towards a more continuous school-based assessment regime. This could well create more stress for pupils who have been drilled by years of emphasis on what the Report calls “high stakes national examinations”. I urge the Ministry to promote group-based assignments that can allow mingling of pupils of varying abilities and their project work. Exposure in this way could help the weaker pupils. The stronger ones will still be able to shine in their individual assessments.”

- Dr Amy Khor

“I would like to also point out the concern about the uncertainty over current students who will be taught an extended interim period between the introduction of the new curriculum in 2008. The students and their parents are unsure of the areas in which they should pay attention... the perception of these students will be that there will be an increase in their Chinese workload as they have to make sure areas focused in both the existing and new curriculums are covered, just to be on the safe side. I hope that MOE and the schools can spell out as soon as possible what is expected of the students in the interim.”

- Mr Ong Kian Min

MPs generally welcome the modular system. In his response, Minister for Education, Tharman Shanmugaratnam, emphasises that the modular approach will not be a form of language streaming.

Parliament endorses the curriculum change. MOE begins to plan its implementation.

### **MARCH 2005 – IMPLEMENTATION PLANS FINALISED AT MOE**

MOE plans to pilot the new curriculum at 25 schools in 2006 before a full rollout to all primary schools. A key change at this stage is the timing of the rollout, which is brought forward by a year to 2007. Instead of rolling out the new curriculum from P1 to P4 in 2008, P1 and P2 will start in 2007, followed by P3 and P4 in 2008.

## MAY TO JUNE 2005 – BRIEFING TO SCHOOLS AND STAKEHOLDERS

MOE rolls out a series of briefings to school principals, NIE staff and Chinese teachers' unions to brief them on the new curriculum. This culminates in a CL Curriculum Forum in June 2005 for school Principals and Vice-principals. Teacher training is also carried out from June 2005 onwards.

## JULY 2005 – PRESS CONFERENCE FOR NEW CURRICULUM

MOE holds a press conference to announce the upcoming changes to the CL curriculum, one of which is the modular curriculum for primary schools. The public is informed of the pilot at 25 primary schools in 2006, and of the 2007 rollout.

Year	Pilot	Rollout
2006	P1 and P2 levels in 25 schools	
2007	P3 level in the same 25 schools	P1 and P2 levels in all schools
2008		P3 and P4 levels in all schools
2009		P5 level in all schools
2010		P6 level in all schools

Schools are free to adopt one of two models, or a hybrid of the two, to match students to the right modules

- (i) The Ability Banding Model. In this model, students will be organised into different CL classes. Those in the Bridging class will take the Bridging Module before the Core Module. Those in the Enrichment class will begin with the Core Module followed by the Enrichment Module. Teachers may move students across the classes based on their progress, usually at the beginning of each semester.
- (ii) The Pull-Out Model. Here, all students in a class take the Core Modules together. At appropriate times throughout the year, students taking the Bridging and Enrichment Modules will attend the different modules in separate groups. Teachers may laterally transfer students at any time during the year.

All primary schools will also have two additional CL teachers by 2008 to implement the modular curriculum.

In September, the list of 25 pilot schools (or 15% of all primary schools) is announced by MOE, again selected to achieve a good representation of school type and student home language profile.

## JANUARY 2006 – PILOT PROGRAMME COMMENCES

The new CL modular curriculum is piloted in 25 schools at P1 and P2 levels. With the modular curriculum, all students will take the Core Module, which accounts for approximately 70-80% of CL curriculum time from P1 to P6 (see Annex A for more details of the Core, Bridging and Enrichment Modules).

While the pilot takes place, focus groups are held to collect feedback so that a formal evaluation can be carried out and the necessary changes incorporated into the implementation of the rollout.

## **NOVEMBER 2006 – PRESS CONFERENCE ON PILOT IMPLEMENTATION**

MOE holds a press conference to announce the outcome of the pilot project. Its studies and surveys show encouraging results and indicate that the new curriculum, which adopts a modular approach and active-learning pedagogy, has provided students with greater flexibility to meet their different CL learning needs. The curriculum objectives have been largely achieved.

### *Pre-Post Test Study*

Results from the Pre-Post Test Study which involved more than 1,200 students from pilot and non-pilot schools, indicated that overall, students in the pilot schools performed better after the intervention. Generally, the modular curriculum structure enabled the Bridging Group to catch up with their peers. The Bridging Module, which aims to build up students' oral communication skills and help them in character recognition, has created more opportunities for students to speak up during CL lessons and encouraged them to want to learn CL. This enabled students with little or no prior CL exposure to learn the Core Module better. For students in the Enrichment Group, exposure to a wider variety of passages and higher-order thinking helped them do better than students in the Core and Bridging Groups. The details of the Pre-Post Test Study are in [Annex B](#).

### *Classroom Coding Scheme Study*

A Classroom Coding Scheme Study conducted by the Centre for Research in Pedagogy and Practice examined teachers' pedagogical practices and students' learning in pilot and non-pilot schools. The study found encouraging signs that the pilot school teachers are adopting teaching practices aligned with the principles of the new curriculum. The CL classroom environment in pilot schools tended to be more focused on student-learning, with more interactive activities such as student presentation and group work to facilitate language use and enhance learning. The level of student engagement was also found to be higher. The details of the Classroom Coding Scheme Study are in [Annex C](#).

### *Feedback from Teachers and Parents*

At the same time, the pilot of the new modular CL curriculum has received strong support from teachers and parents. In separate surveys administered by MOE in late September, feedback from 250 teachers involved in the pilot study was as follows:

- 94% strongly supported the implementation of the curriculum in all schools in 2007.
- 94% preferred the passages in the new instructional materials.
- 93% responded that the new curriculum provided them with more opportunities to conduct interactive teaching and group work.
- 90% observed that students had become more interested and engaged in learning CL.

- 87% opined that the modular approach had helped cater to the varying needs of the students.

1,000 parents from pilot schools were surveyed, and it was found that:

- Close to 90% responded that they understood and identified with the objectives of the new CL curriculum.
- 86% replied that the new curriculum had benefited their children.
- About 85% of these parents observed that their children showed greater interest in learning CL.
- 78% expressed that they knew how to support their children in CL learning.

### **Schools Are Prepared to Implement the New CL Curriculum**

With teacher training in the new curriculum and pedagogy kickstarted in June 2005, schools are now prepared to implement the new CL curriculum in 2007. The SEED-CL<sup>4</sup> initiative launched in April 2005 has also provided these teachers with added opportunities to be acquainted with the new pedagogy. Several sharing sessions showcasing best practices in the pilot schools have also been held.

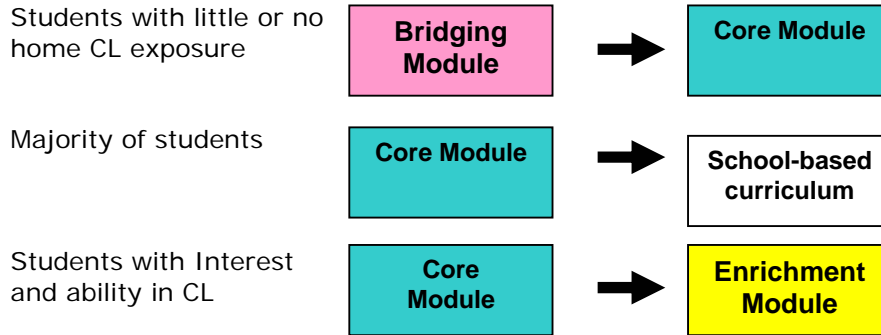
Apart from training and sharing, MOE will continue to provide schools with support and resources such as teaching guides, assessment guideline and digital instructional resources to help them implement the curriculum. A team of 70, comprising Master Teachers, curriculum planning officers and teachers from the 25 pilot schools will assist schools in the implementation.

In addition, MOE has provided schools with materials to explain the features of the new curriculum to parents. For parents looking for information to support their children's CL learning, MOE will upload a recommended list of age-appropriate readers onto the MOE website.

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<sup>4</sup> SEED-CL stands for Strategies for Effective and Engaged Development – Chinese Language

## Annex A

**The Modular Curriculum Structure**

The purpose for each module is given in the table below:

Module	Purposes of the Module
Bridging	This focuses on building up students' listening and speaking skills, and to provide scaffolding for character recognition in the Core Module.
Core	This forms the baseline CL standard that all students have to attain, focusing on the development of listening and speaking skills. Students will also be taught word recognition skills, reading skills and writing skills through the Core Module.
Enrichment	This is an extension of the Core Module, with an emphasis on reading.
School-based curriculum	For the students taking the Core Module only, teachers will have about 20-30% of curriculum time, where they will have the flexibility to use effective pedagogies to deepen learning. In addition, teachers can choose to use part of the enrichment or bridging materials provided by MOE or to design their own school-based instructional packages to meet the different learning needs and abilities of these students which may vary across classes and schools.

### The Pre-Post Test Study

A Pre-Post Test Study was administered on more than 1200 students in pilot and non-pilot schools. Three tests were used, namely

- Chinese version of British Peabody Picture Vocabulary Scale (BPPVS)<sup>5</sup>
- Word Recognition Test (WRT)
- Reading Fluency Test (RFT)

These tests provide a gauge of students' aural-oral and reading proficiencies. The Gain<sup>6</sup> and Mean Test Score<sup>7</sup> for each of the tests were used to compare students' performance across groups. The data below showed students' performance in the three tests.

#### A) Comparison of Students' Performance in Pilot and Non-Pilot Schools

Table 1 and Table 2 showed that the mean test scores for P1 and P2 students in the pilot schools were better than those in the non-pilot schools. P1 and P2 students in the pilot schools also showed a larger gain in BPPVS and WRT. This indicated that with the intervention of the new curriculum, students were learning CL better.

Table 1: Comparison of P1 Students' Performance in Pilot and Non-Pilot Schools

Primary 1	Pilot Schools	Non-Pilot Schools
<b>Peabody Picture Vocabulary Scale</b>		
Mean Test Score	56.8	54.7
Gain	2.9	2.1
<b>Word Recognition Test</b>		
Mean Test Score	41.8	37.2
Gain	12.3	10.4
<b>Reading Fluency Test</b>		
Mean Test Score	68.0	67.5
Gain	14.0	18.0

Table 2: Comparison of P2 Students' Performance in Pilot and Non-Pilot Schools

Primary 2	Pilot Schools	Non-Pilot Schools
<b>Peabody Picture Vocabulary Scale</b>		
Mean Test Score	60.7	57.5
Gain	5.3	3.7
<b>Word Recognition Test</b>		
Mean Test Score	59.7	54.8
Gain	13.7	13.3
<b>Reading Fluency Test</b>		
Mean Test Score	81.0	76.0
Gain	20.0	21.0

<sup>5</sup> BPPVS is a recognised test used to measure listening vocabulary, which is generally regarded as a proxy for oral vocabulary.

<sup>6</sup> Gain is the difference between the mean for group's raw Post-Test and raw Pre-Test scores.

<sup>7</sup> The Mean Test Score here indicates the eventual performance of the students, taking the initial differences in abilities into consideration. It was derived using statistical covariance analysis.

### B) Comparison of Performance of Students in Different Modules within Pilot Schools

Overall, the adjusted mean – which takes initial differences between students into consideration – for the Enrichment Group was higher than that of the Core Group, which in turn was higher than that of the Bridging Group, indicating that the Enrichment Group performed better than the other two. The P1 Bridging Group had a larger gain in BPPVS and RFT and the greatest gain in WRT. This indicates that the modular curriculum structure has enabled the P1 Bridging Group to catch up with their peers.

Table 3: Comparison of Performance of P1 Students in Different Modules within Pilot Schools

Primary 1	Bridging	Core	Enrichment
<b>Peabody Picture Vocabulary Scale</b>			
Mean Test Score	53.5	55.1	57.9
Gain	3.2	2.4	3.6
<b>Word Recognition Test</b>			
Mean Test Score	37.6	40.4	42.0
Gain	14.4	13.9	10.7
<b>Reading Fluency Test</b>			
Mean Test Score	60.5	66.0	68.0
Gain	18.0	20.0	8.0

For P2 students in the Bridging Group, their gains were not larger than those in the other two groups, suggesting that they may need a longer time to catch up with their peers.

Table 4: Comparison of Performance of P2 Students in Different Modules within Pilot Schools

Primary 2	Bridging	Core	Enrichment
<b>Peabody Picture Vocabulary Scale</b>			
Mean Test Score	55.6	58.3	62.5
Gain	4.0	4.4	6.1
<b>Word Recognition Test</b>			
Mean Test Score	49.3	53.8	58.8
Gain	10.3	12.2	15.1
<b>Reading Fluency Test</b>			
Mean Test Score	56.0	78.0	80.0
Gain	17.5	26.5	15.0

### The Classroom Coding Scheme Study

Carried out by the Centre for Research in Pedagogy and Practice, the Classroom Coding Scheme Study aimed to find out the similarities and differences between the instruction received by the pilot and non-pilot groups. It entailed systematic collation and processing of qualitative classroom data through real-time lesson observations. 28 units of lessons (each between 5.5 and 7.5 hours) in both pilot and non-pilot schools were observed and analysed statistically to identify similarities and differences in the pedagogical practices. The key findings are listed below:

#### **A) Students' Engagement Level in Pilot and Non-Pilot Schools**

The study showed that while students in the non-pilot schools were sufficiently engaged in CL lessons, those in the pilot schools were even more engaged. Notably, their engagement level exceeded 75% almost all the time.

Table 5: Students' Engagement Level in Pilot and Non-Pilot Schools

Students' Engagement Level	Pilot Schools	Non-Pilot Schools
100% (Full Engagement)	61.6%	57.3%
75%	37.8%	34.0%
50%	0.6%	8.7%
0%	0.0%	0.0%

#### **B) Types of Learning Activities in Pilot and Non-Pilot Schools**

One objective of the new curriculum is to enhance language learning through more interactive activities. The study showed that students in pilot schools were involved in more teacher-student and student-student interactions in CL class, especially in the form of student presentations and group work. These interactive activities provided opportunities for students to acquire and use the language more effectively and indicated that teachers in the pilot schools were teaching in accordance to the principles of the new curriculum.

Table 6: Types of Learning Activities in Pilot and Non-Pilot Schools

Types of Learning Activity	Pilot Schools	Non-Pilot Schools
<b>Teacher-Student or Student-Student Interaction</b> (e.g. Student Presentations and Group Work, Whole Class Discussion or Activity, Whole Class Answer Checking)	<b>71.9%</b>	<b>52.6%</b>
<b>Teacher Centred or Minimal Interaction</b> (e.g. Whole Class Lecture, Test-taking, Individual Seatwork, Choral Repetition and Oral Reading)	<b>28.1%</b>	<b>47.4%</b>
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>