Evaluating the Modular Curriculum of Chinese Language in Singapore Primary Schools: Insights from Students and Teachers

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Abstract Since Singapore became an independent republic, careful language-in-education planning that caters to the economic, social, and political development of the country has never been abated. A notable case in point is the constant reviews and reforms of the curriculum of Chinese language (CL), a school subject required of ethnic Chinese children, to respond to gradual home language shift from CL toward English, which is the medium of instruction, in the country. In 2008, a differentiated Modular Curriculum (MC) began to be implemented in all primary schools. We were subsequently commissioned by the Ministry of Education to evaluate the MC. We analyzed CL teaching materials, observed and coded CL classes, and engaged students and CL teachers through various methods. In this chapter, based on student surveys as well as a teacher survey and focus group discussions, we report some evaluation findings on how students' interest in CL learning and use changed, how the MC and its underlying principles were perceived by teachers, and what difficulties and challenges teachers experienced under the MC. Based on the findings, we discuss the interface between sociolinguistics, curriculum innovation and reform, and language policy and planning; and underscore boundary crossing in curriculum and program evaluation toward evidence-based language-in-education planning.

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1   Introduction

In bi-/multi-lingual societies, particularly post-colonial societies, where there is
often a contentious agenda on balancing the promotion of the colonial language and
the maintenance of an ethnic language and cultural heritage, school curriculums are
constantly reviewed and reformed to meet with the realities of the evolving socio-
linguistic landscape. Singapore, a multilingual country with the Chinese as the larg-
est ethnic group, is no exception. Since Singapore became an independent republic,
careful language-in-education planning that caters to its economic, social, and polit-
ical development has never been abated. A notable case in point is the constant
reviews and reforms of the curriculum of Chinese language (CL), a school subject
required of ethnic Chinese (EC) children, to respond to gradual home language shift
from CL toward English, which is the medium of school instruction, in the country.
After a two-year pilot, a Modular Curriculum (MC), which was developed by the
Ministry of Education (MOE) in response to the recommendations of the Chinese
Language Curriculum and Pedagogy Review Committee (CLCPRC), was launched
in 2008 in all primary schools to cater to the different learning needs and CL abili-
ties of children from different home language backgrounds.

   To evaluate the MC, the MOE commissioned the CL research team, headed then
by the first two authors in the Center for Research in Pedagogy and Practice (CRPP),
National Institute of Education (NIE), to conduct a multi-year project about 3 years
after the MC's official launch. As part of the evaluation project, we analyzed CL
teaching materials, observed CL classes, and studied students and teachers through
various methods. In this chapter, based on student questionnaires as well as teacher
questionnaires and focus group (FG) discussions, we report some evaluation find-
ings on how the interest in CL learning and use changed in students from different
home language backgrounds, how the MC and its underlying principles were per-
ceived by teachers, and what difficulties and challenges teachers experienced under
the MC. Based on the findings, we discuss the interface between sociolinguistics,
curriculum and program innovation and reform, and language policy and planning;
and underscore boundary crossing in curriculum and program evaluation toward
evidence-based language-in-education planning.

2 Changing Landscape of CL Education in Singapore

Singapore is a multilingual, multi-ethnic country in Southeast Asia. A former British colony, Singapore became an independent republic from Malaysia in 1965. Bilingual education is the cornerstone of the educational system in Singapore, where there are four official languages including English as well as the ethnic languages of the three major ethnic groups (i.e., Chinese, Malay, and Indian), that is, Chinese, Malay, and Tamil. English, in addition to being a school subject itself, is the medium of instruction (and also the *de facto lingua franca* in the country) and the three ethnic languages are designated mother tongue languages (MTLs) of the ethnic groups and learned by the respective group as a school subject. For example, CL is the MTL of ethnic Chinese, who are also the largest ethnic group in the country (about 75% of the population). Singaporean students are taught to become bilingual in English as well as the MTL. In the educational discourse in Singapore, English is often referred to as the "first language" of Singaporeans and the MTL as the "second language." This designation, however, does not reflect the conventional sense of first (L1) versus second language (L2) in the second language acquisition (SLA) literature, that is, L1 being the native or home language and L2 an additional language acquired temporally after L1. Rather, it is based on the importance ascribed to English and the MTL in the society and school curriculum. English is thus sometimes described as the "first school language" whereas the MTL is the "second school language" in Singapore (Pakir, 1992).

The designation of CL as EC students' *mother tongue* does not suggest that CL is necessarily their L1. Not all EC children grow up speaking CL. In fact, as a result of the global influence of English and the importance ascribed to English in the society and in schools, an increasing number of EC children use English as their only or dominant home language (about 40% of those entering primary school, as reported in CLCPRC, 2004; see also Zhao & Liu, 2010). This home language shift from CL to English has had strong ramifications on the sociolinguistic landscape and CL education in Singapore. In both media and scholarly publications, there are discussions on or concerns about how language profiles of school children are changing and how school curriculum should be reformed to accommodate those changes and revert declining motivation in students for learning and using CL.

CL curriculum and teaching in Singapore was long influenced by a so-called L1 approach, where a strong emphasis was placed on the development of a high level of literacy, including an ability to recognize as well as write a large number of Chinese characters. Chinese characters, which are based on strokes and fundamentally different from alphabetic writing systems such as English (see Zhang, 2017), are often cited by language educators and students to be a particularly challenging aspect of learning Chinese as an additional language (Hu, 2010). While the L1-based approach justifiably characterizes primary school education in China, where children largely grow up speaking CL and have a good command of CL oral proficiency upon entering primary school, this approach and a similar, mandated goal for literacy, particularly writing (which relies on stroke memorization), for all students

failed to capture the local reality of English-medium, bilingual education, particularly the diverse range of language profiles and CL proficiency in school children. A lack of oral proficiency in CL in children from families that use English as the only or dominant language, for example, poses constraints to their CL learning in the early years of primary school, and an equally strong emphasis on character recognition and writing in CL teaching without aiming to build up oral proficiency can be demotivating to those students (CLCPRC, 2004). In short, the L1-based approach turned out unaccommodating in Singapore.

The foregoing discussion was the backdrop of the formation of the CLCPRC in 2004, which was charged by the MOE to review the teaching and learning of CL in schools and make recommendations for reform and innovation.[1] In a report released later in the year by the CLCPRC, it was recognized that a large majority of parents felt it important for children to study CL; nevertheless, more and more children entering primary school spoke predominantly English at home; and there would be a continuing trend of Primary/Grade 1 (P1) children having had little exposure to CL. The report underscored that it was unrealistic to expect most students to be equally proficient in both English and CL, and CL education should, more pragmatically, aim to "stimulate an interest in the language in all CL students and motivate them to use it long after they leave school" (CLCPRC, 2004, p. ii).

Among the many recommendations, which covered flexibility in curriculum, alternative assessments, creative teaching methods (e.g., using modern information and communication technology or ICT), teaching materials, and support for teachers, two are particularly noteworthy. First, it would not be realistic to require all students to write characters (or script-writing as called in the CLCPRC report) and use them at the same time they learn to recognize them. Placing an equal emphasis on script-writing, which was usually taught through the traditional approach of copying and dictation (Liu et al., 2006), and character recognition, could be demotivating. The CLCPRC recommended that character teaching adopt the "*Recognize First, Write Later*" principle such that students are taught to recognize a large number of characters initially for promoting early meaningful reading and building reading interest; script-writing can then be delayed to allow more time for character recognition and reading activities, and character use, such as for composition purposes, can be aided with the use of ICT tools. Second, for the majority of students, emphasis should be on supporting the development of listening and speaking (and reading) for functional communication purposes. More competent students can be supported in developing all four skills. The CLCPRC consequently recommended that a customized curriculum comprised of Bridging, Core, and Enrichment modules be developed to provide a flexible approach such that all students, through learning with differentiated objectives, are supported to achieve their best learning potential and develop lasting interest in learning and using CL in school as well as after leaving school.

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[1] This was not the first time that CL education was reviewed in the country. Prior to this review, two others had been conducted in 1999 and 1992, respectively (Chin, 2018).

Those recommendations were accepted by the MOE, and the Curriculum Planning and Development Division (CPDD) of the MOE subsequently started to develop a modular curriculum and aimed to pilot it with P1 and P2 students in 2006. According to the 2007 Chinese Language Syllabus (Primary) (MOE, 2006), students are assigned based on CL proficiency to study either *Gaoji Huawen* (Higher Chinese; for more competent students) or *Huawen* (Chinese; for less competent students, esp. those from English-dominant homes). Linking these two streams is a Core Module that every student must take (70–80% of instructional time). Depending on CL proficiency, some students also study, with 20–30% of instructional time, either a Bridging/Reinforcement Module (which is preparation for the Core Module and where a strong focus is placed on listening and speaking), whereas others also study an Enrichment Module (which is an extension of the Core Module and where there is a strong emphasis on writing and composition).

To support the development of the curriculum and its pilot, the MOE commissioned the CL research team at CRPP, NIE to survey home language use in kindergarten children and conduct a corpus-based study, based on classroom observation of children's CL use as well as elicitation tasks, to generate oral vocabulary lists based on children from different home language backgrounds (Zhao et al., 2007; see also Goh, 2017). The team was also subsequently commissioned to conduct a classroom observation study during the pilot of the MC in 2006 and 2007 with P1 and P2 students in 16 primary schools (Liu & Zhao, 2008). Students in pilot schools were found to be more engaged in learning; classes in those schools were characterized by greater percentages of student-centered activities (e.g., oral presentation and group work) and much less individual seatwork (e.g., character copying and worksheets). A much greater proportion of activities characterized by teacher-student or student-student interaction was found in classes studying the Bridging module than in those studying the other two modules. The MC was formally launched in 2008 in all primary schools. After about 3 years of its national, full-fledged implementation, the CL research team was commissioned by the MOE again to conduct a large-scale evaluation of it, which we describe in detail later.

3 Language Curriculum/Program Evaluation and Boundary Crossing

There has long been the question of *what works* in language education. To answer this question, curriculums and programs need to be rigorously evaluated. "To date, however, program evaluation largely has been ignored by the mainstream of applied linguistics, and as a result the capacity of evaluation to transform how we inquire, reason, and act in relation to language programs is yet to be realized" (Norris, 2016, p. 169). Evaluation aims to uncover the multiplicity of the truth about a program, and involves "the gathering of information about any of the variety of elements that constitute educational programs, for a variety of purposes that primarily include

understanding, demonstrating, improving, and judging program value" (Norris, 2006, p. 579). Curriculum and program evaluation is often developmental in nature and entails a long-term goal toward program sustainability and evidence-based language-in-education planning and innovation (Donato & Tucker, 2010; Nation & Macalister, 2020; Norris, 2016).

In language program evaluation, there is often an underlying interest in applied linguistics to combine it with language assessment (e.g., Davis, 2013; Lynch, 2003; Ross, 2009). This interest or emphasis seems very reasonable since the effectiveness of a curriculum or program for language proficiency development serves as essential evidence to gauge the extent to which program goals have been achieved (i.e., administrators and/or teachers wish to know whether "things have worked"). In other words, there is a built-in goal of assessing learner competence, and its change over time, in curriculum and program evaluation. Nevertheless, (program) evaluation and (language) assessment are distinct concepts (Norris, 2016). Consequently, the emphasis on learner assessment begs at least two questions that require understanding and approaching program evaluation in broader as well as more nuanced ways.

To begin with, what constitutes evidence of curriculum or program effectiveness through assessing students? While effectiveness is often established through testing language competence such as linguistic knowledge and the four skills, sustainable program development importantly necessitates contextualized understandings about students and their individual differences that accommodate both the goals of proficiency development and experiential components of learning (Donato & Tucker, 2010). In the SLA literature, language learners are recognized to differ in background, motivation and interest, learning strategies, classroom engagement, and willingness to communicate in the target language, among many other factors, which all have strong implications for their L2 development or learning outcomes (e.g., Dörnyei, 2005; Hiver et al., 2020). It would thus be very limiting to evaluate program effectiveness by only testing language competence following an outcome-oriented approach without due attention to students' individual differences and learning engagement (e.g., classroom participation). In other words, student assessment should adopt a more inclusive and a pragmatist approach where not only are language skills measured and achievement gains established in quantified terms (a positivistic view) but evidence is collected to understand who the learners are, how they perceive their learning experience, and how various program-related experiences influence their learning process and outcomes (an interpretivist view that considers learning in personalized and contextualized ways) (Donato & Tucker, 2010).

Additionally, does a focus on students and student learning provide sufficient evidence for curriculum and program evaluation? Although students are arguably a fundamental consideration in language education and program evaluation, there are a multitude of other stakeholders, including but not limited to teachers, administrators, communities, and parents (Donato & Tucker, 2010; Kiely & Rea-Dickins, 2005; Tucker, 2000a). Accordingly, evidence of varied types needs to be collected from these stakeholders to generate insights into the context, the process (including insiders' perceptions, experience, and practices), as well as outcomes of program

implementation. Teachers notably play a fundamental role in educational delivery and innovation. They are agents of change, a determinant factor in student learning and program success and sustainability, and policy makers (Donato & Tucker, 2010; Menken & García, 2010). It is their day-to-day work in the classroom that shapes student experience, motivates learning, and promotes language development. And teachers' classroom practices are influenced by a constellation of factors related to who they are; how they view language, learning, and teaching; and how they interpret curricular goals and negotiate micro and macro policies (Borg, 2006, Menken & García, 2010; see also Part II, this volume). It is thus no surprise that curriculum and program evaluation almost always seeks to engage teachers as a key stakeholder by looking into their instructional processes, perceptions and beliefs, and challenges and needs through a wide range of methods such as classroom observation, discourse analysis, and surveys and interviews (Davis & McKay, 2018; Donato & Tucker, 2010; Menken & García, 2010).

Rigorous curriculum and program evaluation thus requires methodological pluralism and information from diverse sources and of diverse types (Davis & McKay, 2018; Norris, 2016). It is inherent in program evaluation, which usually entails multiple purposes and goals, that boundaries be crossed between research paradigms (i.e., pragmatism), methodological approaches (quantitative and qualitative), and methods; and between stakeholders or policy actors (see also Part IV, this volume). This view on language program evaluation in light of boundary crossing is also aligned with shifting and pluralistic views on the nature of language, language learning and use, and teaching in the literature on SLA, language teaching, and education policy and planning (see Zhang and Miller, this volume).

G. Richard Tucker, whom this volume aims to honor, is arguably a pioneer in program innovation and evaluation and has exemplified boundary crossing through his numerous projects and publications that laid the foundation for researching, understanding, and improving language education and policy through stakeholder engagements and methodological pluralism. The St. Lambert Experiment (Lambert & Tucker, 1972) and the Pittsburgh FLES program (Donato & Tucker, 2010) notably provided compelling evidence on how engaging stakeholders and listening to their voices are crucial for understanding language programs and evaluating their effectiveness and impact in micro (school) as well as macro (sociocultural and sociopolitical) contexts. In many ways, our MC evaluation project was influenced by Dick's insights and followed the path he and his collaborators set for applied linguists to cross boundaries in language program evaluation toward evidence-based policy and planning.

4   The Modular Curriculum Evaluation Project

The MC evaluation project was designed to address four overarching goals: (1) to examine how cohesively the pedagogical principles recommended by the CLCPRC are represented across documents of the MC, esp. textbooks; (2) to understand how

the principles are translated into classroom teaching; (3) to understand how teachers view the MC and its implementation; and (4) to assess the impact of the MC on students' self-perceived competence and interest in learning and using CL. These goals were established not only based on key considerations, discussed earlier, of curriculum and program evaluation but also through discussions with the MOE, the primary user of the evaluation findings. The findings aimed to help the MOE monitor MC implementation and support teachers and schools to deliver the curriculum.

At different stages of the project from 2010 to 2012, we compared MC textbooks against previous textbooks to investigate, for example, how Chinese characters were represented for recognition and writing with reference to the "*Recognize First, Write Later*" principle recommended by the CLCPRC. We observed over 50 P2 classes studying different modules in 20 primary schools, which were a stratified random sample considering linguistic profiles of students in different types of primary schools, and coded classroom instructional strategies and focuses. Questionnaires were also administered to students in the participating schools. We also conducted FGs with CL teachers in the participating schools and administered an online questionnaire that targeted all primary school CL teachers in the country.[2]

It is of course impossible to report all project findings in this chapter. We decided to limit the scope by focusing on some findings related to the third and the fourth goal. Specifically, this chapter aims to answer the following three questions.

1. Did student interest in learning and using CL increase over time? Did the interest, and its change, if any, over time, differ between students studying different modules?
2. How did teachers view the MC in light of its emphasis on a differentiated approach and the major pedagogical principles recommended by the CLCPRC?
3. What difficulties and challenges, if any, were experienced by teachers under the MC?

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[2] The project did not involve any direct testing of students' CL competence. This was purposefully planned for two reasons, in agreement with the MOE. First, during the project period, the MC was implemented nation-wide in all primary schools (i.e., there would not be any proper control group). Thus, it would be impossible to compare CL competence or skill attainment in students under the MC against that of students under the old curriculum. Second, the goal of the MC (and the recommendations of the CLCPRC) was not to boost national achievements, benchmarked on those of any earlier cohorts of students, but to make CL learning interesting to all through setting more realistic and differentiated goals for students from different home language backgrounds.

5   Participants and Data Collection

5.1   Student Surveys

A questionnaire was first administered in October 2010 (Time 1) in 17 primary schools where there were 3188 CL-studying P1 students. The students were then in their second semester of P1 and had been studying CL in their respective school for about 9 months. The same questionnaire was administered again to the same students about a year later in August 2011 (second semester of P2; Time 2). They were presented bilingually in simple English and Chinese and administered in CL classes where teachers were asked to read questions aloud and help children complete each section with necessary explanations.

The questionnaire began with some items on the general background of students, including, for example, date of birth, gender, module attending, and home language use. This was followed by instructions for answering the rest of the questionnaire, which included 69 Likert-scale items (and three warm-up items). Each item included a brief statement related to CL. Students were asked to circle an answer, from Yes (5), Maybe (4), Sometimes (3), Maybe Not (2), and No (1), to indicate the extent to which they thought the item represented their situation. The items covered students' attitude toward and self-perceived competence in listening and speaking, reading, and writing. Additional items were included on frequency of different types of language use and learning of life values related to Chinese culture from CL textbooks. The questionnaire also included a section on students' willingness to communicate (WTC) in CL, which considered age-appropriate topics (e.g., self-introduction, storytelling, giving instructions on playing games) and different contexts of CL use (e.g., in versus outside class with familiar versus unfamiliar interlocutors).

This chapter focuses only on self-perceived competence in CL listening and speaking (four items; e.g., *I can understand if people talk to me in Chinese*), attitude toward CL listening and speaking (four items; e.g., *I find it interesting to talk with people in Chinese*), and WTC (24 items; e.g., *Outside class, I am willing to explain how to play a game to a friend in Chinese*). This is because a key consideration in the CLCPRC report and the MC was that all students be supported, through a differentiated approach, to develop lasting interest in learning and using CL, and because oral language is a strong instructional focus in early primary grades, especially for those studying the Bridging module.

For Time 1, a total of 2708 valid questionnaires were collected where 174 were completed by Bridging students and 1362 and 1172 respectively by Core and Enrichment students. For Time 2, 1087 valid questionnaires were returned among which 69, 409, and 609 were completed by Bridging, Core, and Enrichment students, respectively. A total of 399 students (35, 113, and 251 for the three modules, respectively) completed the questionnaire for both times and formed the dataset for the statistical analysis reported later in this chapter. Cronbach's α ranged from .705 to .956 for the three variables (i.e., ability, attitude, and WTC).

5.2   Teacher Questionnaire

An online questionnaire was administered in Chinese in February 2011 targeting all primary school CL teachers. A total of 311 valid questionnaires were received from teachers in 108 primary schools. The teachers (85% females) covered all six grades (P1–P6) and consisted of a range of age groups (11.6% 20–25; 26% 26–30; 23.5% 31–35; 15.4% 36–40; 14.8% 41–50; and 8.7% over 50 years). Most of them (56.9%) were in the early years of CL teaching (0–5 years); 19.6%, 9.3%, 6.4%, 0.6%, and 7.1% had taught CL for 6–10, 11–15, 16–20, 21–25, and more than 25 years, respectively. In terms of their experience teaching under the MC, 13.5% reported less than 1 year; 12.2% 1 year; 16.4% 2 years; 12.5% 3 years; 16.1% 4 years; and 29.3% 5 years or more.

The questionnaire was comprised of several sections that covered a number of issues such as general perceptions of CL teaching, learning, and assessment; ICT (e.g., perceived ease and usefulness of ICT and frequency of using ICT for different purposes) (see Zhang et al., 2014); Chinese character teaching and learning; and efficacy of using differentiation strategies to motivate and support student learning. Because of space limitations, we only focus on items that targeted general perceptions of the MC for accommodating diversities in students and those toward Chinese characters.

Teachers' general perceptions of the MC were measured by 15 items that touched on three issues (see Table 2), including the importance of oral language in CL teaching and learning (e.g., *Teachers should give students enough time for oral language practice*); the capability of the MC for accommodating students from different home language backgrounds (e.g., *The Modular Curriculum offers a differentiated approach for teachers to cater to different learning needs in students*); and efficacy of using strategies of differentiation to motivate and support student learning (e.g., *I know how to adjust teaching based on different abilities in students*). Perceptions toward Chinese characters covered three issues and consisted of 11 items (see Table 3), including cultural and life values (e.g., *Chinese characters should be considered as an integral aspect of Chinese culture*); importance of character writing in CL learning (e.g., *Writing characters facilitates the recognition of characters*); and perceived student interest in writing characters (e.g., *Students are enthusiastic when I ask them to practice writing characters*). Cronbach's α ranged from .660 to .808 for different sections.

5.3   Teacher Focus Groups

We conducted 13 FG interviews in May 2010 with 107 teachers from the 20 participating schools. Each FG consisted of around eight members and lasted for about an hour. Each session was moderated by an experienced research team member familiar with CL education in Singapore and facilitated by an assistant. They were

conducted in CL and audio recorded and transcribed verbatim for subsequent coding and thematic analysis.

The FGs aimed to collect detailed qualitative data via group discussions where teachers could demonstrate their understandings and share views and experiences related to the MC. Like the survey, the discussions were structured to cover a range of issues encapsulated in six topics, each discussed through a set of open-ended questions. In this chapter we focus on questions and discussions targeting the MC's differentiated approach, pedagogical principles recommended by the CLCPRC, and difficulties and challenges teachers experienced under the MC.

6 Findings

6.1 Students' Self-Perceived Ability, Attitude, and WTC

This section reports the findings on self-perceived ability in and attitude toward CL listening and speaking as well as WTC at Time 1 and Time 2 in students studying different modules. Table 1 shows the means and standard deviations of students' responses. Three 2 (time) × 3 (group/module) mixed ANOVAs were conducted with self-perceived ability, attitude, and WTC as the respective dependent variables.

For self-perceived ability, there was a significant main effect of time, $F(1, 396) = 11.486$, $p = .001$, partial $\eta^2 = .028$. This suggested that, disregarding the module taken, students rated their CL listening and speaking ability significantly higher at Time 2 than at Time 1. A significant main effect of group was also found, $F(2, 396) = 11.858$, $p < .001$, partial $\eta^2 = .057$. Subsequent pairwise comparisons showed that, disregarding time, the Bridging students' self-rated listening and speaking ability was significantly lower than that of the Core students and the Enrichment students (both $ps < .001$). Although the ability rating of the Core group appeared lower than that of the Enrichment group, the difference was not statistically significant ($p = .291$). There was no significant time x group interaction effect, $F(2, 396) = .896$, $p = .409$, partial $\eta^2 = .005$.

For attitude toward CL listening and speaking, there was a significant main effect of time, $F(1, 396) = 7.267$, $p = .007$, partial $\eta^2 = .018$. Disregarding module, students' attitude increased from Time 1 to Time 2. No significant main effect, however, was found of group, $F(2, 396) = 1.753$, $p = .175$, partial $\eta^2 = .009$, which

Table 1 Students' self-perceived ability in and attitude toward CL listening and speaking as well as willingness to communicate in CL

	Bridging (N = 35)		Core (N = 113)		Enrichment (N = 251)	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
Ability	3.25 (1.18)	3.56 (1.12)	3.65 (1.16)	4.06 (.82)	3.89 (.93)	4.09 (.84)
Attitude	3.64 (1.24)	3.85 (.92)	3.65 (1.12)	3.90 (1.10)	3.72 (1.04)	4.09 (.93)
WTC	2.86 (1.03)	3.16 (1.21)	3.05 (.82)	3.16 (1.10)	3.08 (.77)	3.23 (1.05)

indicated that, disregarding time, there was no significant module/group difference in children's attitude. There was no significant interaction effect between time and module, $F(2, 396) = .330$, $p = .719$, partial $\eta^2 = .002$.

Finally, for WTC, a similar pattern was found. A significant main effect was found of time, $F(1, 396) = 4.166$, $p = .042$, partial $\eta^2 = .010$. Not considering module, students' WTC significantly improved over a year. There was, however, no significant main effect of group, $F(2, 396) = .809$, $p = .446$, partial $\eta^2 = .004$. This suggested that, disregarding time, there was no significant difference in WTC in students studying different modules. There was no significant interaction effect, $F(2, 396) = .297$, $p = .743$, partial $\eta^2 = .001$.

6.2   Teacher Questionnaire

Tables 2 and 3 show teachers' perceptions toward the MC and Chinese characters, respectively. We compared how the perceptions may differ between more- and less-experienced teachers based on their total experience of CL teaching (0–5 years of teaching CL vs. more than 5 years) as well as experience of teaching under the MC (2 years or less vs. 3 years or more).[3]

As shown in Table 2, disregarding teaching experience, CL teachers overall had positive perceptions of oral language in CL teaching and learning ($M = 4.05$,

Table 2 Teachers' perceptions of the MC

MC perceptions	Total M(SD)	Teaching experience		MC experience	
		Less (N = 177)	More (N = 134)	Less (N = 131)	More (N = 180)
Oral language	4.06 (.370)	4.07 (.345)	4.05 (.400)	4.07 (.334)	4.05 (.395)
Accommodation	3.53 (.661)	3.4 8(.595)	3.58 (.736)	3.50 (.579)	3.54 (.715)
Efficacy	3.90 (.359)	3.84 (.355)	3.97 (.351)	3.82 (.324)	3.96 (.373)

Table 3 Teachers' perceptions of Chinese characters

Chinese characters	Total M(SD)	Teaching experience		MC experience	
		Less (N = 177)	More (N = 134)	Less (N = 131)	More (N = 180)
Cultural values	4.28 (.432)	4.27 (.446)	4.27 (.415)	4.30 (.440)	4.26 (.427)
Importance of writing	3.90 (.538)	3.86 (.523)	3.94 (.558)	3.90 (.522)	3.89 (.551)
Student interest	2.67 (.736)	2.62 (.726)	2.72 (.747)	2.61 (.704)	2.72 (.757)

[3] Teachers were collapsed into these two broad groups based on teaching experience because a large majority of them, as mentioned earlier in the Teacher Questionnaire section, were in the early years of CL teaching (0–5 years: 56.9%) and the number of teachers for each of the other ranges of teaching experience was very small.

SD = .370). Their perceptions of the capability of the MC for accommodating different CL abilities and needs in students also appeared positive, but the rating was not particularly high on average (M = 3.53, SD = .661). Teachers' efficacy for using instructional strategies of differentiation to motivate and support student learning also appeared high (M = 3.90, SD = .359).

A set of independent samples t-tests was conducted to compare more- and less-experienced teachers. No significant difference was found for the total experience of CL teaching in terms of the perceptions of oral language (t = .314, p = .754) as well as those of the accommodating capability of the MC (t = −1.381, p = .168). This, however, was not the case for teachers' efficacy for differentiation in the classroom (t = −3.247, p = .001). Specifically, those more experienced in CL teaching (M = 3.98, SD = .352) were more efficacious than those who were less experienced (M = 3.85, SD = .355) in terms of using strategies of differentiation to motivate and support students from different language backgrounds or with different CL abilities. A similar pattern was found when the experience of teaching under the MC was the independent variable. No significant difference was found between those who differed in MC experience for the perceptions of oral language (t = .424, p = .672) as well as those of the accommodating capability of the MC (t = −.544, p = .587). For teachers' efficacy for differentiation in the classroom, however, a significant difference was found (t = −3.336, p = .001). Those more experienced with the MC (M = 3.96, SD = .373) were more efficacious than those who were less experienced (M = 3.82, SD = .324).

Table 3 shows the descriptive statistics of teachers' responses pertaining to perceptions of Chinese characters in CL teaching and learning. Overall, CL teachers had positive perceptions of the cultural values of Chinese characters (M = 4.28, SD = .432), believing that they are an important aspect of Chinese culture, which is a fundamental goal of CL education in Singapore (that is, learning CL for maintenance of ethnic and cultural heritage). They also, overall, believed that character writing is important in CL learning (e.g., character recognition/reading and composition) (M = 3.90, SD = .538). They, however, perceived student interest in writing characters to be low (M = 2.67, SD = .736).

Independent samples t-tests were conducted to compare more- and less-experienced teachers. Significant difference was found for none of the three variables. When the independent variable was general CL teaching experience, there was no significant difference in perceptions of the cultural values of Chinese characters, t = .081, p = .936; the role of character writing in CL learning, t = −1.334, p = .183; or student interest in writing characters, t = −1.176, p = .240. The same pattern was found when MC teaching experience was the independent variable. For the perception of the cultural values of Chinese characters, t = .737, p = .462; for the role of character writing, t = .132, p = .895; and for perceived interest in students in writing characters, t = −1.278, p = .202.

6.3   Teacher Focus Groups

This section reports some qualitative findings on how teachers perceived the MC regarding major recommendations by the CLCPRC (e.g., the modular approach, emphasis on oral language, and the "*Reading First, Write Later*" principle for Chinese characters), as well as major difficulties and challenges they experienced under the MC. Because of space limitations, we are not able to include any excerpts from the FGs to illustrate teachers' views and discussions.

6.3.1   General Perceptions of the MC and Its Underlying Considerations

Overall, teachers commented positively on the MC in light of its module-based, differentiated approach. They, for example, shared that the MC drew their attention to the reality that students came from different language backgrounds and increased teachers' awareness of how teaching could and should be differentiated to cater to different needs in students. They also commented that students' learning interest (which was a backbone of the report of the CLCPRC and a key consideration of the MC) had noticeably increased. They noted that students in lower grades (before P3; see, however, the following section on difficulties and challenges) particularly enjoyed CL learning more than students under the old curriculum. Many teachers cited the deemphasis of frequent formal exams in P1 and P2 under the MC as enabling them to focus on student-centered activities such as role play, group demonstration, and "show and tell" presentation where students had opportunity to use CL for oral presentation and interaction. Those activities, according to teachers, were fun and liked by young children in P1 and P2 and boosted their interest in CL learning and use (some teachers, though, added that those methods of teaching can be very time-consuming). Some teachers further positively commented that the differentiated approach provided an opportunity for using English as a tool to scaffold early learning for those children who had had little CL exposure prior to primary school.

Nevertheless, teachers also expressed some concerns over the effectiveness of the MC, or the lack thereof, on actual learning outcomes in comparison to the old curriculum. Although the MC underscored oral communication, in the teachers' view, students' actual oral proficiency, compared to that of students they taught under the old curriculum, did not necessarily improve. In other words, although the MC was recognized to have achieved the planned goal in terms of boosting students' CL learning interest (and the student survey showed student' self-perceived competence in listening and speaking improved over a year of studying), the MC was not necessarily better than the old curriculum in boosting students' CL proficiency. It is interesting to infer from this finding that teachers seemed to care much about students' *actual proficiency* as evidence of effectiveness of curriculum and teaching, even though the primary consideration of the curriculum reform was for *learning interest*.

Another concern across all FGs was around the "*Recognize First, Write Later*" principle emphasized in the MC. While teachers agreed that the reduced number of characters for writing released some burden of memorizing stroke orders, some argued that the prescribed distinction between *renduzi* (characters for recognition) and *xiyongzi* (characters for writing) in textbooks was too artificial to represent what students would need for reading and writing purposes. A teacher, for example, was concerned that students sometimes wanted to write about ideas with words in their oral vocabulary but did not know how to write the characters for those words. Because the characters for intended use were not supposed to be a target for writing (i.e., not in the list of *xiyongzi*), she had to tell students to use alternative words with characters in the list. This was cited as limiting students' writing potential and CL learning. Some teachers quoted pressure from parents as a reason for their reducing character writing in P1 and P2, despite the fact that, as will be discussed in detail below, those teachers knew very well that this instructional choice would make it very difficult for students to catch up from P3 when there was much emphasis on writing tasks (e.g., paragraph writing and composition where character writing is fundamental) required of all students.

6.3.2 Perceived Difficulties and Challenges

Teachers also reported a number of difficulties and challenges they had experienced in teaching under the MC. A concern reported repeatedly across all FGs was the lack of articulation between the curriculum for P1 and P2 and that for P3 onward. Although the teachers, as reported earlier, agreed that the emphasis on oral communication (in early grades) made CL learning interesting for students, particularly lower-ability students studying the Bridging module, the lack of attention to character writing in P1 and P2, which manifested the principle of "*Recognize First, Write Later*," created a huge "gap," "sudden transition," and "leap forward" (words repeatedly used by teachers to describe the lack of connection) when students moved on to P3 where writing tasks were an essential component of the curriculum. Almost all participants in every FG group reflected on this issue and expressed worries and frustrations about students' inability to deal with the sudden increase in writing tasks from P3, where composition started to bring too much strain on students. Teachers reported that deemphasizing character writing or written language in general in P1 and P2 caused a number of problems in subsequent years of learning, such as lacking in ability to write characters (using *pinyin*, the alphabetic system for annotating characters for recognition and early reading purposes, to replace a character would be considered an error), written language being too colloquial, and decreased interest in CL learning from P3 (despite the notable presence of interest in P1 and P2). Some, more specifically, noted that student workbooks from P3 barely included any listening/oral language practice (an emphasis in P1 and P2). Consequently, some schools, through their school-based curriculum, incorporated writing from as early as possible and introduced paragraph writing from P2 (as opposed to delaying it to P3).

Another lack of articulation discussed by some teachers was between CL education in early childhood/preschool and primary school. While the MOE oversees primary schools, early childhood education was overseen by the then Ministry of Community Development, Youth and Sports (now the Ministry of Social and Family Development). Teachers reported diverse CL abilities in P1 students due to the different educational experiences they had in childcare centers. While the MC considered students from different home language backgrounds, diversities in language background intertwining with those in preschool experience made the differentiation in P1 and P2 much more difficult. Some teachers reported that it was difficult for their schools, as a result, to properly place children into different modules. For example, among those from English-speaking homes, some had learned *pinyin* systematically in preschool whereas others knew very little; nevertheless, all were required to learn *pinyin* for about 10 weeks at the beginning of P1 to enable their learning to read (e.g., character recognition and *pinyin*-supported early textual reading).

Additionally, some teachers expressed that the Bridging module, with its designed purpose to help EC children from English-speaking families, was still very challenging for non-EC children (e.g., immigrants from non-Chinese-speaking countries in Southeast Asia) who typically had no exposure to CL at all prior to primary school but often studied the Bridging module in the same classroom with EC children who, despite having English as the predominant home language, usually had had some CL exposure before entering primary school. Those demographic and linguistic diversities together with diversities in CL exposure created additional challenges that, according to teachers, cannot be effectively addressed through the MC and made instructional differentiation much more complex and difficult. Teachers wished that additional support would be available to them and those students to "bridge" the gap of learning in the Bridging module. Some reported that their schools, as a result, did not strictly follow the module-based approach but emphasized distinguishing different CL levels within a class and using extra time outside CL classes to provide individual or small-group instruction for those who needed support and to make up for the components of the Bridging module those students missed.

As a result of the issue of lack of articulation, teachers reported that they were balancing between the requirements of the MC (emphasis on learning interest and oral language) and parents' perceptions of children's actual proficiency or learning outcomes as reflected in test performance. Parents were reported to have a concern that their children did well in P1 and P2 but fared badly upon reaching P3 due to the sudden emphasis on writing. Parents wanted their children to have fun with CL learning but also wanted to see the learning "materialized" in good test results. Teachers were under pressure to strike a balance between making learning interesting for students, especially those studying the Bridging module, in the early grades (P1 and P2) through various oral language activities and students' decreased interest and drop in grades or test results in later grades (P3 onward).

CL is a high-stakes school subject in Singapore, as students' results in the Primary School Leaving Examination (PSLE), which is taken in P6, have a

determinant effect on how they will be streamed to study different types of curriculum in secondary school. It is thus not surprising that any reform of CL education in Singapore would cause concerns not only in the general public but more saliently in teachers about student learning, classroom teaching, and test results. Some challenges and difficulties presented above already touched briefly on the issue of student assessment and CL testing and the dilemma teachers faced between student learning interest and test results. Regardless of the module studied, students all sit the PSLE, which is based on the Core module and has a heavy reliance on written language (e.g., passage comprehension and composition). This reality explains why across the FG groups, there were big concerns about how the MC created a challenge for preparing students for the PSLE (e.g., its lack of early attention to [character] writing), particularly those studying the Bridging module. While oral communicative skills are a key innovative point advocated in the new curriculum, it is the writing ability that determines the examination result. Teachers thus questioned the misalignment between the objectives of the MC and the reality of the examination, and wished that the testing system would be reformed to bring positive washback effects on classroom teaching.

7 Discussion

To answer the first research questions, student interest in CL (attitude toward CL listening and speaking and WTC in CL) increased over a year from P1 to P2 and so did their self-perceived ability in listening and speaking. To answer the second research question, teachers recognized the benefits of the differentiated approach of the MC for accommodating students with different CL abilities. The emphasis on oral language was underscored as boosting student interest in P1 and P2. Nonetheless, teachers were also concerned that the MC, compared to the old curriculum, did not seem to have enhanced students' oral proficiency, and the "*Recognize First, Write Later*" principle overall was not supported based on the many difficulties and challenges teachers experienced. Lastly, to answer the third research question, those difficulties and challenges included a sudden shift of the curriculum from a deemphasis on (character) writing in P1 and P2 to the strong inclusion of writing tasks and tests focused on written language from P3 onward. This lack of curriculum articulation or coherence, and the misalignment between the MC and the examination system, made teachers juggle curriculum requirements, parental expectations, students' difficulties and decreased interest from P3, and the need of written language skills for students to do well on high-stakes examinations. Consequently, teachers, who were on the front line of delivering the MC, had to be pragmatic and adaptive, exercising their agency to navigate many complex realities and act upon the MC in local and personalized ways.

In what follows, we discuss the findings in light of three complex realities, including (1) student interest versus CL proficiency; (2) oral language versus (character) writing and curriculum articulation; and (3) curriculum reform versus
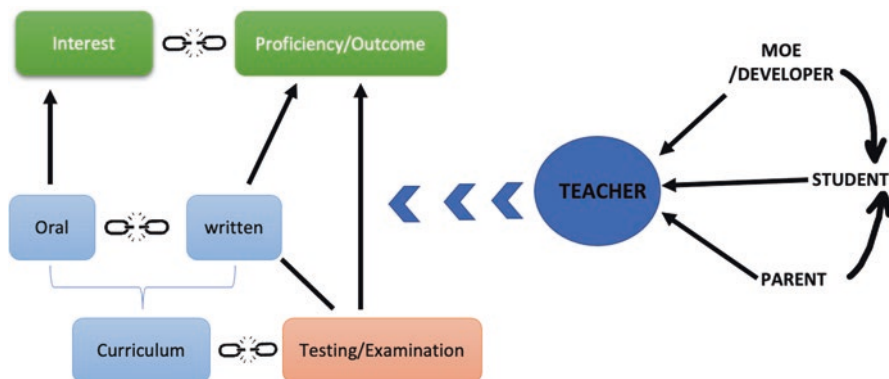
Fig. 1 Complex realities and conundrums faced by CL teachers

examination (see Fig. 1). Based on the findings (and more broadly sociolinguistics, bilingualism, and CL education in Singapore), we then discuss how curriculum innovation or reform is a collective enterprise and how boundary crossing is essential in curriculum evaluation toward evidence-based language-in-education planning.

7.1 Student Interest Versus CL Proficiency as the Goal of Planning

The first complex reality pertains to student interest versus CL proficiency as the goal of planning. While both should perhaps be a goal of language education or educational reform (given the literature on positive associations between learner interest and motivation and learning outcomes), the MC in CL education followed a local and pragmatic approach in that the MOE (policy maker and curriculum developer) prioritized boosting student interest over enhancing national CL achievements. The recommendations of the CLCPRC, and subsequently the MC, were based on pragmatic considerations of the changing realities of bilingualism in the country where it was considered unrealistic for everyone to be highly proficient in their MTL and equally proficient in English. This planning for "interest" encapsulated in the MC did seem to have achieved some effects.

In this respect, it is interesting, however, that teachers did not fully embrace the MC and were concerned that students' actual proficiency was no better than that of students under the older curriculum. Under the consideration that students would not be able to have the (written language) skills to perform well on tests (see discussion later on examinations), schools and teachers customized approaches to boost learning outcomes, despite the recognition that student interest decreased as a result of those approaches. This choice of the teacher was influenced by parents and matched that of parents, who are also pragmatic stakeholders. Parents were happy

to see children have fun with CL learning (in P1 and P2) but quickly questioned teachers if the interest failed to be translated into good test results or outcomes.

The case of the MC may be unique in its "interest"-oriented planning for language education. Yet, the contentions revealed between different stakeholder groups (as a result of their different positioning and stakeholding interest), however, are by no means unique to Singapore. In fact, they have been widely reported in the literature on program innovation and evaluation and, more generally, language-in-education policy and planning (Donato & Tucker, 2010; Kiely & Rea-Dickins, 2005; Menken & García, 2010; Ross, 2009). Donato and Tucker (2010), in their evaluation of Japanese and Spanish FLES programs in the United States, for example, found that parents' expectations, children's views, and teachers' views did not necessarily converge. Parents viewed the programs "as a vehicle for their children to develop cultural knowledge and awareness" as opposed to a certain level of "language proficiency per se" (p. 103). This might be attributed to their practical recognition that there was little opportunity or need outside the programs for children to use the target language. Yet, students themselves paid much attention to their language development and could use self-assessment tools to demonstrate abilities and identify areas they wanted to further develop. Teachers, likewise, emphasized skill attainment and proficiency development as important goals of student learning and had high expectations for bilingual language proficiency in students.

Although the FLES programs in Donato and Tucker (2010) and the MC in Singapore are arguably different in a number of dimensions, it is notable how much *teachers* in both contexts emphasized actual language learning outcomes in students. This is perhaps not a surprise given that teachers, in any context, are on the front line of program or curriculum delivery and thus reasonably aim to demonstrate effectiveness of teaching in terms of learner proficiency. The contrasting expectations of parents – proficiency and test performance in Singapore versus cultural knowledge and awareness in Donato and Tucker (2010) – seemed very reasonable in that CL in Singapore, as opposed to Spanish and Japanese in FLES in the United States, is a high-stakes school subject. This contrast is particularly noteworthy in a teacher's remark during a FG that "They [parents] only look at grades or scores, caring little about how much their children's cultural knowledge has expanded." Such a highly pragmatic expectation of parents seems particularly interesting in that CL education in Singapore is primarily intended for cultural maintenance purposes (see also Chin, 2018).

7.2 Oral Language Versus (Character) Writing and Curriculum Articulation

The second complex reality that CL teachers negotiated and where their agency was demonstrated was about the lack of coherence in the MC. The MOE had a planned purpose to emphasize oral language in the MC. Students reported increased interest

in CL listening and speaking; parents, according to teachers, liked children's demonstrated interest in CL; and teachers were pleased to adopt student-centered activities to engage students in CL learning and use. These, however, were the case only in P1 and P2 where there was a deemphasis on formal testing and limited focus on character writing (and written language in general). From P3 onward, however, there was a sudden shift to strong written language requirements, and formal tests where written language was a heavy focus began to be introduced. As a result, according to teachers, students' interest decreased, their grades dropped, and parents complained (and had our longitudinal student survey carried on to later years beyond P2, we might see some change to the positive trend of increasing interest reported in this chapter). Some teachers/schools consequently chose not to strictly follow the principles underpinning the MC but started an emphasis on writing practice from as early as possible in P1 and P2 that, they believed, could bridge the gap and help make the transition from P1 and P2 to P3 smooth for students (and address their assessment needs; see discussion below on examinations) even though they were sometimes challenged by parents and were cognizant of the risk that this adaptation could demotivate students.

The conundrum induced by the lack of curriculum articulation and teachers' adaptation in curriculum enactment obviously have strong implications for the MOE, the primary user of the evaluation findings. These issues, however, are not unique to the current CL case. In fact, teachers' negotiation of curriculum requirements or policy mandates toward adaptive implementation, based on careful assessments of their local, micro contexts and realities of teaching (e.g., negotiating the interests and/or concerns of different stakeholder groups in the context of their own teaching or classroom realities), has been widely reported (e.g., Hyland & Wong, 2013; Ng & Boucher-Yip, 2016; Priestley et al., 2015). A gap is commonly seen between the intended/prescribed/planned curriculum and the enacted curriculum in language education (Menken & García, 2010; Orafi & Borg, 2009). The findings reported in this chapter, in this respect, have reaffirmed that it is crucial to consider teachers' perceptions, the micro contexts or local realities of their teaching, as well as the influence of those perceptions and negotiation of realities on actual teaching. For a program to achieve its planned goals (and to fine-tune toward sustainability), it is essential to engage teachers as key stakeholders or policy actors (Donato & Tucker, 2010; Kiely & Rea-Dickins, 2005; Menken & García, 2010).

7.3   Curriculum Innovation and Examinations

The last reality that concerned stakeholders, most importantly teachers, was the misalignment between some underlying principles of the MC and the examination system. In fact, many of the issues discussed earlier seemed to have a root in this reality. Teachers reported that CL tests (from P3 onward), particularly the high-stakes PSLE in P6, relied heavily on written language. This created a big gap between the planned goal of the MC that emphasized oral language proficiency and

learning interest and the immediate needs of students for achieving good test results with strong written language skills. CL teachers' enacted curriculum seemed to show a tendency, from the earliest years of primary school, to prepare students for high-stakes examinations as a result of negotiating the lack of coherent goals in the MC across learning stages and the misalignment between the MC and the examination system.

The gap between a reformed curriculum and an untouched gate-keeping examination system does not pertain to the CL case in Singapore alone. In the context of curriculum or program innovation, particularly in high-stakes educational reform contexts, it is not uncommon that reform efforts are encapsulated in curriculum contents and teaching materials (especially textbooks), without due attention to reforming high-stakes examinations and the impact of the gap on teachers and teaching (Agrawal, 2004). The influence or washback effect of testing on teachers and teaching is widely recognized and studied in language education (e.g., Cheng, 2005; Spratt, 2005). Language teachers are known to often "teach to the test" as a result of their passive and/or active goals for effective teaching, with instructional focuses and activities often guided by the content and format of a test or what they believe students need for gaining good test results (Cheng, 2005). They negotiate curriculum requirements and the interests of different stakeholder groups, including their own, which often results in a pragmatic approach of teaching with assessment goals strongly incorporated (Li & Baldauf, 2011). It thus seems no surprise that CL teachers reported adapting instructional focuses and rushing for full coverage of required curriculum content, even though they perceived learning gaps and decreased interest in students (from P3 onward) and consequently wished the goal planned in the MC for student interest, and the principles recommended by the CLCPRC, could transpire through a reformed examination system.

7.4   Curriculum Innovation and Evaluation, Language-in-Education Planning, and Boundary Crossing

Language education reform through program innovation is a collective enterprise where it is essential to engage diverse stakeholder groups or policy actors (e.g., curriculum developers, teachers, students, administrators, and communities), carefully analyze their different stakeholding interests, and evaluate how the diverse interests and positioning interplay to impact the goals planned of the innovation or reform (Donato & Tucker, 2010; Tucker, 2000a). Baldauf and colleagues (e.g., Baldauf et al., 2008; Kaplan & Baldauf, 1997) argued that language-in-education planning involves a number of objectives related to components or sub-systems of education: the target population, the teacher, syllabus, methods and materials, resources, assessment and evaluation. Baldauf et al. (2008) specifically listed eight processes or policy considerations, including access policy, personnel policy, curriculum

policy, method and materials policy, resource policy, community policy, evaluation policy, and teacher-led policy.

The case of the MC in CL education in Singapore suggested that these component policies, in program innovation or educational reform, are not always considered holistically and do not often operate in synergy as a result of the diverse agendas of different stakeholder groups. The primary agenda of the MOE was boosting and sustaining student interest for maintaining Chinese Singaporeans' ethnic and cultural identity, as opposed to boosting national achievements in CL (this made the MC case distinct from many others in the context of the standards-based movement, where policy decisions are often driven by neoliberal considerations). The parents' agenda was to see learning interest as well as concrete outcomes/test results in children. Students wanted to be engaged in learning; teachers wished to boost interest but had to be pragmatic so as to prioritize outcomes/test results over learning interest when the two were in conflict. These diverse stakeholding interests, together with the missing links in the reform effort, make program innovation and implementation very complex (see Fig. 1). They reflect the complex realities of changing sociolinguistic milieu, bilingualism and English-medium education, and the important gate-keeping role of high-stakes examinations in the educational system in Singapore.

To unravel the complexity and improve language education policy and practice, it is essential to cross boundaries between component policies and stakeholder groups and analyze their interplay through careful evaluations based on diverse sources and types of evidence. In this chapter, we have crossed methodological boundaries (e.g., qualitative and quantitative methods) and boundaries between stakeholder groups in our evaluation of the modular CL curriculum in Singapore. Although we had to limit our scope with a restricted focus on some findings on teachers and students, we hope the findings have achieved the purpose of exemplifying boundary crossing (e.g., stakeholder engagement and methodological pluralism) in language curriculum and program evaluation toward evidence-based language-in-education planning. Our approaches to boundary crossing have, in particular, underscored that evaluating a language program or curriculum is analogous to interpreting a "Necker Cube," to use Tucker's metaphor for describing language teaching (Tucker, 2000b, p. 26). A narrow attention to any single stakeholder or a narrow reference to any single source of evidence would obscure understandings about the complexity involved in curriculum reform and implementation and limit the generation and interpretation of evaluation findings.

8   Conclusion

We reported some findings, drawing upon student surveys and teacher FGs and surveys, of the evaluation of the MC, which was intended by the MOE, through a differentiated approach, to cater to different language backgrounds and CL abilities in primary school students in Singapore such that everyone could be supported to

achieve their best learning potential and develop a lasting interest in learning and using CL for maintaining their ethnic and cultural identity. We showed how key stakeholders, including teachers and students as well as parents and the MOE, bring into the process of implementing the MC considerations and perspectives which were not necessarily in synergy. This consequently resulted in teachers' pragmatic and adaptive approaches to curriculum/policy interpretation and implementation. We also demonstrated the importance of crossing boundaries between stakeholders and methods in program evaluation.

One of the core issues of program evaluation is the utilization of evaluation findings. This issue was not a focus of this chapter. Nevertheless, it is important to touch on it briefly in this conclusion. At different stages of the project, workshops and tailored reports were provided to participating schools, and meetings and discussions were conducted with the CL team of the CPDD, MOE. A full project report was also subsequently submitted to the MOE. It is noted, however, that while the evaluation project was being launched, another committee had been formed by the MOE to review MTLs (Malay, Chinese, and Tamil) in Singapore (MOE, 2011). The Mother Tongue Languages Review Committee (MTLRC) (MOE, 2011) aimed to build on earlier reviews, including the report of the CLCPRC (2004), to review the evolving sociolinguistics of MTLs and provide recommendations for MTL education and reform. To some extent, this reflects the Singaporean society's fast-responding approach to important issues like education. The MTLRC report reiterated the fundamental issue which formed the backbone of the CLCPRC report (2004), that is, the reality and continuing trend of English becoming a predominant home language of Singaporean children and the reform of curriculum and teaching toward developing lasting interests in students for using their respective MTL. Important issues such as better alignment between curriculum and examination, which emerged in the MC evaluation project, received much attention in the MTLRC report, which subsequently influenced the 2015 Chinese Language Syllabus (Primary) (MOE, 2014) and the format of the PSLE. From 2017, for *Huawen* (Chinese), for example, listening and speaking increased to 35% of the total score of the PSLE; and written composition, which can be taken with dictionary assistance, decreased to 20%. For *Gaoji Huawen* (Higher Chinese), however, the PSLE is still a fully written test.

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