



INTERNATIONAL & COMPARATIVE EDUCATION | RESEARCH ARTICLE

The tongue in between: Some thoughts on the teaching of Chinese as a second language in Singapore

Chee Lay Tan

Cogent Education (2014), 1: 967478



Received: 07 May 2014
Accepted: 07 September 2014
Published: 07 October 2014

*Corresponding author: Chee Lay Tan,
Singapore Centre for Chinese Language,
Nanyang Technological University,
Singapore, Singapore
E-mail: cheelay.tan@sccl.sg

Reviewing editor:
Bob Adamson, Hong Kong Institute of
Education, Hong Kong

Additional article information is
available at the end of the article

INTERNATIONAL & COMPARATIVE EDUCATION | RESEARCH ARTICLE

The tongue in between: Some thoughts on the teaching of Chinese as a second language in Singapore

Chee Lay Tan^{1*}

Abstract: In Singapore's unique and complex linguistic environment, it is common to have Chinese-language learners from many different backgrounds in the same school classroom, which is why Singapore is nicknamed as a "language laboratory." In this paper, I hope to examine our linguistic environment and response strategies from different angles, including theories of second-language acquisition and Singapore's teaching methods and distinguishing features. This paper argues that Singapore's approach to teaching Chinese as a second language have to be highly diverse and specialized, in cohesion with Singapore's constantly evolving sociolinguistic landscape and Chinese-language teaching environment.

Subjects: Chinese, Language & Literature, Language Teaching & Learning, Languages of Asia

Keywords: Singapore, sociolinguistic environment, Chinese as a second language, second-language acquisition, Chinese-language education



ABOUT THE AUTHOR

Chee Lay Tan has lived in Singapore, Taiwan, and UK, and has studied Chinese literature, English Studies, and Business Administration. He completed his doctorate in Oriental Studies (Chinese literature) in Cambridge University, specializing in Chinese poetry and exile poets. He was awarded the Young Artist Award and the Singapore Youth Award (Culture and the Arts). He is currently an assistant professor in Chinese in Nanyang Technological University (NTU), and is the Deputy Executive Director of the Singapore Centre for Chinese Language, NTU. He has published widely in both Chinese and English. His main research area is teaching of Chinese literature in a second language and bilingual context. This specialization differs from literary research in China and Taiwan as the research subject is Chinese literature in international bilingual contexts such as Singapore and international CL literature, and the pedagogy is applicable in bilingual learning environments like Singapore.

PUBLIC INTEREST STATEMENT

This paper would be of interest to members of public who are interested in Singapore and its renowned bilingual educational policy.

Singapore's unique and complex linguistic environment was said to be one of the most interesting linguistic laboratory to research on language shift, bilingualism, Chinese-English language code switching, etc. In Singapore, it is common to have Chinese-language learners from many different backgrounds in the same classroom, which makes it extremely challenging to the language teachers. This paper examines our linguistic environment and possible pedagogies and strategies, including theories of second-language acquisition and Singapore's teaching methods and distinguishing features.

This paper would enable educational officers and scholars to have a better understanding of Singapore's approach to teaching Chinese as a second language, as well as some insight to Singapore's constantly evolving sociolinguistic landscape and Chinese-language teaching environment.

1. Introduction: the Singapore's sociolinguistic background

With the reform and robust development of China, Chinese has been increasingly well regarded in the foreign language education market. In China, the main goals for teaching Chinese as a foreign language were originally to “fulfill the needs of people from all countries when they come to study Chinese in China” and to “raise the profile of China as the homeland of the Chinese language” (Li, 2006). However, in recent years, besides targeting the language training of foreign students who move to China, China has begun to energetically move out into the rest of the world—proactively promoting Chinese-language education in various countries worldwide, displaying China's linguistic and cultural “soft power” apart from its economic power. Increasingly, the world is seeing China's growing importance with regards to Chinese-language education.

The rise of China has increased the exposure of people to the Chinese language, and in recent years, Singapore's government has also begun to put in continuous effort to promote the Chinese language as the main tool for engaging businesses in China, besides its long-lasting “Speak Mandarin Campaign” of 35 years (see the campaign website <http://www.mandarin.org.sg/en/about/> for the history and background of the campaign in the Singapore language landscape). In multi-ethnic, multi-cultural Singapore, English has become not only the most important language, but also the dominant language in daily usage. Some important statistics that reflect the changing linguistic background of Chinese in Singapore are collated below. Conducted by the Singapore Department of Statistics, the Census of Population 2010 stated that “Concurrent with the rise in the level of English literacy, the usage of English as home language became more prevalent, especially among the younger age groups. Among Singapore residents aged 5–14 years, English was the home language for 52% of the Chinese.” Further, according to the Ministry of Education's (MOE) survey of Primary 1 students' parents in 2009, 59.1% of Chinese children were reported by their parents as speaking English predominantly at home, which is a big change from 28% in 1991, as seen in Figure 1 below (MOE, 2011, p. 92).

While Figure 1 shows the trend of a shift in dominant family language amongst all three races, it is most steep amongst the Chinese. Many scholars and observers have even attributed the problems in Chinese-language learning to this shift in the home language environment (Goh, 2012; Liu, Goh, & Zhao, 2006; Tan, 2011). While many scholars and academic papers had based their discussions of the Singapore language environment on the above finding, I believe home language use is not exclusive, and using more than one language is in fact the reality amongst many Singaporean families. Subsequently, a more balanced portrayal of the language situation among students in Singapore is captured in the large scale MOE survey carried out in March–May 2010, as shown in Table 1 below (MOE, 2011, p. 93).

Table 1, which depicts a more nuanced language situation, is more realistic in reflecting Singapore's diverse and complex home language environment. Students were broadly categorized into three groups based on dominant language at home: those who spoke predominantly English; those who spoke predominantly Mother Tongue Languages (MTLs); and those who spoke both languages just

Figure 1. Proportion of students speaking English most frequently at home.

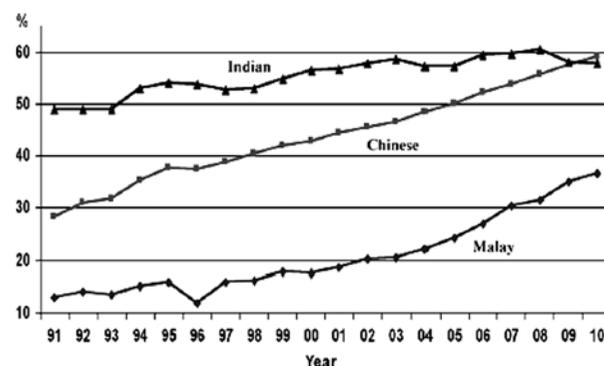


Table 1. Language P6 students used to communicate with their family

Percentage of P6 students in 2010 who spoke to their family in	MTL		
	CL	ML	TL
<i>English only and English mostly</i>	38	17	38
• English only	8	3	12
• English most of the time and MTL occasionally	30	14	26
<i>English and MTL just as frequently</i>	25	33	33
<i>MTL only and MTL mostly</i>	37	50	30
• MTL most of the time and English occasionally	25	37	23
• MTL only	12	13	7

Notes: MTL—Mother Tongue Languages, CL—Chinese Language, ML—Malay Language, TL—Tamil Language, P6—Primary 6.

as frequently. Thirty-eight percent of Primary six (CL) students use predominantly EL at home, 37% their MTLs, and the remaining one quarter both EL and CL equally. The above tables also show that Chinese Singaporeans, who form 75% of the national population, are considerably distanced from the native Chinese environment of China, Hong Kong, or Taiwan societies. Of course, besides the sociolinguistic context, Singapore’s ethnic make-up and migrant-based society is also very different from these societies with Chinese as a first or native language. As a multilingual society that is multi-ethnic and multi-cultural, Singapore’s main languages include English, Chinese, Malay, Tamil, and dialects of various languages. It has even been called one of the most complex linguistic environments in the world (Tan, 2014).

Therefore, Singapore cannot be deemed a society in which Chinese is used as a first language. At the same time, while conditions such as a Chinese environment, Chinese cultural traditions, and the teaching of the Chinese language as a mother tongue for students in Singapore, Singapore is not exactly similar to countries without a Chinese environment or historical background, or countries where Chinese is studied as a foreign language. So the learning of Chinese in Singapore cannot be treated as the learning of a foreign language either. In fact, it is mother tongue that is neither a first language nor a foreign language, but almost a “tongue in between the two levels.” Careful observation will show that Singapore’s Chinese linguistic environment shares some similarities and more than a few differences with the two aforementioned kinds of societies: societies where Chinese is a first language and societies where Chinese is a foreign language. Hence, Singapore cannot be called a society where Chinese is a first language or a society where Chinese is a foreign language. In recent years, especially with the approach of the twenty-first century, Singapore’s Chinese language educators, sociolinguists, education, and language policy formulation organizations have gradually recognized and determined the development and position of the Chinese language locally: that Singapore is progressing towards a society and a language teaching environment where Chinese is a second language, and that the teaching of the Chinese language at second-language level would increasingly play a key role in Singapore.

2. Chinese-language learners in Singapore

In general, Chinese-language learners are divided into the following three categories:

- (1) CNL/CL1-Chinese as a Native Language or First Language.
- (2) CSL/CL2-Chinese as a Second Language.
- (3) CFL-Chinese as a Foreign Language.

Students from many countries mainly belong to only one of the above categories. Many countries and regions even equate second-language learning and foreign-language learning, combining both into one category. However, in Singapore’s unique linguistic environment, it is extremely common

to encounter Chinese-language learners from each of these three categories at the same time and even in the same classroom. Moreover, the differences among students in these three categories (including family background, most frequently used language, and language ability) are very pronounced. Therefore, in Singapore, second-language learning cannot be equated to or classified in the same category as foreign-language learning. This extremely complex mix of student backgrounds and language abilities is the reason why Singapore is nicknamed as a “language laboratory.” The uniqueness of the “Singapore language laboratory” is not only in its overall linguistic environment, but is also in the uniqueness of each family, school, classroom, and even of each language learner. Precisely because of this, our education system, curricular structure, teaching resources, and teaching methods need to pay great attention to the vast differences among individual learners, especially the uniqueness and differentiation among learners of Chinese as a second language. Moreover, these considerations need to be able to keep up with temporal and geographical changes, and cohere with Singapore’s constantly evolving sociolinguistic landscape and Chinese-language teaching environment.

Singapore began implementing the “English Language and Mother Tongue” Bilingual Educational Policy in the late 1970s, which requires students to study English as the medium of all content-area instruction, and also to study their official Mother Tongue as a single subject. Here, Mother Tongue is determined based on ethnicity, regardless of the student’s home language (Dixon, 2005, pp. 25–26). The English language gradually replaced Mother Tongues to become a first-language subject, and the medium of instruction for all subjects besides Mother Tongue. According to the latest Mother Tongue Review Report, “Bilingual education in English (EL) and the MTLs remains a cornerstone of Singapore’s education system. EL, as the common language of instruction, enables all our students to plug into a globalised world” (MOE, 2011, p. 10). Chinese-language education, on the other hand, switched from being mainly a first-language subject to being a second-language subject. At the same time, the four nationwide Mother Tongue curricular reviews Singapore has experienced since the end of the twentieth century (in 1992, 1999, 2004, and 2010) have included revisions and adjustments of various scales in areas such as lesson content, teaching methods of the teaching resources, testing, and assessment. The reason for Singapore’s MOE to carry out Mother Tongue reviews so frequently is closely connected to Singapore’s sociolinguistic trend as shown in the figure and table aforesaid, and the consequent changes in Singapore’s medium of instruction. As mentioned above, in today’s Singapore, one classroom may hold three kinds of Chinese-language learners. The first kind is the learners whose mother tongue is Chinese and who are native speakers. These students are definitely in the minority, and mainly constitute new immigrants or International Student from China, Taiwan and other societies with Chinese-language backgrounds. The second kind is mainly ethnically Chinese Singaporean students, who mainly speak Chinese as their second language as they converse mainly in English; and the third kind is students in mainstream Singapore schools who are foreigners or not ethnically Chinese. They can be considered as students of Chinese as a foreign language. In recent years, the number of students of foreign nationalities who are learning Chinese has distinctly risen. The reason for this is that when foreign students enroll in local schools, they must also comply with the regulations of Singapore’s bilingual education system, and choose a language subject aside from English. With the rise of China, Chinese has become the most natural choice for foreign students who are in the mainstream schools of Singapore (Tan, 2011).

To distinguish these learner categories from one another, we would need to first examine that their first-language, second-language and foreign-language learning processes, which differ from each other. The most fundamental difference among these processes is to distinguish between the processes of “learning” and “acquisition.”

Language acquisition refers to the processes and ways by which children naturally, and even unconsciously, grasp their mother tongue. Language acquisition normally occurs outside the classroom, and is mainly an unconscious learning process. It is the mastery of the patterns of a language through great amounts of exposure to the language in social interactions in daily life, usually without expert guidance or people correcting the child on purpose. At most the child’s parents may

provide brief suggestions and explanations to the toddler to child from time to time. Fundamentally, the process of acquisition does not concentrate on language forms, but focuses on language meanings because language is taken as a whole, absorbed and internalized. The two oral skills of listening and speaking are not learned separately from each other, but acquired together in daily usages. Reading and writing, the two literacy skills, are a different skill set and would still need to be learned. In addition, studies have indicated that language acquisition is required (especially before the age of 12–13) in order for a learner to gain what is known as a “native accent” (Scovel, 1988; Singleton & Lengyel, 1995). In general, that which is called a “first language” and a “mother tongue” is mostly gained through the process of language acquisition (Cruz-Ferreira, 2011).

Generally, learners of Chinese as a first language or as a mother tongue have these characteristics in common:

- (1) Growing up listening to this language from a young age.
- (2) Beginning to use this language to speak after the age of one.
- (3) Beginning to read in this language around the age of four.
- (4) Beginning to write in this language after entering kindergarten.

In simpler terms, first-language learners approach the four skills of listening, speaking, reading, and writing in a way where they gradually and progressively absorb the language naturally (Richards & Rodgers, 2014). Due to being immersed in a Chinese-medium linguistic environment for a long period of time, they receive enormous volumes of “input,” and both the repetitiveness and interactivity of this input are extremely high. Hence, language acquirers can kill two birds with one stone through inferring what the principles and rules are in linguistic information by making logical connections, and unconsciously internalizing linguistic elements such as characters, words, and sentences. As language acquirers have internalized the basic principles and rules of spoken language before enrolling in mainstream schools, the focus for this batch of learners should be reading and writing, and not the acquired skills of listening or speaking.

Language learning refers to a gradual process of learning a language (usually not the learner’s mother tongue) in a school environment with a program, knowledge and awareness, and a goal. This often occurs in the classroom and requires a teacher or a specialist’s guidance, explication, and correction. It focuses on language forms, and its processes are mainly meant to turn what students are conscious of into something they can perform without conscious thought. Linguist Stephen Krashen raised the concept of Monitor Hypothesis in *The Monitor Model for Second-Language Acquisition*: that second-language learners learn by monitoring their own conditions, editing, adjusting, checking, and correcting their speech while speaking (Krashen, 1982). I will discuss this in further detail below. It is clear that this is a conscious learning process, and a second language is mainly gained by learning the processes behind this concept of consciousness. Second-language and foreign-language learning processes differ from mother tongue-learning processes as they can be divided into three main stages:

- (1) Stage 1: The “silent stage.” Learners who come into contact with a completely foreign language would first listen quietly, absorbing and accumulating vocabulary. In the first few days or months during this “silent” period, the teacher does not need to rigidly require that students speak up, but only needs to provide a large volume of listening materials and exercises.
- (2) Stage 2: The “elementary stage of speaking.” At this stage, students can be asked to imitate or read simple phrases or short sentences.
- (3) Stage 3: The formal “spoken language learning stage.” At this stage, students can be asked to read longer or more complete sentences. Teachers can create opportunities to encourage students to challenge their own speaking ability, but need not make it a requirement.

From my teaching and research experience, when the standard of students in the same class reaches Stage 3, huge gaps would have already occurred; it can even be described as an extreme unevenness in student abilities. After Stage 3, differentiated or individualized language teaching would need to begin as soon as possible. If resources do not allow for one-to-one individualized teaching, we can raise the number of differentiated teaching activities year by year: for example, in the first year, (e.g. Primary One or Secondary One) 20% of classroom activities can be differentiated learning activities, i.e. in every lesson hour, about 12 min will be for differentiated instruction, assignments, exercises, etc. In the second year, the proportion of differentiated learning activities will be raised to 25%, and in the third year, the proportion will be raised to 30%, and so on. Normally, as students' abilities improve, the differences among individual students will inevitably become more pronounced. So the best situation is to split a class up into smaller lesson groups. However, if the situation does not allow this, the proportion of differentiated instruction has to be increased. Group work can also allow the number of students in each group to be small, which can increase the chances of each student to use spoken language in class.

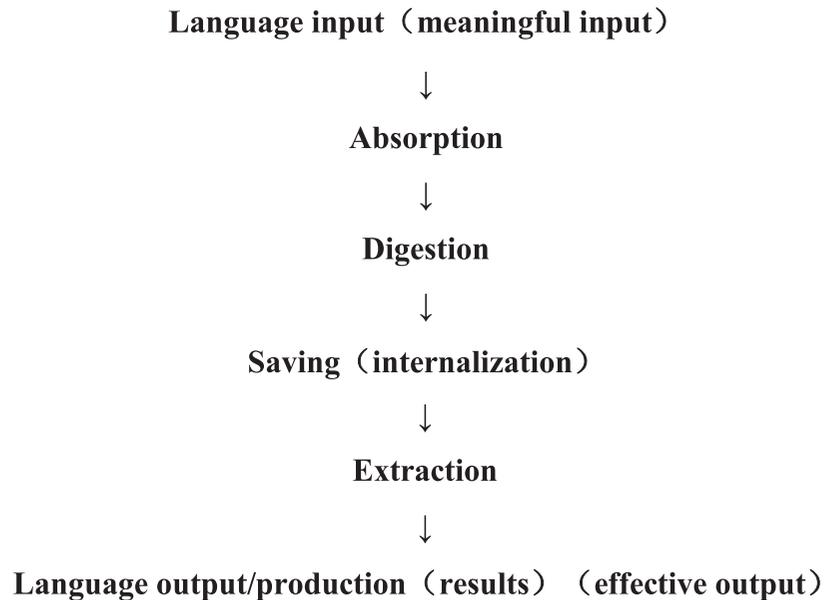
3. Chinese-language learning in Singapore

If we scrutinize Singapore's language learning environment where Chinese is a second language and a foreign language (i.e. apart from those families with Chinese as their dominant language), we can roughly see these situations in the four areas of listening, speaking, reading, and writing:

- (1) Listening: Learners may encounter an environment where Chinese is audible, usually from mass media or limited interaction with sellers, but not amongst family members.
- (2) Speaking: Learners usually do not have many opportunities to use Chinese at home with their family members, and the usage of Chinese is usually limited to grandparents, preschool teachers and classmates.
- (3) Reading: Before entering preschool, learners usually do not have many opportunities to read Chinese.
- (4) Writing: Before entering Primary One, learners rarely have opportunities to write in Chinese, besides limited opportunities to write Chinese characters in preschool.

From the above observation, it is clear that Singapore's second-language learners have relatively few opportunities to be exposed to spoken Chinese before entering school. To make up this deficit, these students need a curriculum with an even more rigorous, systematic, and holistic structure that builds their linguistic systems. In primary school, Singapore students only spend 20% of their time learning and using Chinese, as there are other examinable subjects including Mathematics, Science, and English, which are all taught in English and take up most of the curricular time (MOE, 2014). Hence due to this time constraint, second-language learners are unable to absorb a curriculum that is designed for learners of Chinese as a first language. For second-language learners, a more targeted, selective systematic teaching method is required.

Many theories about language learning, such as the input hypothesis (Krashen, 1985), the language processing hypothesis (Bialystok, 1991; McLaughlin, 1983; Schmidt & Lee, 2005), the associative learning theory (Ellis, 2005; Gasser, 1990), and the processing instruction theory (VanPattern, 2003) have raised the point that when learning a language, whether it is being studied as a first or as a second language, one process is similar. This process simplifies and models the "input-output" language learning flow:



Although the actual language-attainment process is much more complex than this flowchart, we can first define “input” as listening and reading, and “output” as speaking and writing. Regardless of whether learners are learning Chinese as a first or second language, they need to first receive large volumes of “input” from the target language. It is worthwhile for teachers to note that the materials to form the “input” usually meet five broad criteria:

- (1) meaningfulness,
- (2) comprehensibility,
- (3) structuredness,
- (4) having a high rate of recurrence, and
- (5) having a high level of repetitiveness.

After repeated “meaningful input” and absorption, learners can gradually digest the materials and convert these contents as mental lexicon, i.e. to save lexicon, vocabularies, semantics, and sentence formations into their cognitive corpus. Eventually, these information (including character forms, words, and sentence structures) will be internalized into the learners’ linguistic systems for the learners to be able to draw upon whenever required, and to create “output” in the form of speech or writing. We can then term this as “effective output” (as it achieves effective communication and message delivery).

Aligned with second-language learning theories (McLaughlin, 1983; Schmidt & Lee, 2005), the Chinese-language education in lower primary (Primary One and Two) should also model the above “input-output” language learning flow, and be more concentrated on teaching the skills of listening and speaking. These second-language learners need to be fed a large volume of meaningful and easily comprehensible spoken Chinese materials (meaningful input), preferably authentic materials that is easily available in their surroundings. Only then will they be able, after the language learning flow, to later use Chinese to communicate in situations of daily social interactions, and to create meaningful, understandable messages (effective output). In addition, I would further argue that it is more important for students to first grasp these two spoken language communication skills of speaking and listening, instead of only learning the official Chinese phonetic system of Hanyu Pinyin at the first term of Primary One. This is because Hanyu Pinyin will only provide limited help in reading as it is only an intermediate tool or an additional agent (and not the Chinese character itself), and it

cannot effectively enable learners with the most pressing requirement of daily life: the listening and speaking skills that are essential in social interactions. In fact, the latest announcement of the new Primary School Chinese curriculum 2015 has made such a revision: Chinese text will introduced both the teaching of Hanyu Pinyin and Chinese characters from the beginning of the year (Zaccheus, 2014).

All in all, students with different starting points require differently designed curricula. For learners of a language as a foreign language, and even learners of the language as a second language who began from a lower level, they need to begin with a curriculum with the primary foci of listening and speaking.

I have briefly described the differences between first- and second-language learning processes vs. foreign-language learning processes above, but in principle, both share certain similarities in language learning. Understanding student differences is paramount for teachers to avoid using course material and methods for first-language learners to teach second-language learners; and identifying student similarities can enable teachers to use certain first-language teaching methods they were familiar with to teach second-language learners.

4. Conclusion

On the whole, the foundational principles of language mastery, whether they are for first-language, second-language, or foreign-language mastery, share numerous similarities. However, in terms of language education theory, curricular framework, curriculum content, lesson plans, teaching methods, learning strategies, etc., there are still fundamental differences among the teaching of a language as a first, second or foreign language. The teacher's ability to incorporate fundamental differential teaching strategies for first- and second-language learners will be crucial, and their inability to adopt suitable teaching strategies will affect the teaching result. Especially from a learning point of view, successful language teaching means that the student has learned the skills to actually use the language comfortably. For the Singaporean learner of Chinese as a Second Language, becoming "active learners" and "proficient users" have become the ultimate goal of our MTL policy (MOE, 2011, p. 17).

In conclusion, we have by now, with the changing family language trends and classroom student backgrounds, come to acknowledge that most students in Singapore would learn and master Chinese at the second-language level. It would be important for scholars, educators, and even parents to address this intricate question: if Singapore students take Chinese as a second language, some even taking Chinese as a foreign language, do we need to adjust and accept that the students' Chinese-language standards have to be adjusted downward, and do curricular standards, teaching resources and examinations need to lower their requirements?

Before responding to this intricate question, it is especially crucial for Chinese teachers who were educated and nurtured in the first-language environment of the past, or in China and Taiwan contexts, to adapt, retrain, and confidently carry out the teaching of Chinese as a second language. Furthermore, educational and curricular planning will need to fully make use of our unique linguistic, cultural, geographical, and environmental advantages in the teaching of Chinese. Meanwhile, there is a need to revamp the present curriculum framework which is more inclined towards first language, and consider the perspectives of second-language learning and the fast-evolving family language environments. If the above could be made possible by concerted efforts amongst parents, educators, and policy-makers, our students could still master Chinese in conditions where they learn it as a second language. Course milestones, teaching resources, teaching methods, and assessment would need to be revised in the process, but not necessarily at the cost of lowering expectations. Instead, changing the direction and focus of the Singapore Chinese-language education, utilizing second-language pedagogies, and more effective/appealing learning tools are important measures. We can see that the new Primary School Chinese Curriculum and textbooks for 2015 have further emphasized such a second-language direction (Zaccheus, 2014). It is imperative that these changes

have language acquisition theory as their foundation, that they have research on teaching methods for Chinese as a second language as their strategic basis, and that these changes are implemented among policy planning officers, in-service teachers, and the assessment system in which examination papers are set and graded—these are some of the most important changes to the language education system that will nurture, grow, and improve the language abilities of “the tongue in between the levels.”

Funding

The authors received no direct funding for this research.

Author details

Chee Lay Tan¹

E-mail: cheelay.tan@sccl.sg

¹ Singapore Centre for Chinese Language, Nanyang Technological University, Singapore, Singapore.

Citation information

Cite this article as: The tongue in between: Some thoughts on the teaching of Chinese as a second language in Singapore, C.L. Tan, *Cogent Education* (2014), 1: 967478.

Cover image

Source: Author

References

- Bialystok, E. (1991). *Language processing in bilingual children*. Cambridge, MA: Cambridge University Press.
<http://dx.doi.org/10.1017/CBO9780511620652>
- Cruz-Ferreira, M. (2011). First language acquisition and teaching. In A. Wilton & M. Stegu (Eds.), *AILA review 24: Applied folk linguistics* (pp. 78–87). Amsterdam: John Benjamins.
<http://dx.doi.org/10.1075/aila.24>
- Dixon, L. Q. (2005). Bilingual education policy in Singapore: An analysis of its sociohistorical roots and current academic outcomes. *International Journal of Bilingual Education & Bilingualism*, 8, 25–47.
- Ellis, N. C. (2005). Language acquisition as rational contingency learning. *Applied Linguistics*, 27(1), 1–24.
- Gasser, M. (1990). Connectionism and universals of second language acquisition. *Studies in Second Language Acquisition*, 12, 179–199.
<http://dx.doi.org/10.1017/S0272263100009074>
- Goh, H. H. (2012). *A study of lexical diversity, syntactic complexity and code-switching in spoken mandarin of Chinese preschoolers in Singapore: A corpus-based analysis* (Unpublished doctoral dissertation). National Institute of Education, Nanyang Technological University, Singapore.
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. London: Longman.
- Li, Q. (Ed.). (2006). *Research on teaching resources for Chinese as a foreign language*. Beijing: Beijing Commercial Press.
- Liu, Y., Goh, H. H., & Zhao, S. (2006). *Transcribing Chinese language classroom talk: To build a computer corpus* (Technical Report). Singapore: CRPP, NIE, Nanyang Technological University.
- McLaughlin, B. (1983). Second language learning: An information-processing perspective. *Language Learning*, 33, 135–158.
<http://dx.doi.org/10.1111/lang.1983.33.issue-2>
- Ministry of Education. (2011). *2010 mother tongue languages review committee report*. Singapore: Author.
- Ministry of Education. (2014). *Primary school education*. Singapore: Author. Retrieved August 3, 2014, from <http://www.moe.gov.sg/education/primary/files/primary-school-education-booklet.pdf>
- Richards, J., & Rodgers, T. (2014). *Approaches and methods in language teaching*. Cambridge, MA: Cambridge University Press.
- Schmidt, R., & Lee, T. L. (2005). *Motor control and learning: A behavioral emphasis*. Champaign, IL: Human Kinetics.
- Scovel, T. (1988). *A time to speak: A psycholinguistic inquiry into the critical period for human speech*. New York, NY: Newbury House.
- Singleton, D. M., & Lengyel, Z. (1995). *The age factor in second language acquisition: A critical look at the critical period hypothesis*. Avon, OH: Multilingual Matters.
- Tan, C. L. (2011). *Teaching of Chinese language and literature in Singapore*. Hangzhou: Zhejiang University Press.
- Tan, C. L. (2014). An overview on Chinese character recognition at preschool level in Singapore: Observations and reflections. In *5th International Conference on Han Characters Education and Research—Proceedings* (pp. 35–53). Seoul: Korea University.
- VanPattern, B. (2003). *From input to output*. Boston, MA: McGraw-Hill.
- Zaccheus, M. (2014, August 25). Cartoons to help master mother tongue. *The Straits Times*. Retrieved from <http://www.straitstimes.com/news/singapore/education/story/cartoons-help-master-mother-tongue-20140825>



© 2014 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 3.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

