Chapter 5
Chinese Language Teachers' Perceptions of Training Needs and Perceived Student Difficulties

Kaycheng Soh

Introduction

In the past decade or so, there have been many efforts to specify expected language proficiency or competence in great details for different language skills and levels of attainments. This resulted in the proliferation of documents referred to as *standards, frameworks, benchmarks*, *expectations*, etc. Typically, they take the form of a graded series of skill-level matrix in which language competence is specified as *descriptors*. In a sense, this is similar to assessment rubrics but covers a much wider range over many grade levels which have become popular over the world in the context of *formative assessment*.

International Scene To date, the best known and most influential language standards is the *Common European Framework of Reference for Languages: Learning, Teaching, Assessment* (CEFR; Council of Europe 2011). It serves as a guide to describe achievement of languages across European countries and is assumed to be applicable to all European languages in spite of their differences. The CEFR has even been adapted by countries beyond.

The levels of language competence in the CEFR are Breakthrough (Beginner), Waystage (Elementary), Threshold (Intermediate), Vantage (Upper Intermediate), Effective Operational Proficiency (Advance), and Master (Proficiency), and the CEFR operationalizes the language competence in behavioral terms that facilitates teaching and objective assessment. For instance, cited below is for the lowest level (Beginner; Basic User, A1; p. 24):

K. Soh (✉)
Singapore Centre for Chinese Language, Singapore, Singapore
e-mail: kaycheng.soh@sccl.sg; sohkaycheng@hotmail.com

K. Soh (ed.), *Teaching Chinese Language in Singapore*,
DOI 10.1007/978-981-10-0123-9_5

- Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type
- Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows, and things he/she has
- Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help

In contrast, for the highest level (Master; Proficient User, C2; p. 24), thus:

- Can understand with ease virtually everything heard or read
- Can summarize information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation
- Can express him/herself spontaneously, very fluently, and precisely, differentiating finer shades of meaning even in the most complex situation

A close look at the two sets of descriptors above reveals that the CEFR stresses communication and interaction as the ultimate goal of language learning.

On a smaller scale, at the national level in the USA, there is the *Foreign Language Standards and Proficiency Expectations* of the Department of Defense Education Activity (No date). This is an adaptation of the earlier *Inverted Pyramid of Proficiency* of the American Council on the Teaching of Foreign Languages. Note that this framework is for foreign languages and competence is described as of three levels (which have subdivisions): novice (low, mid, high), intermediate (low, mid, high), and advanced (low, advanced). Cited below is a description of the expected proficiency for Elementary K-2 students (Novice Proficiency Range, Novice-Low Level, p. v):

> By the end of 2nd grade, students comprehend and produce vocabulary related to everyday objects and actions on a limited number of familiar topics. Students imitate modeled words and phrases using intonation and pronunciation similar to the model. They demonstrate limited comprehension of vocabulary when enhanced by auditory and visual stimuli, pantomime, props, realia (culturally authentic learning tools), and videos. Students imitate the use of culturally appropriate vocabulary. They predict a story line or event when it involves literature, folktales, fables, and stories culturally similar to their own.

A descriptor like this specifies not only the language aspects but also how language is to be acquired (i.e., modeling) and there is also an element of cultural learning (e.g., *culturally* similar literature, folklores, fables). Obviously, a descriptor like this is more fitting for *language education* (which is a much broader concept of teaching a language *and* its culture) than for *learning instruction* (which focuses almost exclusively on the acquisition of language skills).

Besides such specifications at the international and national levels, some states in the USA have their own versions, too. A typical example is the *Michigan World Language Standards and Benchmarks* (Michigan Department of Education No date). And, again, communication is given emphasis as the *Standards and Benchmarks* defines what students should know and be able to do to communicate effectively in a language other than English.

In the Michigan framework (Michigan Department of Education No date, p. 3), language competence is described with reference to three elements:

- The *communicative functions* that students should be able to carry out
- The *contexts* in which students can understand and use written, spoken, and/or signed language to carry out these tasks
- The level of *accuracy and appropriateness* of the language student uses

This three-part functions-contexts-accuracy model is used to describe language proficiency at a variety of levels.

For the Chinese language, the Office of Chinese Language Council International (Hanban/Confucius Institute Headquarters 2007) has published the *International Standards for Chinese Language Teachers*. Hanban/Confucius Institute Headquarters is a public institution affiliated with the Chinese Ministry of Education of PRC. Similar to the British Council for English language and culture, Hanban provides resources and services worldwide for the teaching of the Chinese language and culture. The Chinese *Standards* describes the knowledge, competency, and quality that an international Chinese Language teacher should have and serves as a basis for training, appraising, and certification. With these as its purposes, the *Standards* has its target the teacher and not the students of primary and secondary schools.

Nevertheless, it is informative that the Chinese *Standards* takes a comprehensive stance to include not only language competence but also related teaching competencies. The five modules are: (1) linguistic knowledge and skills (for Chinese and foreign language), (2) cultures and communications (Chinese cultures, foreign cultures, and cross-cultural communications), (3) theory of the second language acquirement and study strategy, (4) teaching methodology (teaching, evaluation, curriculum, modern education techniques), and (5) overall quality (professional quality, development ability, and professional ethics). It is interesting that the Chinese *Standards* refers to research findings such as those of TESOL.

While the standards movement is well on its way, a pertinent question to ask is: In what ways will standards help in the education process? In a discussion on the standards-based curriculum (not only of language but in general), Judy Steiner (No date: 8), Chief Inspector for English Language Education in the UK, had the following to say:

> Setting standards is an important and effective learning tool because they express clear expectations of what all pupils should know and be able to do with the language. They can be helpful to different populations, such as the state, districts and schools, teachers, pupils and parents.

However, Steiner also pointed up the concerns, also raised by some American educators, that setting standards would lead to centralized education and would undermine innovation at the local level. She further pointed out an additional caveat: the standards should reflect a high level of achievement, while being realistic and relevant to the context in which they are being taught. Her discussion ends; thus:

> Standards in and of themselves are meaningless. What counts are the steps that educators and others take to help pupils reach them. (para. 35)

Thus, it appears that the publication of standards as such is only the beginning of a long winding road of education reform where language instruction is concerned.

Singapore Context The teaching of Chinese Language in Singapore has over the years become a keen concern of the educational authorities, the Chinese community, and the Chinese Language teachers' organizations. Prior to the implementation of the New Education System in 1979, there were vernacular schools in which ethnic languages were the main media of instruction according to the ethnicity of the students and English was studied as one of the subjects. There were also English Schools where all instruction was conducted only in English and ethnic languages were studied as a subject, if at all. With the implementation of the New Education System in all schools, all instruction is conducted in English, and students learn their respective ethnic languages (referred to administratively as the Second Languages and now Mother Tongue Languages) as stand-alone subjects. This change could well be the main cause of learning difficulty where ethnic languages are concerned.

There is no denial that the Chinese language is a much more difficult language to learn. The Foreign Service Institute of the USA defines for English speakers the time needed to attain the General Professional Proficiency in speaking and reading at Level 3 (Effective Language Learning No date). In this scheme, Chinese language (together with Arabic, Japanese, and Korean) are the most demanding in terms of time. To reach Level 3, these languages need 2200 h of learning and are labeled as "Category V: Language which are exceptionally difficult for native English speakers", whereas many European languages such as Dutch, French, Italian, Spanish, and the three Scandinavian languages are labeled as "Category I: Languages closely related to English" which need only 575–600 h of learning. Thus, even for adults, learning the Chinese language requires about four times of that needed to reach the same level of competency of European languages related to English. And if this is for motivated adult learners of the Chinese language, what more for unmotivated children who have to learn it?

In Singapore schools, Chinese Language as a standing-alone subject takes up about 15–18 % of the total curriculum time, and this is comparable with most other subjects in the curriculum. Although the Chinese Language syllabuses have been adjusted to the so-called Second Language level, whereas the other subjects are taught in English and this provides additional practice of it, the Chinese Language has no such advantages. Thus, the limited exposure and lack of practice could have given rise to the problems of learning the language.

Over and above the difficulty inherent in the language, especially in its written form, the problem of teaching Chinese has gradually, perhaps unperceptively, been aggravated by the changes in home language of the students. As shown in Table 5.1, a survey by the Ministry of Education (2004) shows that the proportions of parent–child interaction using Chinese decreased from 59 % at Secondary 4 to only 37 % at Primary 2, with a difference of 22 % over an 8-year period. On the other hand, parent–child interaction using English only increased from 18 % at Secondary 4 to 26 % at Primary 2, with a difference of 8 %. During the same period of time, families

Table 5.1 Changes in home language among students

	Primary 2	Primary 3	Primary 6	Secondary 2	Secondary 4
English only	25.7	23.5	21.5	24.4	17.6
English and Chinese	33.0	27.4	29.6	21.8	19.6
Chinese only	37.3	44.8	44.1	50.2	59.1

Source: Ministry of Education, Singapore 2004, p. 52, Table 1

became more bilingual, using both English and Chinese for cross-generational interaction; the proportions changed from 20 % at Secondary 4 to 33 % at Primary 2. Such changes can be expected to have an influence on the learning of the Chinese language as home support is critical for language acquisition and language learning. This increased discontinuity from home to school where the language is concerned would have led to not only greater difficulty but also weaker motivation in learning.

However, the difficulty in the teaching and learning of Chinese Language is not totally unforeseen as there have been five reviews in 1978 (Note: This is a holistic review of the system as a whole and not only on the teaching and learning of Chinese language), 1992, 1999, 2004, and, the most recent, 2010. These periodical reviews involved political leaders, university professors, school principals, first-line teachers, students' parents, community representatives, and ministry officials. Information and views were gathered through large-scale surveys and focus group discussion sessions. Every review led to redesigning and diversification of the Chinese Language curriculum and examination formats, development of instructional materials, and suggestions for effective teaching.

The most recent review resulted in the report *Nurturing Active Learners and Proficient Users* (Ministry of Education, Singapore 2010). The Review Committee recognized the diversity in language background and ability of the students as well as the importance of communicative competency. Explicitly the Committee stressed a key recommendation:

> (…) teaching methods will have to take into account the different home language backgrounds and language learning abilities of students, especially in the early foundation years. The MTL curriculum should be designed and taught to develop proficient users who can communicate effectively using the language in real-life contexts and apply it in interpersonal communication, listening and reading for comprehension, and presenting in spoken and written forms. (p. 14)

The Committee further recognized the need for explicit specifications of the levels and types of language competency in Mother Tongue Languages and recommended that proficiency descriptors be developed to guide teaching, learning, and assessment; thus;

> The proficiency descriptors will help teachers tailor their teaching, classroom activities and assessments to create more opportunities for students to practise and use their MTL in specific ways, e.g. show-and-tell, role-play and group discussion. With clearer goals, students will also be more motivated to progress from one proficiency level to the next. (p. 16)

While the development of the proficiency descriptors as recommended by the review committee is being awaited, there is a value to surveying Chinese Language teachers with regard to their perceptions of students' learning difficulties, and, in connection with these, the teachers' perceived training needs.

Objectives and Significance

Against the backdrop above, the present study is an effort to gather empirical data for the following objectives:

1. To identify the training needs of Chinese Language teachers with regard to the various types and levels of the language skills
2. To ascertain Chinese Language teachers' views on the attainability of the various types and levels of the language skills
3. To ascertain the relations between Chinese Language teachers' felt training needs and their perceived student difficulties in attaining the language skills

It is a truism that the best method to ascertain the attainability of the stipulated language skills is to gather performance data from the students. This, however, has to be a long-term aspiration for the simple reason that learning takes time and is therefore not possible at this early stage. As an interim measure, relevant data is to be gathered from the Chinese Language teachers. This is justifiable for the fact that teachers are in constant interaction with students and therefore have trustworthy perception of attainability. Moreover, based on their past experience, teachers are able to foresee their relevant training needs.

The data gathered for the present study will serve two important purposes. Firstly, it identifies aspects of Chinese language learning where research is needed. Secondly, the data provides information of the specific training needs felt by the teachers for whom courses and workshops can be conceptualized and conducted to better prepare them to meet the students learning needs.

Method

Respondents

A convenience sample of 414 Chinese Language teachers (Primary 221 and Secondary 193) who attended training courses at Singapore Centre for Chinese Language during June to July 2014 participated in the survey. It was estimated that there were about 3000 Chinese Language teachers in Singapore at the time of this study. For a population of this size, a sample of 341 is needed to attain 95 % confidence level and 5 % confidence interval (The Survey System 2012). Moreover,

according to the Researcher Advisor (2006), a sample size of 384 is good enough to represent a population of as large as 250,000, with 95 % confidence level and 5 % confidence interval. Thus, the number of teachers of the present study is more than adequate in terms of sample size for the survey conventions.

While the sample size is more than adequate, the composition of the sample is also important or even more so. As shown in Table 5.2, the teachers came from a variety of schools, taught various types of Chinese language courses to a wide range of students at different levels. Although the proportions may not be exactly consistent with the population of Chinese language teachers in Singapore, they were considered as being a good representation.

Primary Sample Of the primary teachers, there is a female preponderance with 10 % male and 90 % female. The majority of 85 % came from the government schools while the remaining 15 % from the other types of schools. There is a wide range of teaching experience, with 44 % having 10 or less years of teaching, 49 % between 11 and 20 years, and 11 % more years. The classes the teachers taught in 2014 are evenly spreading from Primary 1 to Primary 6, teaching between two and three levels. When responding to the survey, the teachers' focused classes are evenly spreading throughout the six primary levels.

Secondary Sample Of the secondary teachers, there is also a female preponderance with 14 % male and 86 % female. The majority of 68 % came from the government schools while the remaining 32 % from the other types of schools. There is a wide range of teaching experience, with 51 % having 10 or less years of teaching, 29 % between 11 and 20 years, and 20 % more years. In 2014, 20 % of the teachers taught Secondary 1 and the remaining 80 % are evenly distributed to the three higher classes. For responding to the survey, 59 % of the teachers focused on Secondary 1 and 2, with the remaining 41 % Secondary 3 and 4. While 64 % of them taught either High Chinese or Express Chinese, the remaining 36 % taught either Normal Chinese or Basic Chinese.

Instruments

Besides questions of personal information, a competence-by-level matrix (Fig. 5.1) was created. For each of the six levels of language proficiency, there are seven levels of complexity, giving a total of 42 broad categories which form the focus of the present study. In the survey, these were organized into two sets, with Levels 1–4 for Primary 1 to Primary 6 and Levels 5–7 for Secondary 1 to Secondary 4.

When gathering the data, an introduction to the purpose of the survey was first made, and the respondents were assured of the confidentiality of their responses. Then, responding to the survey, the teachers were requested to focus on one level in accordance with their teaching experience. The choice of the level was left to the teacher's discretion as it was believed that she would tend to focus on the level at which teaching and learning difficulties were more acute.

Table 5.2 The sample

	Primary (N = 221)	Secondary (N = 193)
Sex		
Male	10.0	14.0
Female	90.0	86.0
School type		
Government	85.1	67.9
Government aided	9.1	4.1
Special assistance	6.2	8.3
Autonomous	0.8	11.9
Independent	0.8	7.8
Years of teaching		
3–5	20.7	25.9
6–10	23.3	25.4
11–15	30.6	15.5
16–20	18.5	13.5
21–25	4.7	9.3
26–30	2.2	2.6
31 or more	0.0	7.8
Classes taught in 2014		
Primary 1/Secondary 1	16.4	19.9
Primary 2/Secondary 2	18.5	27.7
Primary 3/Secondary 3	16.0	26.7
Primary 4/Secondary 4	16.0	25.7
Primary 5	18.7	Not applicable
Primary 6	14.5	Not applicable
Class focused		
Primary 1/Secondary 1	16.6	20.7
Primary 2/Secondary 2	16.2	38.3
Primary 3/Secondary 3	17.4	19.7
Primary 4/Secondary 4	17.0	21.2
Primary 5	17.4	Not applicable
Primary 6	15.4	Not applicable
Chinese language courses taught in 2014		
High Chinese language	Not applicable	31.0
Express Chinese language	Not applicable	33.0
Normal Chinese language	Not applicable	23.4
Basic Chinese language	Not applicable	12.7

Note: For *Classes taught in 2014*, multiple answers allowed

Language proficiency	Primary 1 to 6				Secondary 1 to 4		
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Listening							
Speaking							
Reading							
Writing							
Oral interaction							
Written interaction							

Fig. 5.1 The competence-by-level matrix

The teachers were to respond with two different, though related, perspectives: (1) the teacher's felt training needs and (2) the teacher's perception of student difficulties in attaining the specified learning objective. Open-ended questions asked the teachers to write additional comments and suggestions.

Analysis

To uncover the trends of the teachers' felt training needs and perceived student difficulties, percentages were calculated based on the number of responses (endorsements) and not the number of respondents (teachers), calculated thus for each skill: percentage = (endorsements at a level)/(endorsements at all levels)*100 %. This enabled the calculation to be done first for each level within each language skill. The skill-based percentages were later summed for comparisons across the six language skills. The resultant percentages show the relative "importance" of the specified language skills in terms of felt training needs and perceived student difficulties.

Results

The survey results are herewith presented with reference to the three research objectives stated earlier. This is followed by a presentation of the responses (teachers' suggestions) to the open-ended questions.

Objective 1: To Identify the Training Needs of Chinese Language Teachers with Regard to the Various Types and Levels of the Language Skills

Table 5.3 (Fig. 5.2) shows the percentages for training needs felt by primary and secondary teachers. It is obvious that, with some slight deviations, the felt training needs are highly similar among the six skills and vary with levels. At the primary level, training needs are highest for Level 1, followed by Level 4, with Levels 2 and 3 being lower. At the Secondary level, training needs increased from Level 5 to Level 6 and then decreased somewhat at Level 7; however, the difference between Levels 6 and 7 is much less than between Levels 5 and 6. On the whole, there is a curvilinear (nonlinear) trend in the overall percentages for the seven levels. In other words, the felt training needs fluctuate with levels rather than forming a monotonically increasing trend which is commonly assumed in curriculum design.

It is interesting to find out how the six language skills are related to one another in terms of felt training needs of the teachers. As shown in Table 5.4, with the exception of Listening which has mostly nonsignificant correlations with the other five

Table 5.3 Felt training needs by skills and levels

	Primary				Secondary		
	L1	L2	L3	L4	L5	L6	L7
Listening	35.3	17.6	16.5	30.6	15.0	56.7	28.3
Reading	33.9	17.5	19.1	29.5	20.6	42.6	36.9
Speaking	35.1	18.2	16.9	29.9	23.2	35.4	41.4
Writing	34.0	18.2	16.4	31.4	21.0	36.4	42.6
Oral interaction	39.1	18.5	16.3	26.1	21.6	37.6	40.8
Written interaction	35.9	18.3	15.7	31.0	23.5	39.5	37.0
Overall	35.6	18.1	16.8	29.8	20.8	41.4	37.8

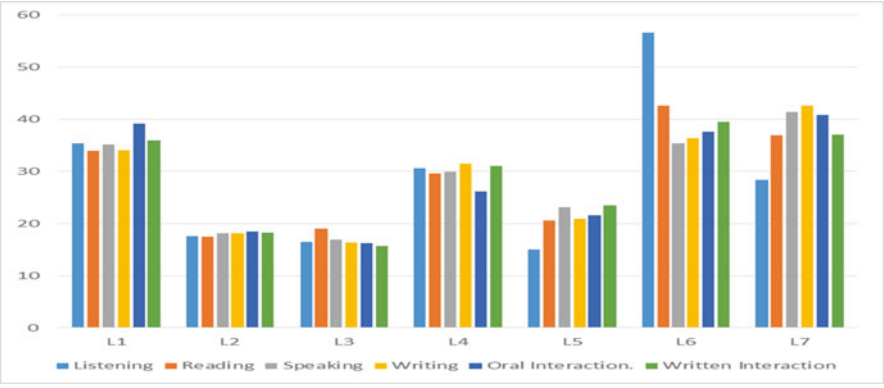

Fig. 5.2 Felt training needs by skills and levels

Table 5.4 Correlations of felt training needs

	Listening	Reading	Speaking	Writing	Oral interaction	Written interaction
Listening	1.00	.94	(.68)	(.70)	(.73)	.83
Reading		1.00	.92	.93	.93	.97
Speaking			1.00	.99	.97	.96
Writing				1.00	.95	.96
Oral interaction					1.00	.96
Written interaction						1.00

Note: Coefficients are statistically significant (df 4, two-tailed, $p < .05$), except those in parentheses

Table 5.5 Perceived student difficulty by skills and levels

	Primary				Secondary		
	L1	L2	L3	L4	L5	L6	L7
Listening	39.4	12.1	27.3	21.2	17.6	34	45.3
Reading	33.3	19.7	18.8	28.2	23.6	37.4	39.0
Speaking	29.5	18.2	20.5	31.8	18.0	42.7	39.3
Writing	34.0	18.2	16.4	31.4	22.7	37.7	39.6
Oral interaction	39.1	18.5	16.3	26.1	18.9	34.9	46.2
Written interaction	35.9	18.3	15.7	30.1	22.6	34.6	42.9
Overall	35.2	17.5	19.2	28.1	20.6	36.9	42.1

language skills, there are high correlations among this latter set of five language skills. This suggests that the felt training need for Listening is rather independent of the other five language skills and that, for the other five, when the teacher felt the training need for one, she is highly likely to feel the needs for training in the others.

Objective 2: To Ascertain Chinese Language Teachers' Views on the Attainability of the Various Types and Levels of the Language Skills

Table 5.5 (Fig. 5.3) presents the percentages for perceived student difficulty of the primary and secondary teachers in terms of levels of language skills. It can be seen that for the six language skills, the percentages among the levels are highly similar. As is true for felt training needs reported above, at the primary level, Level 1 was seen as the most difficult, followed by Level 4, with Levels 2 and 3 being lower. At the secondary level, perceived difficulty increased from Level 5 to Level 6 and then Level 7. However, there is a larger gap between Levels 5 and 6 than between Levels

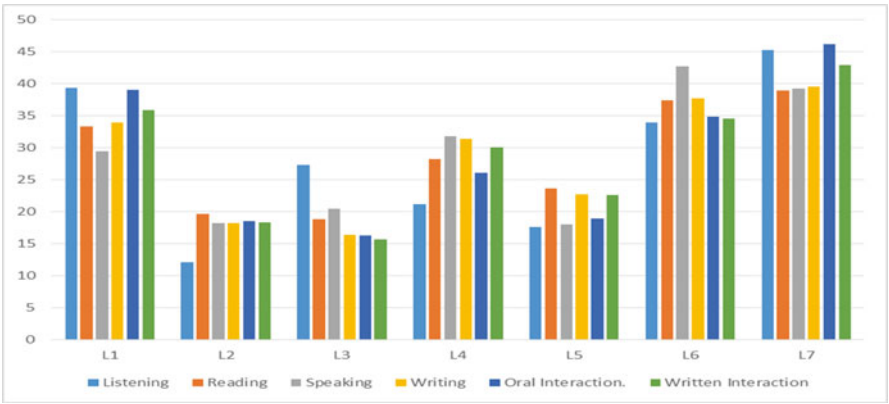

Fig. 5.3 Perceived student difficulty by skills and levels

Table 5.6 Correlations of perceived student difficulty

	Listening	Reading	Speaking	Writing	Oral interaction	Written interaction
Listening	1.00	.82	(.74)	(.77)	.89	.82
Reading		1.00	.93	.99	.95	.97
Speaking			1.00	.93	.83	.86
Writing				1.00	.93	.98
Oral interaction					1.00	.97
Written interaction						1.00

Note: Coefficients are statistically significant (df 4, two-tailed, $p < .05$), except the one in parentheses

6 and 7. The trend is again nonlinear (curvilinear), contrary to the commonly expected increasing difficulty from earlier to later levels; the non-monotonic sequence is similar to that found for felt training needs.

It is of interest to find ascertain how the six language skills are related to one another in perceived student difficulty. As Table 5.6 shows, with the exception of Listening which has both significant and nonsignificant correlations with the other five language skills, there are high correlations among this latter set of five language skills. This suggests that the perceived student difficulty for Listening is independent of Speaking and Writing but dependent on Oral Interaction and Written Interaction. At the same time, the other five language skills have high correlations. In short, perhaps with the exception of Listening, in the eye of the teachers, there is a general pattern of student difficulty among the students.

Table 5.7 Overall felt training needs and perceived student difficulty by levels

	Felt training needs	Perceived student difficulty
Level 1	35.6	35.2
Level 2	18.1	17.5
Level 3	16.8	19.2
Level 4	29.8	28.1
Level 5	20.8	20.6
Level 6	41.4	36.9
Level 7	37.8	42.1

Note: r = .99, df 5, two-tailed, $p < .05$

Fig. 5.4 Felt training needs and perceived student difficulty by levels

Objective 3: To Ascertain the Relations between Chinese Language Teachers' Felt Training Needs and Their Perceived Student Difficulty in Attaining the Language Skills

With the observed trends in felt training needs and perceived student difficulties, it is interesting to note that the correlation between them is a near perfect r = 0.99 as shown in Table 5.7. It is conceptually reasonable here to assume that the teachers' felt training needs for the teaching of the six language skills has been caused by their perception of their perceived student difficulty in teaching them. Figure 5.4 clearly depicted the close relationships between felt training needs and perceived student difficulty.

Responses to Open-Ended Questions

In addition to questions pertaining to the three research objectives and the results which have been presented above, the teachers were requested to respond to two open-ended questions to make additional suggestions. The responses are summarized hereafter.

From the primary teachers, there were 57 coded written responses which were grouped as shown in Table 5.8. As shown therein, there are seven categories that deserve attention, with the need for training in teaching exceptional students in the lead. This is followed by three suggestions which have more than 10 % of the responses: training in the teaching of composition writing, using ICT and media, and alternative/interesting pedagogies.

To the second open-ended question of students' difficulties, there are 79 coded written responses. These were grouped as shown in Table 5.9 below. Leading the list is word recognition and vocabulary development with a high 39 %. Following this are lack of interest, attitude, and confidence together with *Hanyu Pinyin*, each with

Table 5.8 Additional felt training needs of primary teachers

	Percent (N = 57)
Teaching exceptional students	29.8
Composition writing	15.8
ICT and other media for teaching	15.8
Alternative/interesting pedagogy	12.3
Classroom management	5.3
Hanyu Pinyin	5.3
Translation	3.5
Miscellaneous	12.2

Table 5.9 Additional perceived student difficulty by primary teachers

	Percent (N = 79)
Word recognition, vocabulary development	39.2
Interest, attitude, confidence	12.6
Hanyu Pinyin	11.4
Lacking home support	8.9
Reading comprehension	8.9
Composition writing	7.6
Miscellaneous	11.4

Table 5.10 Additional felt training needs of secondary teachers

	Percent (N = 107)
Composition, writing, styles	26.2
Oral examination	14.0
Exam papers, test items	13.1
Reading comprehension	12.1
Multimedia, ICT	6.5
Interaction	5.6
Precis writing	5.6
Vocabulary	5.6
Miscellaneous	11.2

Table 5.11 Additional/ specific training needs

	Percent (N = 52)
Vocabulary	46.2
Reading comprehension	21.1
Expression	15.4
Time for teaching	13.5
Translation	3.8

more than 10 % of the responses. Near to these are lacking home support and reading comprehension and not far behind difficulty in composition writing.

From the secondary teachers, as shown in Table 5.10, training in the teaching of composition tops the list of additional felt needs. This is followed by training related to oral examination, examinations, and reading comprehension; these have more than 10 % of the open responses. However, training relevant to ICT, interaction, *precis* writing, and vocabulary were also present, though with small percentages.

To the second open-ended question of students' difficulties, there are 52 coded written responses. As can be seen from Table 5.11, in the lead is difficulty with vocabulary and, to a lesser degree, reading comprehension. Besides these, difficulty in expression and shortage of time for teaching have more than 10 % of the open responses.

Discussion and Recommendations

Before a discussion is attempted, the main findings of the present study are summarized below.

1. Consistently for all six language skills, the primary teachers felt greater training needs for Levels 1 and 4 than for Levels 2 and 3. However, the secondary teachers felt greater training needs for Level 6 and Level 7, although there is a smaller difference between Levels 6 and 7 than between Levels 5 and 6.

2. Consistently for all six language skills, the primary teachers perceived Levels 1 and 4 as being more difficult for students to attain than Levels 2 and 3. However, for the secondary teachers, difficulty levels increase from Level 5 to Level 7, with a smaller difference between Levels 6 and 7 than between Levels 5 and 6.
3. For both primary and secondary teachers, there is a very strong correlation between the teachers' felt training needs and their perceived student difficulties.
4. Primary teachers' responses to the open-ended questions suggest that training is also needed in the teaching of exceptional students, composition writing, ICT and media for teaching, and alternative/interesting pedagogy. They also pointed out that students' main difficulties are word recognition (vocabulary), lack of interest/positive attitude/confidence, and *Hanyu Pinyin*.
5. Secondary teachers' responses to the open-ended questions suggest that training is more needed in the teaching of composition, oral examination, and vocabulary and reading comprehension. The need for training in setting examination papers and writing of test items is also indicated. More time for teaching the language is also suggested.

Much of the above findings are not surprising. Teachers feel the needs for training because they have encountered or expect to encounter learning problems among their students. The large proportion of teachers feeling the needs for training indicates that the Singapore Centre for Chinese Language has an important role in updating the teachers with knowledge and skills that will enhance their teaching effectiveness in the classroom.

Teaching language (be it Chinese or any other language) is difficult (and no one says it is easy). The finding that teachers highlight skills involving reading as difficult is understandable. This is expected as the Chinese writing system is quite independent of its pronunciation system, making word recognition, reading comprehension, and recall much more difficult than, say, English which the students learn concurrently. Thus, ways and means need be explored and found to ensure effective word recognition, reading comprehension, and memory for the Chinese characters than mere practice, practice, and more practice.

The competence-by-level matrix logically presents the target skills in ascending order of difficulty assumed to be inherent in Chinese Language, with Level 1 assumed to be the easiest for primary students to Level 7 being the most difficult for Secondary students. This is an approach commonly used in developing a language curriculum, since later learning has to be built upon earlier learning, following the basic educational principles of "from easy to difficult" and "from the known to the unknown."

However, the surveyed teachers do *not* see the levels thus sequenced in terms of ease in attainment by students. This does not, however, invalidate the logical difficulty levels as depicted in the competence-by-level matrix but is a reminder that, when implementing a curriculum, there are other considerations that need be taken into consideration. In other words, the levels of language skills are *targets* (referred to as *goals*, *objectives*, and *standards* in different documents) but how to reach them in the classroom reality is a different matter. In short, specifying *what to teach* is not the same as *how to teach*.

It is a truism that how well and timely students are able to reach the expected levels of the six language skills will depend on other factors, some of which are beyond the teacher's control: the students' current level of proficiency, home support for learning the language, motivation and attitude of students and their parents, and the general atmosphere for the language in the immediate community and the society at large, to name a few obvious ones. Saying so is not finding an excuse for the teachers; in teaching language (or any other subjects), teachers can do just that much and not more. Of course, within the limiting conditions, Chinese Language teachers need to maximize their capability and do *that much*.

The finding that the teachers find Level 1 most difficult followed by Level 4 deserves attention. As pointed out earlier, there are high correlations between the teachers' felt training needs and their perceived student difficulties. It is necessary to understand why they have given such responses. Short of empirical data, an explanation is proffered below.

At Level 1, the teachers are faced with young students who have had little experience with Chinese language before admission to the primary school, although many of these children would have learned some basics of Chinese Language during their preschool days. In a sense, they are relatively "new" to the learning of the language, at least in the eye of the teachers teaching Primary 1. This being the case, the teachers would have a real or perceived challenge to bring the students up to the Level 1 targets. This might have caused them to see Level 1 as the most difficult for students to attain within a year or so in the early grades.

The teachers' felt student difficulties might be confounded by the fact that the new Primary 1 students are in a transition from a more informal learning environment in the preschool years to a more formal setup in Primary 1 classes. In this case, the teachers need to teach the Primary 1 students Chinese Language and at the same time how to behave in formal classrooms. Needless to say, this confounding effect affects not only teachers of Chinese Language but all other subjects. Nevertheless, it adds to the difficulty just the same.

At Level 4, toward the end of the primary school years, there is the high-stake Primary School Leaving Examination (PSLE) of which Chinese Language is one of the four examined subjects, together with English, Mathematics, and Science. With this high-stake examination nearing, the teachers will naturally see Level 4 (Primary 6) as being difficult for students to attain. Besides, teachers' efficacy is indirectly inferred from or even directly evaluated on with reference to students' performance in the PSLE. This, again, naturally creates a pressure on the teachers causing them to see Level 4 as being difficult.

As the survey results show, the teachers see the levels as a *curvilinear* non-monotonic progression. To meet the training needs of the Chinese Language teachers, research and training at both ends of the spectrum (i.e., Levels 1 and 4) need be given more attention. Needless to say, the best way to validate a curriculum is to test it out on students who are supposed to benefit from it. However, while it is a worthwhile attempt in the future, the present surveys serve as a useful intermediary step between the *intended* curriculum and the *implemented* curriculum with regards to the curriculum's attainability.

As regarding the findings at the Secondary level, that teachers do not see Level 5 (Secondary 1) as the most difficulty as primary teachers see Level 1 (Primary 1) is not surprising. Secondary teachers could have seen Level 5 (Secondary 1) as a continuation of Level 4 (Primary 6) and not a fresh start. Moreover, the stringent PSLE results for the Chinese Language might have a reassuring effect on the secondary teachers, thus enhancing their confidence in the students' ability to reach the targets.

That secondary teachers perceived Level 6 as more difficult than Level 7 (contrary to the competence-by-level matrix) may be a reflection of what has happened in the school reality in the Singapore context. It is a common practice that secondary teachers make effort to cover the four-year syllabuses of not only the Chinese language but also other subjects within the first three years of secondary schooling, that is, covering four years' work in three years. In short, to prepare the students for the General Certificate of Education "O"-Level Examination to be taken at the end of Secondary 4, density of teaching peaks at Secondary 3 rather than Secondary 4. Once this is reasonably achieved, the year for Secondary 4 is very much for revision than for teaching something new. This would make Secondary 3 (Level 6) more difficult than Secondary 4 (Level 7), hence the reversal of the difficulty level.

As alluded to earlier, knowing *what to teach* (via the competence-by-level matrix) is different from knowing *how to teach*. This is analogous to setting the destiny and reaching it. Thus, in addition to familiarizing teachers with the targets, attention needs be accorded to specific training needs related to the teaching of exceptional students, essay writing, ICT and media for teaching, and alternative or interesting pedagogy. These are training needs felt by the teachers over and above the content knowledge. Courses and workshops on these identified problems will help the Chinese Language teachers to become more effective and, for the students, the learning of the language more interesting and efficient, with the ultimate goal of better achievement.

The main difficulties identified by the teachers of word recognition (vocabulary), lack of interest, positive attitude and confidence, and *Hanyu Pinyin* also deserve attention. Interest, attitude, and confidence may have a capping effect on the students' achievement as they will put in just that much effort to learn and feel comfortable with the language. It is readily appreciated that finding more effective ways to build up students' vocabulary is important as Chinese characters are challenging when compared with English words, and in this connection, *Hanyu Pinyin* can be a useful tool if taught and used properly to help in this regard.

Implications for Research and Training

The findings of this survey have implications for future planning of research and training. Specific implications of the surveys are as follows:

1. More research on the difficulties encountered by students (and hence difficulties in teaching) especially those learning targets involving learning and using

Chinese characters. Alternative teaching methods and language learning strategies need be invented and utilized with reference to relevant studies in Chinese linguistics, psycholinguistics, sociolinguistics, and even neurolinguistics. Learning activities and materials need be developed and trialed on specific groups of students. When found effective, the methods, activities, and materials will have to be made available to teachers.

2. The approach suggested above is a problem-based approach to research and training which will be more relevant to the needs of students and their teachers in solving and minimizing difficulty in learning the language.
3. On a practical plane, as greater difficulty is perceived by the teachers for a certain levels, training and development efforts need be focused on those levels identified in the survey. These are the key stages at which more help (in the forms of training and materials) is indicated and critical: Primary 1, Primary 6, and Second 3–4. Of course, focusing on these critical levels should not lead to total neglect of the levels in-between where some help is still needed.
4. It will be useful to be specific with the view to find solutions for specific learning difficulties as identified by the teachers, for example, strategies for word recognition are memorization of Chinese characters which pose a basic problem of learning the language. Other specific aspects where research and training are needed have been indicated by the teachers' responses to the open-ended questions.
5. For a thorough understanding of the problems encountered by teachers in their day-to-day teaching, it is useful to conduct surveys on primary and secondary teachers with regard to the specific problems and even their efforts and successes in solving some of the problems. Such information will be helpful for formulating research studies and also disseminating good practices. The information will make it possible for research to be truly problem-based with relevance to the teachers' and students' needs.

Conclusion

In sum, the present study might not have found anything unusual or unexpected for the teaching of Chinese Language in Singapore schools. It, however, confirms the needs for training as felt by the teachers with reference to their perception of learning difficulty they expect to be encountered by students. The non-monotonic curvilinear progression, instead of a linear one, of the seven levels of the six skills also clearly indicates where research and training are needed.

It is a truism that only through concerted, coordinated, and planned efforts based on empirical information, such as those provided by the present surveys, that the problems of learning and difficulty in teaching Chinese Language can be systemically ameliorated, largely if not totally.

Acknowledgments The kind assistance of Chia Swee Hong, Chow Fong Yee, Lim Kwee Hua, Lim Yee Pin, Dr. Taicheen Ng, Zheng Yingjiang in questionnaire design and data collection is greatly appreciated. Without the help of these Chinese Language Master Teachers, the study would not be possible.

References

Council of Europe. (2011). *Common European framework of reference for learning, teaching, assessment.* ouncil of Europe. http://en.wikipedia.org/wiki/Common_European_Framework_of_Reference_for_Languages

Department of Defense Education Activity. (no date). Foreign language standards and proficiency expectations. http://www.dodea.edu/Curriculum/foreignLanguage/upload/DoDEA-FL-Standards-Proficiency-Expectations.pdf

Effective Language Learning. (n.d.). Language difficulty ranking. http://www.effectivelanguage-learning.com/language-guide/language-difficulty

Hanban. (No date). International standards for Chinese language teachers.http://english.hanban.org/node_9906.htm#nod

Michigan Department of Education. (no date). Michigan world language standards and benchmarks.http://www.michigan.gov/documents/mde/WLSB_206824_7.pdf

Ministry of Education, Singapore. (2004). *Report of the Chinese language curriculum and pedagogy review committee*. Singapore: Ministry of Education.

Ministry of Education, Singapore. (2010). *Nurturing active learners and proficient users*. Singapore: Ministry of Education.

Steiner, Judy. (No date). Why have a standards-based curriculum and what are the implications for the teaching-learning-assessment process? http://www.etni.org.il/red/etninews/issue4whystandard.html

The Research Advisor. (2006). Sample size table. http://www.research-advisors.com/tools/SampleSize.htm

The Survey System. (2012). Sample size calculator. http://www.surveysystem.com/sscalc.htm