

# Content and Language Integrated Learning Teacher Training for Elementary Education in China

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## Abstract

English Curriculum Standard for Compulsory Education (2022) of China sets core competencies as the cultivation concept during its nine-year compulsory education. As a bilingual teaching of a subject with a foreign language (mainly English), Content and Language Integrated Learning (CLIL) caters for the educational needs of China. Therefore, CLIL projects are being carried out among some primary in-service English teachers. The purpose of this study was to investigate how instructors felt about their level of proficiency when teaching CLIL. Two instructors agreed to a 30-minute interview, and participants completed an online Likert-scaled questionnaire based on the CLIL Teacher's Competence Grid. The findings showed that many in-service teachers could not understand the concept of CLIL with other comparable teaching approaches, and some of them acknowledged they needed further training due to its complexity and adaptability.

**Keywords:** English Curriculum Standard for Compulsory Education (2022), Content and Language Integrated Learning (CLIL), Primary In-Service English Teacher, Level of Proficiency

## Introduction

Pérez-Cañado underlines the importance of teacher training on CLIL as a neglected area as the benchmark for bilingual education continuity (e.g. Coyle 2010). As a method to address the political, economic and cultural problems in Europe, Content and Language Integrated Learning (CLIL) has been defined as a 'dual-focused educational approach in which an additional language (mainly English) used for the learning and teaching of content and language with the objective of promoting both content and language mastery to predefined levels' (Maljers et al., 2010; Marsh et al., 2010), which meets the educational needs of China now. New social development and new scientific and technological findings should be included in English textbooks for pupils was presented in the Compulsory Education English Curriculum Standard issued in April, 2022 by the Education Ministry of China. Therefore, CLIL

teacher education has become to be the essential success factor for future English education in China. Although some CLIL program has been carried out for English teachers in primary and secondary schools, numerous studies have focused on CLIL explanation, CLIL teaching model and CLIL on students, leaving CLIL teacher perspectives on CLIL and teacher competence untouched.

In order to evaluate the effectiveness of the training, identify the key variables, and determine how to implement corrective measures for future CLIL teacher education for pre-service and in-service English teachers, this article suggests an analysis of CLIL teacher competence by an online questionnaire based on the CLIL Teacher's Competence Grid.

### **CLIL Underpinning and CLIL Teacher Education in China**

Intercultural communication skill, collaboration, critical thinking, innovation are included in English Curriculum Standard for Compulsory Education (2022) by referencing the advanced international education concepts and serious considerations in educational context in China. In fact, CLIL approach highly accords with the general objectives.

According to Mehisto, Marsh, and Frigols, Content and Language Integrated Learning (CLIL) first emerged in 1990s and later was found in programs and papers of European Commission to realize its multi-lingual policy. CLIL is defined as an approach having the dual purpose of teaching learners curriculum content and a second language (L2), usually English, in an integrated manner (Coyle et al., 2010; Coyle & Meyer, 2020; Pérez et al., 2018; Nikula et al., 2016).

Socio-cultural theory is the key theories which underpins CLIL development in learning through collaboration. In CLIL, it is in the zone of proximal development (ZPD) that the content is scaffolded through the use of language (Jäppinen, 2005; Mahan, 2020). CLIL teachers use language to mediate content in a way that encourages student learning through interactions with classmates and teachers. Secondly, the core of learning in CLIL is the development of cognitive abilities and critical thinking abilities. Therefore, CLIL practices are expected to help learners' transition from lower-order thinking skills such as remembering, understanding, and applying to higher-order thinking skills such as analyzing, evaluating, and creating. (Coyle et al., 2010, p. 31) The third one is systemic functional linguistics (SFL), a theory of how language works in real-world contexts (Halliday & Matthiessen, 2014; Martin & Rose, 2007). Through the analysis of CLIL underpinning above, CLIL approach can be applied in English teaching in compulsory education in China as previous studies have shown the advantages of CLIL in students' motivation, language learning center of curriculum, meaningful contexts, time saving and variety of teaching methods (Çekrezi, 2011).

In Europe, as a teacher who teaches subject through a non-native language, CLIL teachers can be subject teachers, language teachers, primary classroom teachers or classroom assistants (Bentley, 2010). Subject teachers attempt to know more about language knowledge, while language teachers need subject knowledge. In some cases, subject teachers and language teachers cooperate with each other to carry out scientific research.

The first article on CLIL teacher education emerged in 2007 to determine whether content teachers could deliver effective language teaching by creating teaching performance indicators (de Graaff et al., 2007). The observation tool offers explicit operation explanation and classroom activity suggestions, and it has been used in CLIL teacher training and teacher self-reflection for secondary school teachers in the Netherlands. After that, many studies on CLIL teacher education focused on the following four fields: teaching performance (Tessa, 2012; Wilkinson, 2018), teacher needs (de Graaff et al., 2007; Dufva et al., 2007; Pappa et al., 2019),

teacher methodology (Briggs et al., 2018; Dale et al., 2017) and teacher and other elements such as CLIL coursebook (Banegas, 2014), CLIL from critical sociolinguistic stance and marketplace logic, school administer and CLIL (Codo & Patiño-Santos, 2018). In a word, European countries have accumulated rich experience in CLIL teacher education not in in-service CLIL teacher education program, CLIL practice and pre-service teacher education, which provides rich findings to CLIL teacher education in China.

Different from CLIL teachers in Europe, teachers who are contributing to CLIL research and practice are those language teachers (mainly English teachers). At present, some CLIL teacher education programs are carrying out in mainland China, such as CLIL teacher training for primary English teachers by Foreign Language Teaching and Research, CLIL project research by the General Administration of Press and Publication. However, different from the full-scale CLIL research in western countries, the related research in China limits in higher education and the practice of CLIL in primary schools. Whether CLIL teacher training is effective or not, in which aspects CLIL teachers have been improved leave unexplored.

### **CLIL Teacher Competence**

During CLIL practice in European countries, it is perceived that teacher training has been reported as a key factor and one of the variables 'related to the effectiveness of the teaching methods in the field of language teaching' (Pavón & Rubio, 2009).

Marsh et al (2010) stressed that core topics including self-reflection, CLIL fundamentals, content and language awareness, methodology and assessment, research and evaluation, learning resources and environment, classroom management, and CLIL management should be covered in CLIL teachers' training. Therefore, CLIL teacher competence was found in the report of European Commission:

Teachers applying CLIL need to be qualified in one (or more) non-language subject and have a high command of the foreign language used as the language of instruction. Moreover, specific methodological skills to teach a non-language subject through the medium of a foreign language are needed. (European Commission 2017, 14).

### **Statement of the Problem and Objectives**

In-service English teachers are currently receiving several CLIL programs and teacher training, and they are implementing CLIL lessons in various primary and secondary schools. There is a chance that the demands for CLIL teacher education may increase with the adoption of the English Curriculum Standard for Compulsory Education 2022. In order to improve the CLIL teacher education to promote English education in primary and secondary schools in China, it is necessary to test present its effect now as CLIL teacher education is the benchmark for bilingual education continuity (Coyle, 2010). Given this situation, we decided to conduct research analyzing teachers' perception on CLIL after receiving related training to achieve the following objectives:

- (1) To describe the present situation of CLIL training in China
- (2) in-service English teachers' perceptions of their level of competence in relation to their knowledge about CLIL;
- (3) To determine whether factors, such as education background, personal interest of CLIL (teaching experience), are determinant in their self-image and the effectiveness of CLIL training as CLIL teachers.

### **Method and Procedures**

A non-experimental study was conducted by using a survey-based technique to collect data in order to achieve the objectives of this study. After obtaining CLIL training, an online survey was created to learn more about the English instructors' perspectives and self-evaluations of their CLIL ability. These trainings took the form of seminars and lasted two to three days.

### **Instrument**

Three sections made up the questionnaire: Part A, which inquired about the respondent's academic and personal history; Part B, which addressed the fundamental theoretical knowledge of CLIL for teachers adapted from the Competencies in the European Framework for CLIL Teacher Education; and Part C, which addressed the use of CLIL in actual classroom instruction. Using a five-point Likert scale, each assertion's level of proficiency for each of the indicators was self-evaluated.

### **Data Analysis**

Data was gathered in 2022 between May and June. Based on the European Framework for CLIL and the training program's content, a questionnaire was created. The questionnaire was then made available online by Wenjuanxing. Excel was used to enter the data, and IBM SPSS 26 was used to process it.

### **Participants**

The study aims to investigate how in-service English teachers' attitudes and self-evaluations of CLIL have changed as a result of obtaining relevant training. During the CLIL training, there are two formed CLIL QQ groups, each with 500 participants. The online survey was distributed to the QQ group with the group leaders' approval from Foreign Language Teaching and Research Press, and each QQ group member is free to select whether or not to participate in the study. Finally, 151 English instructors completed the survey. There are 136 female teachers among the participants, making up a total of 87.2 percent of the samples. It is typical in some parts of China for female teachers to hold the majority of positions in the teaching profession.

### **Research Procedure**

Data was acquired in July 2022 using the Chinese internet survey website Wenjuanxing. The statistical analysis of the data was developed using IBM SPSS 26. The inquiry includes descriptive evaluations of all the variables and differential computations for the full scale.

**Result***Descriptive Analysis of Part A*

category	frequency	percentage
valid	5	3.2

  

Dimension	Cronbach's Alpha	N of Items
Part B (theoretical knowledge of CLIL)	0.843	5
Part C (application of CLIL in teaching)	0.956	5
total	0.941	10

40-49 years old  
**Figure 2 reliability of Part B and Part C**

	postgraduate	16	10.3
	Phd	3	1.9
Working place	Primary school	139	89.1
	Junior high school	3	1.9
	Senior high school	1	0.9
	university	8	5.1
Teaching experience	Below 1 year	95	60.9
	1 to 3 years	42	26.9
	Over 3 to 5 years	1	0.6
	Over 5 to 10 years	4	2.6
	Over 10 years	9	5.8

**Figure 1 descriptive analysis of demographic basic information**

The descriptive analysis of the key demographic data is shown in Figure 1 above. Only 9.6% of the sample consisted of men, while 87% of the participants were female. In elementary schools, there were 139 English instructors, while there were 4 in secondary schools and 8 in colleges and universities. A four-year-degree is held by 87.42% of participants, with teachers making up 10.6% of those individuals.

With a Cronbach's alpha of 0.941, the scale's overall dependability is strong and good. Each of Part B and C is worth 0.843 and 0.956.

### Present Situation Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Mean 1	151	1.60	5.00	2.8596	.53456
Mean 2	151	1.00	5.00	2.6583	.69612

**Figure 3 present situation of CLIL training**

The outcome of the current CLIL training environment in China is shown in Figure 3. Part B (theoretical underpinnings of CLIL) is represented by Mean1, while Part C is represented by Mean 2 (practical application of CLIL). Part B and C have respective means of 2.8596 and 2.6583 and standard deviations of 0.53456 and 0.69612 respectively.

### ANOVA Analysis

	graduate	postgraduate	Phd	F	P
Mean 1 (theoretical background of CLIL)	2.87±0.51	2.79±0.65	2.8±1.04	0.186	0.831
Mean 2 (application of CLIL in teaching)	2.64±0.66	2.68±0.98	3.27±0.23	1.188	0.308

**Figure 4 ANOVA analysis of education background on CLIL**

According to the aforementioned ANOVA analysis regarding the impact of participants' educational background on their perceptions of CLIL knowledge, all data for each question are above 0.05, and this means that participants' education background has no bearing on how they perceive CLIL knowledge.

	Below 1 year	1 to 3 years	Over 3 to 5 years	Over 5 to 10 years	Over 10 years	F	P
Mean 1	2.80±0.51	2.77±0.37	4.20	3.60±0.46	3.4±0.74	7.441	0.000
Mean 2	2.58±0.68	2.54±0.51	5.0	3.30±0.48	3.49±0.66	9.106	0.000

**Figure 5 ANOVA analysis of teaching experience on CLIL**

An ANOVA analysis was done to determine whether the participants' teaching experiences affected how they perceived their knowledge of CLIL. The P value for Mean 1 (Part B) and Mean 2 (Part C) are all 0.000, indicating that the teaching experience had a significant impact on the participants' perceptions of CLIL.



### Correlational Analysis

	Mean 1	Mean2
Mean 1(theoretical background)	1	
Mean 2 (application of CLIL in teaching)	.781**	1

\*\* is significant at the 0.01 level

**Figure 6 correlational analysis of Mean 1 and Mean 2**

To determine the relationship between Mean 1 (Part B) and Mean 2 (Part C), a correlational analysis was conducted. The correlation between Mean 1 and Mean 2 is considerable, as seen in the aforementioned Figure 6.

### Teachers' Perceptions of Their Competence in Relation to CLIL

After the training, two English teachers were interviewed and the results are as following:

**Teacher A:** The training program is effective and could help our English instructors discover certain concepts that we had previously overlooked. Additionally, the program gives us the chance to speak with certain experts and exchange ideas with them, which can help us better understand how to implement the CLIL concept in our English teaching. Although CLIL is a new idea to all of us, it is impractical and impossible for every instructor to learn everything there is to know about it in just six hours of training. In my opinion, I still have a lot of trouble distinguishing it from other comparable teaching strategies, such immersion teaching and STEM teaching. Additionally, language teachers find it difficult to integrate language and other topics since a highly effective class requires that we acquire and understand a variety of science concepts. Last but not least, because the online or offline training is so infrequent (once or twice a semester), the lengthy gaps cause teachers to forget the training.

**Teacher B:** Although the program is really engaging and the CLIL idea is fantastic, some English instructors find it difficult to afford it. Additionally, because the CLIL idea is so adaptable, what we learned in the training program may not be appropriate for our schools or students that require inquiry, such as math instructors, artists, or scientists. As a result, we must create our own courses. However, due to the Double Reduction Policy's severe time constraints, it is challenging for instructors from various courses to work together on content collecting. Additionally, the advice of experts is crucial as we construct our courses.

### Discussion

The descriptive analysis of Part A indicates that 87.2% of the participants are female instructors, which accurately reflects the reality in Chinese primary schools today. Young instructors predominate in elementary schools, as seen by the fact that those between the ages of 20 and 29 account for 65.4% of all participants. Therefore, the design of CLIL training should keep their special needs in consideration (Qiao, 2017). The results also show that 139 of the 151 participants are teachers from primary schools, highlighting the limitations of CLIL training initiatives in China's primary education system. Despite some evidence to the contrary, teacher development only accounts for 2.4% of CLIL research at Chinese universities (Mi, 2015). More research focuses on the effectiveness of CLIL and its theoretical exploration.

Regarding the data of present situation of CLIL training in Figure 3, Part B is satisfactory which represents implementing practice-oriented, but theory-informed workshops contributed to teachers' growth in language awareness. Furthermore, teachers developed their identity as a language educator (Lo, 2020). However, the current training in China is mostly provided by the Foreign Language Teaching and Research Press, and the major formats are the demonstration class and the exchange of teaching experiences, which leaves little time for instructors to practice their skills at seminars.

With the ANOVA analysis, teaching experience is the only factor which influenced teachers' perception on CLIL. This is different from the investigation in other CLIL projects in other countries, which shows no differences are detected in terms of amount of teaching experience only type of teacher is considered (Cañado, 2018). This is due to the fact that the data in Pérez Caado's study comes from the British Council, which has been using CLIL in 19 different schools for two decades, but the data in this article solely comes from a training program and contains no actual classroom teaching research. The fourth part is the correlational analysis between Part B and Part C of the Likert scale, the significant correlation verifies both parts in the training of CLIL teachers grow interdependently: the higher the CLIL communicative competence, the higher their CLIL theoretical knowledge (Pérez & Pino Rodríguez, 2021).

From the interview of two English teachers after the training, the content design of the training, the continuity support of CLIL guidance in classroom teaching, materials and resources are problems for the participants.

Given that this article is intended for English instructors in primary schools, its limitations are clear. As a result, neither the statistics nor the perspectives of people from secondary schools and colleges about CLIL can be reflected. Furthermore, more opinions from those male teachers should be taken into consideration because the participants' gender distribution is uneven, with the female share reaching a high of 87.2 percent. In addition, personal factors, such as language experience are excluded out of this study. Actually, some of teachers who have got their diploma outside of China tend to have higher competence in linguistic competence and communication proficiency. Finally, because there is no practice in the seminar, the research cannot identify the collaboration and classroom management abilities.

## **Conclusions**

This paper has explored in-service training program in China in relation to CLIL teacher competence as its flourished popularity in western countries. A questionnaire was distributed to those participants and an interview was carried out to the English teachers. The following findings are drawn following the examination of the data gathered:

Objective 1: to describe the present situation of CLIL training in China; it is concluded that The participants in the CLIL training program have a thorough understanding of CLIL's theoretical foundations and practical teaching techniques. Despite this lack of systematic structure and official documentation, the authorities have not shown a great deal of concern for this educational approach.

Objective 2: in-service English teachers' perceptions of their level of competence in relation to their knowledge about CLIL; it is concluded that all teachers from different education background are positive towards their perception on CLIL competence. Nevertheless, participants slightly underperformed in Part C compared to Part B. Participants consider their teaching skills are lower than their theoretical knowledge, signifying an urgent support in this field.



Objective 3: to determine whether factors, such as education background, personal interest of CLIL (teaching experience), are determinant in their self-image and the effectiveness of CLIL training as CLIL teachers. It is concluded that education background has no influence on the perception of CLIL but teaching experience deeply affects the effectiveness of CLIL, signifying grouping and cooperation should be considered in later training programs.

The results above revealed that more measures should be taken to change the present situation. The recommendation is that more research centers or teaching research centers should be established to carry out the related CLIL research in the educational context in China, especially the CLIL teacher development field. Besides that, the teacher training programs should be supported by the enactment of the educational policy to build long-term mechanism for the cooperation and communication among teachers from different subjects, such as teacher learning community. Furthermore, the design for the training program should consider the special personal needs from different teachers from different teaching experiences and different regions as China is a vast land with various schools and universities in different demands. At last, a comprehensive teacher cultivation system is finally required.

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