



Analysis of CLIL Teachers' Instruction on Language of Learning

Chin-Wen Chien

National Tsing Hua University, Taiwan

Introduction

Within the 4Cs framework (communication, culture, content, cognition) for Content and Language Integrated Learning (CLIL) as proposed by Coyle (2007), teachers must endeavor to develop learners' language of learning, language for learning, and language through learning for communication. Different terms are used interchangeably, such as language of learning, academic language, or subject specific language (Nikula, 2015). Language of learning is defined as "the language needed for learners to access basic concepts and skills relating to the subject theme or topic" (Coyle, 2007, p. 553).

The 12-Year Basic Education plan was implemented starting in September 2019. CLIL has been highly recommended as the curriculum initiative to be implemented in English elementary schools (Ministry of Education, 2016). However, not all English or content teachers are equipped with adequate levels of English and curricular content knowledge to teach CLIL (Banegas, 2012). The input language must be comprehensible to language learners (Ting, 2011).

In addition to everyday conversation talk, English as a foreign language (EFL) learners with limited English ability have difficulties in academic talk in content areas. Teachers need to design and deliver lessons so that learners cannot only be exposed to specialized content vocabulary and structures, but also to practice them (Bentley, 2007). The actual presentation techniques and instructional strategies on language of learning have been neglected (Kovas, 2010).

This study explored six elementary school English teachers' instruction on language of learning in order to answer three questions. First, how did CLIL teachers design and deliver instruction on language of learning? Second, what challenges or problems did CLIL teachers face when designing and delivering instruction on language of learning? Third, how did CLIL teacher attributes affect their design and delivery of instruction on language of learning? Suggestions on effective instructional strategies on teaching language of learning are provided in this report.

Literature Review

Learning the language of learning in CLIL is crucial for learners to acquire both the language and content. However, the expository texts and abstract language in content areas make vocabulary learning challenging (Tragant et al., 2016). Teachers must be equipped with the expertise and awareness of the language of learning which conveys the concepts of the subject matter (Kelly, 2010).

Teachers need to trigger learners' awareness of their language input (receptive vocabulary) as well as



their expected output (productive vocabulary) (Wannagat, 2007). Therefore, teachers must employ different instructional strategies for teaching language of learning in CLIL.

First, learners are exposed to language of learning through repetition (Denman et al., 2013). Some language teachers might choose translation as the common practice for clarification of the meanings of unknown terms and concepts (Escobar et al., 2014; Gallagher & Colohan, 2017; Gierlinger, 2015). Gallagher and Colohan's (2017) experimental study among Italian secondary school students concluded that translanguaging is a useful language teaching and learning tool, particularly for teachers to develop learners' awareness of the features of the language of learning.

Second, teachers design different tasks and activities for learners to practice the language of learning (De Graaff et al., 2007; Infante et al., 2009). Forey and Cheung (2019) suggested that teachers could set the context in which the teachers and learners explore the target knowledge, then teachers model and deconstruct the exemplar text. Teachers and learners could co-construct the text with the teachers' scaffolding, or learners could construct the texts independently.

Teachers also model or provide learners with hands-on activities or opportunities to use the language of learning, such as reading the authentic text or answering questions of comprehension (De Graaff et al., 2007; Denman et al., 2013). Nikula (2015) analyzed the observations of two Finnish secondary teachers' CLIL lessons on language of learning with thirteen secondary school learners. During the pre-task, while the chemistry teacher emphasized language of learning in order to enable his learners to be familiar with the theories and terminology, the physics teacher provided the minimum of background theory and terminology. During the post-task, while the chemistry teacher revisited the experiments, the physics teacher tried to connect the theories to the tasks, measurements, and calculations.

Most of the research on CLIL instruction on language has been conducted at the secondary level (e.g.; De Graaff et al., 2007; Forey & Cheung, 2019; Gallagher & Colohan, 2017; Kavas, 2010; Nikula, 2016; Tragant et al., 2006) or tertiary level (e.g., Gablasova, 2015) because learners acquire certain literacy skills in both L1 and the target language (Lim Falk, 2015). Limited studies have focused on the elementary levels (e.g., Short et al., 2012). This study aimed to explore Taiwanese elementary school English teachers' designs and delivery of language of learning in content areas.

Theoretical Framework

The conceptual framework for this study in Figure 1 was developed based on empirical studies (e.g., Ball et al., 2008; De Graaff et al., 2007; Morton, 2018; Ting, 2011). Elementary school English teachers must be equipped with competence in content and have specialized language knowledge, so they can choose appropriate language of learning in content areas. Based on the selection of language of learning, they introduce the language of learning to their learners during warm-up and present it through translation, flashcards, realia, and other teaching tools. Learner awareness of language of learning can be fostered. English teachers design practice and model the use of the language of learning through drills and tasks, so learners will be exposed to language of learning. Finally, through teacher-designed tasks, hands-on activities for production, and wrap-up as assessment of learning, learners will be able to acquire the language of learning in content areas.

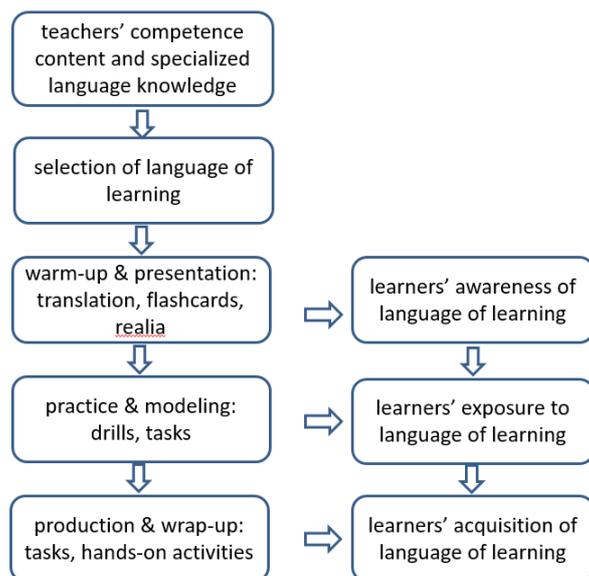


Figure 1. Conceptual framework.

Method

Setting and Participants

The six participants were recruited for this case study through convenience and purposeful sampling. Participant demography is revealed in Table 1. Three participants are English teachers from Taiwan and another three are native English speaking teachers from the United States and South Africa. Judy is an ELL (English language learner) teacher in the United States with training in SIOP (sheltered instruction observation protocol).

TABLE 1
Participants' Demography

Teachers	content area	Background	Nationality	School
Andy	music	English teacher	Taiwan	urban
Bill	science	English teacher	Taiwan	rural
Chad	social science	subject teacher	the U.S.A.	remote
Gina	math, health	English teacher	Taiwan	rural
Iris	art	subject teacher	South Africa	rural
Judy	science	ELL teacher	the U.S.A.	remote

Gina, Bill, and Iris teach in rural elementary schools. Chad, Judy, and Andy teach in an urban elementary school. The content areas that these six participants teach for the CLIL vary and include math, music, art, science, and social science.

Data Collection

Data in this study included documents, classroom observations, and interviews. Documents in this study included participant lesson plans, teaching materials, and PowerPoint slides. Six 40-minute lessons were observed. All lessons were video-recorded and the researcher took field notes of the observations.

The interview protocol was developed based on empirical studies (e.g., De Graaff et al., 2007). Sample

key guiding questions were “How did you select the language of learning?” and “What problems or difficulties did you notice when you taught the language of learning?” Participants were interviewed immediately after the classroom observations. Each interview lasted for an hour and was recorded for later transcription.

Data Analysis

The data was analyzed using the following steps. First, the researcher read through all the data and gave it tentative codes (e.g., translation, Quizlet, flashcards). Next, the researcher read through all the tentative codes and identified emergent themes (e.g., warm-up, tasks). Finally, based on the conceptual framework and research questions, the main categories were identified (e.g., instructional strategies, competence). Relevant quotations or excerpts were extracted and included in order to illustrate the major themes. Trust was achieved through the researcher reporting the major findings to the participants for their approval.

Results

Based on the data analysis of classroom observations, interviews, and lesson plans, three major themes were identified in terms of the instructional strategies for language of learning, problems in teaching language of learning, and teacher attributes in design and delivery of language of learning.

Instructional Strategies for Language of Learning

When teaching the language of learning during the presentation stage, all six participants implemented whole-class instruction. Gina in Excerpt 1 used PowerPoint slides to explain to her students the concept of “too much” and “safe.”

Excerpt 1: Gina’s math concept

Gina: (Show the PowerPoint slide) Too much. (Use her hands to show the width as indicating too much) Not good.

Students: Too much.

Gina: (Show the PowerPoint slide) Safe. Safe is good.

Students: Safe.

As revealed in Table 2, these six teachers all designed warm-up activities and used flashcards or PowerPoint slides to introduce and explain the language of learning for presentation.

TABLE 2
Teaching Procedure on Language of Learning

	warm-up	presentation	practice	production	Wrap-up
Andy	✓	✓	✓		
Bill	✓	✓	✓		
Chad	✓	✓	✓		✓
Gina	✓	✓	✓		
Iris	✓				
Judy	✓	✓	✓	✓	✓

Bill reviewed the words related to colorful snipes via Quizlet as in Excerpt 2. He first showed the English word “conspicuous” and asked students to say the Chinese translation, se cai xian yan. The presentation of words is mainly translation.

Excerpt 2: Bill's Quizlet

Bill: (Click on the Quizlet) conspicuous

Students: Conspicuous

Bill: The Chinese translation is? (Click on the Quizlet se cai xian yan)

Students: se cai xian yan

As in Excerpt 3, Judy tried to teach the things that are helpful or hurtful to bees. When she taught the concepts, she also used the word cards "subject" and "predicate" to explain the grammatical concepts. Judy checked learner understanding to ascertain whether her students are familiar with the word by providing Chinese translation, illustrative situations, and guiding questions.

Excerpt 3: Judy's instruction

Judy: Pesticides, helpful or hurtful?

Students: Hurtful.

Judy: (Point to the word card "subject" and "predicate" on the top of the whiteboard). Subject.

Students: Subject.

Judy: Pesticides are the subject. "Predicate" of the sentence is the action. "Are hurtful" is the predicate. So, we put them together. Pesticides are hurtful.

Students: Pesticides are hurtful.

While Iris did not have activities for practice, Judy was the only teacher who designed a hands-on activity for production. Judy designed a card game for her students as in Excerpt 4. She asked students to read the sentence on the card together as a team and discuss if it was helpful or hurtful to bees. She asked students to collect pollen balls and nectar as the rewards.

Excerpt 4: Judy's card game

Judy: Read the sentence on the card together. Discuss whether it is helpful or hurtful. OK.

Students in team A: A beekeeper plants flowers by the hive. Helpful.

Judy: Read the sentence on the bottom. Collect your pollen or nectar.

Students in Team A: Collect 3 pollen balls. Joyce, you get three big red balls.

Joyce: (Walks to the center of the classroom and picks three big red balls.)

Students in Team A: 1/2 cup of nectar. James, you get 1/2 cup of small ball.

James: (Use the plastic cup to get 1/2 cup of small ball).

Judy: Let me check team A. Good job.

Only Chad and Judy designed wrap-up activities. As the exit task, Chad checked student worksheets group by group as in Excerpt 5. These two students completed the close with the right answer "gym."

Excerpt 5: Chad's exit check

Student A+B: (Give the worksheet to Chad)

Chad: Let me check. You are exercising at the gym. Yes. Good. Gym.

Problems in Teaching Language of Learning

Four major problems occurred when these participants taught the language of learning. First, the chosen language of learning was beyond learner proficiency levels and no scaffolding was provided. In Excerpt 6, Bill taught students the facts about the colorful snipe. However, the language of learning he chose, such as aquatic or incubation, was beyond the sixth graders' English proficiency.

Excerpt 6: Bill's close exercise

Bill: We just reviewed the words aquatic, incubation, male, female, and conspicuous. Read the following sentences and fill in the blank.

Bill: Number 1. Painted snipe is a medium size, attractive ___ bird. Do you see the shui (water)? Which one is it?

Student A: aqu....

Student B: aquatic.

The second problem was that participants tended to use Chinese to teach the language of learning. In Excerpt 7, Iris retold the basic information about an artist, such as his nationality or style. She emphasized the words "vertical" and "horizontal." Her learners first repeated after her. However, her co-teacher said the corresponding words in Chinese and students could not associate these two words with the Chinese translation.

Excerpt 7: Iris' Art Lesson

Iris: Remember the artist we learned last week. Where is he from?

Iris: He is from Netherland.

Iris: Look, this is vertical. That is horizontal.

Students: Vertical, horizontal.

Iris' co-teacher: Chui zhi shui ping zen me shuo (How do you say "vertical" and "horizontal"?)

Students: (No response)

Iris: Vertical, horizontal.

Students: Vertical, horizontal.

The third problem in teaching language of learning was that the participants themselves had problems in fully understanding the language of learning in content areas, so they had misconceptions. In Excerpt 8, Andy was confused about how many times he and students had to clap hands for one eighth note, two eighth notes, or one fourth note. His students identified his misconception.

Excerpt 8: Andy's music instruction

Andy: How many times do we clap our hands for two eighth notes? One. How many sound times do we clap our hands for one fourth note?

L1: Two

Andy: Really?

L1: Two eighth notes are for one clap.

Andy: Two eighth notes are for one clap??

L1: We clap our hands for one time for fourth note and twice for eighth note.

Andy: OK.

Fourth, participants regarded their learners as having problems in memorizing the language of learning due to insufficient exposure to the input or practice. Judy said, "My co-teacher and I taught our CLIL art lessons in the regular classroom. We did not have a space to post the language of learning on the word wall in the class, so learners could not review the language of learning. Our learners forgot all the terms that we taught last week." Gina also said, "If I have my own English classroom, I can post these words around my classroom. My students can review these words again and again."

Teacher Attributes in Designing and Delivering Language of Learning

Teacher attributes influenced their design and delivery of language of learning. Judy was an ELL teacher and had training in special education in the United States. She integrated Sheltered Instruction

Observation Protocol (SIOP) into her instruction as in Excerpt 3. Iris had specialty in art, so she said, “These art terms are not difficult. I know these terms and artists.” With professional development on the SIOP model, teachers like Judy in this study can be equipped with awareness of the language of learning used in the content area along with the knowledge of how to exploit teachable language opportunities during class.

On the other hand, Andy in Excerpt 8 was not a music major, so he had misconceptions of music terms, such as eighth notes. Andy said, “I am an English major, but not a music major. I had difficulty in understanding all these music concepts and terms.” Gina faced similar challenges. She said, “I am an English teacher, not a health or math teacher. I did not know how to design cross-cultural lessons or even choose the appropriate language of learning for my instruction.”

Discussion

This study used documents, interviews, and observations to explore six Taiwanese elementary school English teachers’ design and delivery of language of learning. Major findings of this study are as follows. First, only one teacher taught her students language of learning warm-up throughout the wrap-up activities. Instruction mainly focused on the presentations and practice on the language of learning. Language teachers are expected to stimulate the oral or written input by designing a variety of tasks that involve learners in grappling with the meaning of the language of learning. Teachers should constantly check whether learners comprehend the meaning of the input (De Graaff et al., 2007).

Second, these teachers encountered four major problems in teaching language of learning in terms of inappropriate word selection, teacher incompetence in content areas, overuse of the first language, and learners’ limited exposure to the language of learning. Such findings were in accord with the empirical studies. Language teachers faced various challenges when implementing CLIL, such as difficulties in articulating language objectives and explaining the language of learning, not knowing what learners needed in terms of language of learning, or lack of metalinguistic and content knowledge (Tedick & Cammarata, 2012).

Finally, English teacher attributes affected their design and delivery of language of learning. Judy with trainings on SIOP could design and deliver better instructional strategies on language of learning. Hence, CLIL teachers need to acquire the basic knowledge of how EFL learners acquire language of learning under the CLIL context, such as second language acquisition theories or factors influencing language learning. Teachers with knowledge and competence can become able to deploy the strategies necessary to promote language learning in the content areas (Ball et al., 2008; Morton, 2018).

Suggestions on effective instructional strategies for teaching language of learning were provided in terms of appropriate word selections for learners’ English proficiency levels, clear explanations, provisions of activities, and English language teachers’ competence in CLIL.

Language of Learning Appropriate for English Proficiency Levels

Language teachers must be equipped with “specialized language knowledge for content teaching,” referring to “teachers’ use of language to represent content knowledge and make it accessible to learners” (Morton, 2018, p. 280). With such specialized language knowledge for content teaching, language teachers can design language of learning appropriate for their learners’ English proficiency levels based on the text in the content area (De Graaff et al., 2007).

Clear Explanations and Instruction of Language of Learning

Clear explanations and instruction of language of learning are crucial. According to Forey and Cheung (2019), “the explicit teaching of language enables teachers to clarify and make visible the task requirements, to discuss the language and structure of the texts, and to provide a diagnostic tool for

assessment and feedback” (p. 105). CLIL teachers need to be equipped with the knowledge and competence to use language to present the subject content knowledge and make it accessible and comprehensible to their learners, so they can use the language in the communicative, interactional, or discursive context (Morton, 2018).

Provisions of Activities for Learners to Apply Content and Language Knowledge

Repeated exposure or deeper involvement with learning are needed in order to help learners master the language of learning as input. Language activities (e.g., completing tables, matching definitions, researching semantic shifts, creation of glossaries, memorizing of words, lexical reinforcement, and work on linkers) are suggested to provide learners with consolidated language knowledge (Gablasova, 2015).

English Teachers’ Competence in Instruction on Language of Learning

CLIL teachers must be adept in designing and implementing CLIL to learner differences and local context. Most importantly, CLIL teachers must be equipped with competence in instruction on language of learning. They are expected to create a rich and supportive target-language environment, make input comprehensible, promote students’ comprehensible output, and use teacher-talk effectively (Mehisto et al., 2008).

Conclusion

Llinares (2015) asserted that it is essential to bring language to the fore. Teachers should be trained to design and deliver the language of learning from different genres in different content areas for their learners through tasks and activities in the classroom. The conceptual framework, findings, and implications of this study can unfold the important elements of CLIL teacher education. The study primarily contributes to the research field through its exploration of instructional strategies on language of learning employed by the elementary school English teachers in Taiwan. In particular, the challenges faced by these six English teachers were identified. Suggestions were provided for effective instruction on language of learning and the competence required for the CLIL teachers.

One limitation is that this research focused only on analyzing three types of data—observations, documents, and interviews—to explore six Taiwanese EFL teachers’ instruction on language of learning for CLIL lessons. No data on Taiwanese EFL young learners’ performance on language of learning has been collected to compare and contrast the influence of the teachers’ instruction on their acquisition of language of learning and output. Future research should, therefore, address the assessment of learning in order to provide a detailed model of the acquisition of the language of learning.

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The Author

Chin-Wen Chien received her Doctor of Education degree from the University of Washington (Seattle, USA). She is an associate professor in Department of English Instruction of National Tsing Hua University in Taiwan. Her research interests include language education, language teacher education, and curriculum and instruction.

Department of English Instruction
National Tsing Hua University
No. 521, Nanda Road, Hsinchu City 300, Taiwan
Tel: +886 3 5715131 *76712
Mobile: + 886 9-30885429
Email: chinwenc@ms24.hinet.net

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