

Content list available at http://ijltr.urmia.ac.ir

Iranian Journal of Language Teaching Research



Urmia University

CLIL Teacher Professional Development for Content Teachers in Thailand

Punwalai Kewara ^{a,*}, Denchai Prabjandee ^a

^a Burapha University, Thailand

ABSTRACT

In Thailand, the new educational policy is mandated to encourage content teachers to integrate English in content classrooms. The policy has created tensions and misconceptions among content teachers, who must change the medium of instruction from Thai to English. This paper presents an attempt to foster teacher knowledge about the Content and Language Integrated Learning (CLIL) approach in a teacher professional development program. Classroom language in English and CLIL classroom structure were provided for 15 teachers at a secondary school. Four volunteer teachers were observed to determine the extent to which teachers implemented CLIL. The findings revealed the teachers partly implemented classroom language in English and the provided CLIL structure was not evident. The contribution of this paper is to the literature of CLIL teacher professional development effectiveness and the implementation fidelity of a professional development program.

Keywords: CLIL; teacher professional development; CLIL in Thailand; English a medium of instruction; in-service teacher training

© Urmia University Press

ARTICLE HISTORY

Received: 4 June 2017 Revised version received: 12 Aug. 2017

Accepted: 10 Dec. 2017 Available online: 1 Jan. 2018

^{*} Corresponding author: Burapha University, Thailand Email address: punwalai@go.buu.ac.th

[©] Urmia University Press

Introduction

This paper reports the effects of a teacher professional development program to enhance content teachers' knowledge about implementing Content and Language Integrated Learning (CLIL) in their classrooms. Content teachers (mathematics, science, and computer) in Thailand volunteered to participate in the professional development program. After the professional development program, we conducted an implementation-fidelity study to examine how teachers implemented the knowledge and skills they gained from the program.

The current reform of English language teaching in Thailand to encourage content teachers to integrate English in their classrooms (Office of Basic Education Commission, 2014) provides the rationale of the present study. The policy is mandated because of the current world situation where English is regarded as a means of survival in the international arena. With the increasing importance of English, the Ministry of Education in Thailand has recognized the need to equip Thai learners with sufficient English proficiency. However, English language teaching in the Thai context has been reported as unsuccessful (Dhanasobhon, 2007; Wiriyachitra, 2002). It has become apparent that only learning English in the English classroom may not be enough. As a result, the Ministry of Education has stipulated a policy to encourage content teachers to use English as a medium of instruction to increase the amount of language input for learners.

With this drastic change, the policy has created tension and resistance among these teachers, leading to their misconceived views on the policy change (Kewara, 2016). To minimize the misconceptions, it is urgent to provide professional development for the teachers.

Content and Language Integrated Learning (CLIL)

CLIL originated in Europe as an educational approach in which an additional language is used as the medium of instruction to teach non-language subjects to students in mainstream education (Coyle, Hood, & Marsh, 2010; Dalton-Puffer, Nikula, & Smit, 2010). CLIL has been reported as an effective approach to foster learners' content and language knowledge, and it is now expanding to different parts of the world such as Latin America (e.g., Doiz, Lasagabaster, & Sierra, 2013), Asia (e.g., Bozdoğan & Karlıdağ, 2013; Iyobe & Lia, 2013; Yang, 2016), and Australia (e.g., Smala, 2014; Turner, 2013a; Turner, 2013b).

For the last two decades, countless research has stated the advantages of a CLIL classroom. CLIL learners are more motivated than those in a regular content classroom and they develop complex concepts more deeply in a foreign language (Wolff, 2007). The CLIL classroom not only offers learners the opportunity to communicate with the target language but it also provides CLIL teachers with similar opportunities. When CLIL teachers use the additional language as a medium of instruction, they practice the language like their students (Dalton-Puffer et al., 2010). Therefore, the CLIL classroom could be considered as a hub where two sides of classroom communication (learners and teachers) speak the same target language through content subjects.

Teaching content should be introduced differently to a CLIL classroom compared with a regular classroom. CLIL is a new learning approach which demands content teachers to be prepared to develop multiple types of expertise, for example, in content subjects, language, best practice in teaching and learning, and the integration of CLIL in their schools (Marsh, Mehisto, Wolff, & Frigols Martín, 2010). Coyle (2009) suggested the 4 Cs principle framework in which Content, Cognition, Communication, and Culture are interrelated in teaching and learning in both the first language and the target language. The 4 Cs framework is a conceptualization of CLIL that was first mentioned in the educational field and later was used in CLIL. The sociocultural theory

accounts for the CLIL approach in the sense that, in this approach, knowledge (Content) used in a real sociocultural context is practiced in a learning context (Communication) through the implementation of the 4 Cs framework. Thinking skills (Cognition) and intercultural skills (Culture) need to be developed through teaching and learning interaction.

Implementing CLIL in Regular Content Classrooms

Converting from regular classrooms to CLIL classrooms is a complex and longitudinal process (Bentley, 2010; Coyle, 2013; Lasagabaster & Doiz, 2017). Prior research has pointed out that implementing CLIL successfully starts with the teachers. CLIL classrooms need competent teachers who are capable of speaking more than one language (Klimova, 2012; Madrid Fernández, 2006; Marsh et al., 2010). CLIL teachers also need to possess knowledge of how to teach content through an additional language. Kewara (2016) argued that implementing CLIL in the content classrooms does not simply mean that teachers change the language of instruction, but they also need to change how they teach.

Starting with the teachers themselves, this approach implies that content teachers should be linguistically and culturally competent (Dalton-Puffer et al., 2010). CLIL class provides learners with more than just learning to use the language and the subject content. Teachers are to encourage learners to develop cultural awareness and participate in social activities through the instructional language. The objective of teaching in a CLIL classroom is content and language integration which requires a particular teaching method. CLIL teachers need guidance and support (Coyle, 2009). Also, teacher collaboration is essential to making the CLIL classroom possible. The formation of teachers' community of practice will boost different types of coordination in the school such as those between language teachers and content teachers with effect of sharing the same beliefs on CLIL (Pavón Vázquez, Ávila López, Gallego Segador, & Espejo Mohedano, 2015). It is not easy to shift from the regular practice of teaching to assuming a new teaching approach. Schools, teachers, and stakeholders should build networks to facilitate functional CLIL classrooms through in-service CLIL teacher training, material support, and promoting interdisciplinary projects. For these reasons, switching from regular to CLIL classrooms requires time and considerable collaboration.

CLIL in Thailand

In Thailand, the Ministry of Education opted for using English in regular content classrooms to boost students' English proficiency in 2014 (Kewara, 2016). An existing program that responds to this policy is English for Integrated Studies (EIS). EIS is a project of classroom instruction where English is used by teachers and students, and the teaching approaches are poorly discussed. Currently, EIS schools encourage content teachers to use English in their classrooms with no support structure. Some teachers use English based on their limited capacity while they have to practically rely on the official curriculum. This had led to a significant workload for teachers.

CLIL was implemented more than a decade ago in the Thai educational system. The CLIL training programs were piloted to find a potential CLIL teaching methodology for the Thai context (MacKenzie, 2008). However, the pace of the development of the appropriate solution to fully integrate CLIL into regular classrooms is very slow. According to MacKenzie (2008), one reason that CLIL struggles in the Thai context is the misconstrued view of CLIL in the administration level. As the policy has not been communicated appropriately to schools, they are put into uneasy situation.

Professional Development for CLIL Teachers

Generally, CLIL teachers are subject content experts but rarely have language qualifications (Nikula, Dalton-Puffer, & Llinares, 2013). Therefore, upgrading CLIL teachers' language proficiency and CLIL teaching concepts are empirically required for the implementation of this new approach (Pérez Cañado, 2016; Wolff, 2012).

Research shows that CLIL teachers lack confidence as they have an insufficient level of language skills to implement CLIL (Lorenzo, Casal, & Moore, 2010). CLIL teachers do not know how to conduct CLIL classes since they are aware that the teaching methods are different from the ones they have been trained in and have been practicing (Pavón Vázquez & Ellison, 2013). The unfamiliarity of the concept of content and language integration to teachers has made CLIL teachers fall short of the goals of the policy change (Fernández & Halbach, 2011). This indicates that a proper CLIL teacher training program is highly required.

An official pre-service CLIL teacher training program is required to improve teachers' language skills. Dhanasophon (2007) pointed out that poorly-trained teachers contribute to the failure of English learning and teaching in Thailand. Teacher training in Thailand is the Thai-based initial program; pre-service teachers are trained to use Thai as a medium of instruction. However, these teachers are asked to instruct in English, which contrasts with what they were trained. Therefore, language competency should be integrated into pre-service CLIL teacher training in order to prepare teachers who are autonomous, ethical experts of content and language integrated learning and improve educational culture (Colbert, Brown, Choi, & Thomas, 2008; Otwinowska, 2015; Freeman, Reynolds, Toledo, & Abu-Tineh, 2016).

Several professional developments were held by different higher education institutions to serve mostly language competence needs. There is no standard framework for in-service teacher training. Several training programs are improving content teachers in language competency but there are rarely true CLIL teacher training programs with a focus on an updated CLIL teaching approach (Suwannoppharat & Chinokul, 2015). Teachers are offered training programs; however, training programs that focus on both language and teaching methodology or a CLIL classroom template are infrequently provided. As the definition of CLIL has never clearly accounted for the way the teaching approach should fit in the curriculum in the Thai educational context by the Ministry of Education, planning a framework for a CLIL training program for in-service teachers who are not fully informed by non-CLIL experts is ambiguous.

To produce CLIL teachers, a clear concept should be shared by the stakeholders from the administration level to the classroom level. Also, official pre-service programs where content teachers can use to prepare themselves as CLIL teachers and in-service teacher training programs that can serve teachers' needs are in constant need. A framework for the professional development of CLIL teachers in the Thai context should be developed.

Prior research has attempted to train CLIL teachers by using different approaches. For example, Hunt, Neofitou, and Redford (2009) developed a 1-year Modern Foreign Language teacher training course with the objective to raise awareness of the CLIL approach. Participants engaged in planned and taught CLIL lessons in different subjects and different languages. The program assisted participating teachers in acquiring tools and reflected on their own teaching practices and materials. Mackenzie (2008) designed a CLIL teacher training course in Thailand as a motivating and preparatory project that aimed to discover proper CLIL methodologies for a Thai context. Participating teachers constructed lesson plans and designed learning curriculum. Both content and language teachers worked collaboratively so that they could learn and share ways of teaching. A content teacher professional development program in Malaysia also highlighted the buddy

support system and teaching strategies through English (Yassin, Tek, Alimon, Baharom & Ying, 2010). These attempts show that there are several models of CLIL teacher training.

Teaching strategies, language competence, and collaboration are mainly required for CLIL teacher training. Hillyard (2011) placed emphasis on three intertwined abilities that CLIL teachers need for the CLIL approach, which are: target language ability, content knowledge, and CLIL methodology. Moreover, the most important aspects in shifting a regular classroom to a CLIL classroom are the teacher's attitudes and willingness to design other classroom materials, learn something new and a strong belief in CLIL.

CLIL Teacher Professional Development and Implementation Fidelity

It is evident that CLIL teacher professional development is crucial; however, little is known about how teachers implement what they gain in the classrooms. The concept of doing a follow-up study after implementing an intervention is understood as *implementation fidelity*, the extent to which an intervention is implemented as intended by the developer (O'Donnell, 2008). Implementation fidelity is an important aspect of examining program effectiveness since it links the effects of the program to outcomes (Carroll et al., 2007). Prior research has employed this concept in many fields, such as program evaluation, public health, and K-12 curriculum intervention (O'Donnell, 2008).

Previous studies have used different frameworks depending on the purposes of the studies. Hall and Loucks (1977) were the pioneers in conceptualizing a hierarchy level of intervention implementation, termed as the concerns-based adoption model. The model is a continuum of determining three levels of implementation, comprised of *nonuse*, *mechanical use*, and *creative adaptation* to the local requirements. Based on this seminal work, it has become a common practice that measuring implementation is multidimensional. Recently, many researchers have developed different conceptual frameworks to measure implementation fidelity. For example, Powell and Diamond (2013) proposed three dimensions of measuring implementation fidelity: structure, process, and content. These recent studies have amplified the need to measure implementation fidelity from different dimensions.

It is important to note that implementing a new intervention in the classrooms requires teachers to change their current practices. From the perspective of theory of change perspective, Penuel and Means (2004) argued that teachers will implement an intervention when it meets their expectations and local support will enhance the feasibility of fidelity. However, March (1978) suggested that an individual's choice to implement a certain intervention goes beyond themselves; it includes social, political, economic, and organizational factors. Based on this view, program implementers take for granted the effectiveness of the program; rather, they choose program components that meet the immediate needs of the organization, and they modify the program to fit the organizational constraints (Emshoff, Blackely, Gottschalk, Mayer, Davidson, & Erickson, 1987). Regardless of implementing a program or not, the teachers' choice of program enactment will not undercut the scientific aims of the program (Penuel & Means, 2004).

Research Questions

 To what extent are the structural, process, and content dimensions of CLIL implemented by Thai content teachers after participating in a CLIL teacher professional development program? 2. How do teachers explain what makes them implement or not implement CLIL in their classrooms?

The Study

Context of the Study

This study was conducted at a large secondary school (Grades 7-12 with approximately 3,000 students) in the eastern part of Thailand. The school was purposefully selected since it had initiated an educational program, hereafter called *English-integrated classroom*, where content teachers in some subjects (mathematics, science, and computer) are asked to integrate English in their classrooms. At this school, English-integrated classroom refers to a program provided instruction that introduces terminology and classroom language in English such as greetings, checking comprehension, or asking questions. The school does not require teachers to use English 100% of the time in their classrooms.

In this school, there were approximately 158 teachers. Out of these teachers, 45 were randomly assigned to teaching in this program. The school policy made it imperative for these teachers to change the language of instruction. None of the teachers received a teacher preparation degree in English and they had never been prepared to integrate English in their classrooms. Thus, when the school asked them to integrate English in their classrooms, it was a daunting and overwhelming experience.

Prior to this study, the school recognized the need for professional development for these teachers, so professional support was provided for the teachers in this program, such as offering intensive English language development courses. The professional development courses were primarily conducted to enhance the teachers' English skills only; the courses did not focus on teaching approaches that are suitable for conducting content classrooms in English. Thus, the teachers in this study had never heard of the concept of CLIL.

The school had gone through several administrative changes that affected the rise of the English-integrated program. In the previous school board, the principal was very supportive of the program. The principal provided professional development, mostly to equip teachers with the necessary English skills. With this support, the teachers felt more confident to integrate English in their classes. At the time the study was in progress, the current school board and school principal were not supportive enough, so professional development was limited. Even though the school asked the teachers to change their practice, which required tremendous effort and preparation, the teachers did not receive extra rewards.

Participants

Fifteen content teachers (six mathematics, eight science, and one computer) volunteered to participate in the CLIL teacher professional development program. All teachers had taught in the English-integrated program continuously for two to five years. Since none of them volunteered to teach in this program and they had never been prepared to integrate English in their classrooms, the teachers resisted the new policy.

After implementing the CLIL teacher professional development program, four teachers were purposefully selected to participate in an implementation-fidelity study because they were willing to participate (Stake, 1995). The participants in this phase served as cases to examine the effects of professional development on the teacher's knowledge and practice. In this phase, the

participants were observed and interviewed about the extent to which they implemented CLIL in their classrooms.

CLIL Teacher Professional Development Program

In this study, the CLIL teacher professional development program was designed to foster content teachers' knowledge about implementing CLIL in the classrooms. The goals of the workshop were to introduce CLIL concepts, theory, principles, and practice to the teachers and to equip them with the necessary English. To design the professional development program, a needs analysis was conducted to understand the teachers' current CLIL teaching practices and their expectations. After the needs analysis, we designed the professional development program by using the targeted professional competencies proposed by Wolff (2012).

In the professional development program, the *process* dimension pertains to teacher behavior in the CLIL classroom, particularly using English in the class. We provided intensive instruction related to using classroom language in English. The classroom language session was a collection of ready-to-use sentences in English. We suggested that the teachers use these model sentences regularly until they became part of the culture of the classroom.

Additionally, the *content* dimension of the program involves providing CLIL theories and principles for teachers. Having raised the participants' awareness about the importance of CLIL, we introduced the concept of CLIL, CLIL classroom structure, the 4 Cs framework to design CLIL lessons (Coyle et al., 2010), roles of CLIL teachers, and choosing CLIL resources. In this workshop, we provided examples of CLIL lessons. At the end of the workshop, we asked the teachers to design CLIL lessons and present their samples to the whole group. Comments and suggestions were provided to revise their lessons. The teachers were encouraged to use the designed lessons in their classrooms.

Further, the *structural* dimension pertained to the CLIL classroom structure. We provided a CLIL learner-centered structure to the teachers (Mehisto, Marsh, & Frigols, 2008), called the six-step learner-centered lesson: *Greetings, Review, Directions, Task, Assessment,* and *Delivery*. As for *Greetings,* it is the step which involves teachers' greeting of the students. For *Review,* teachers will review past learning from previous studies. For *Directions,* the teachers will give directions of a task. For *Task,* the teachers observe the learners while they are trying to complete a task. For *Assessment,* the teachers assess the learners' concept of the task. For *Delivery,* teachers debrief the concepts of the lesson. We argued that these six-steps are useful for teachers to prepare CLIL lessons.

Data Collection

The CLIL professional development program was conducted at a school. During the professional development, we designed activities to investigate the development of teachers' CLIL knowledge. The teachers were observed while they participated in the workshop activities. After each workshop, we wrote reflections about the results of the workshop, and later discussed our reflections. The discussions were audio-recorded and used as supplementary data.

After implementing the workshop, we asked for volunteers to participate in a follow-up study. Four teachers decided to participate in this phase. We observed teachers by videotaping the instructions. The total observation time was 12 hours. The purpose of this observation was to examine the extent to which the teachers used CLIL in their classrooms. After the observation, we interviewed the teachers about their performance, confidence level of their videotaped

instructions, and challenges to implement CLIL in their classrooms. The interviews were recorded and later transcribed for analysis.

Data Analysis

The data in this study were from observations, interviews, and written reflections. The data were used holistically to understand the effects of the CLIL professional development on teachers' implementation of CLIL in the classrooms. To analyze the data, we loosely used the implementation fidelity framework of Powell and Diamond (2013): process, content, structure. We watched the videotapes together, determining the extent to which the teachers implemented CLIL. The extent was assessed by comparing the observations with the proposed CLIL structure in terms of structure, process, and content (Powell & Diamond, 2013). The interview data were analyzed by searching for themes to understand the reasons why certain aspects of professional development programs were implemented or why other aspects were not. The data analysis was conducted both at the individual level and later compared across the participants.

Trustworthiness

To maximize the trustworthiness of the data, we employed several techniques. To begin with, we tried out the activities in the CLIL professional development program with a group of content teachers who had similar characteristics with the target participants. The activities were later modified. Additionally, we simultaneously analyzed the data. Discussions and negotiations were made until we reached a consensus.

Ethical Considerations

To conduct ethical research, we were aware of the participants' rights, their autonomy and independence, justice, fairness. The permission from the school principal was obtained before collecting the data. The participants were informed of the purpose of the study. Participation was voluntary and the participants understood that they had a choice to drop out of the study at anytime without any consequences. The data in this study were treated confidentially. The school's name was not included to prevent the identification of the site. The participants signed consent forms to allow us to use the data for research purposes only.

Findings and Discussion

Prior CLIL Knowledge

Investigation during the professional development revealed that teachers held misconceptions of CLIL prior to participating in the professional development program. To investigate CLIL knowledge and CLIL theories relating to the content process, we asked the teachers how they generally structured their CLIL classrooms prior to our professional development as shown in Table 1.

Table 1

Comparison of Teachers' Perceptions and Our Proposed CLIL Classroom Structure

Six-steps by participating teachers		Designed	d six-step lesson
1.	Greetings	1.	Greetings
2.	Review	2.	Review
3.	Delivery	3.	Directions
4.	Directions	4.	Task
5.	Task	5.	Assessment
6.	Assessment	6.	Delivery

As shown in Table 1, there is a discrepancy between the teachers' understanding of the CLIL classroom structure and the designed six-steps. The main difference between the teachers' prior knowledge and the designed CLIL structure was the "Delivery" stage; it was placed earlier for the teachers' prior understanding compared to the one in the designed classroom structure. When the delivery stage was placed earlier, it revealed the teachers' habitual practices which focused less on students' learning skills but the content they need to learn in the teacher-led classroom. It may be concluded that there was more practice but less challenge for the students in their usual teaching activities.

Delivery should be delayed to a later stage to enable students to put things together to construct something new from what they have learned or perceived of new structures (Anderson & Krathwohl, 2001). The classroom structure was displayed showing how a CLIL class is expected to be structured. The designed six-steps, as mentioned above, would be helpful for teachers to prepare their content and language integrated classroom. We implicitly expected that, once the CLIL concept has been clarified, the teachers would implement these six steps in their content classrooms.

Purposeful Use of Classroom Language

Two teachers made use of classroom language provided from the first phase of the professional development with enthusiastic preparation for the English integrated lessons, and instructed the whole lesson in English. Moreover, the subject content, learning activities, and teaching materials were completely in English. Contrary to the first two teachers, the other two teachers were to some extent hesitant to draw on classroom language. Regarding the process dimension, the teachers employed English purposefully for *Greetings*, some short interrogative sentences, and specifically on technical terms to transfer subject content. Giving task instructions and transferring knowledge were generally in Thai. English was limited to Greetings and short sentences.

Next, it was evident that there were misconceptions of the role of English in the English integrated classroom. As mentioned above, English for Integrated Studies (EIS) in which the role of English and teaching methods are ill-defined, has spread out to some major schools. Based on the interviews, the participating teachers stated that the project does not focus on English-only classrooms and the role of the teachers is to support and promote students' English usage. These participating teachers were of the view that it is sufficient to convert Thai to English at the classroom language level; *Greetings* in English is undoubtedly a rapid step that does not need any practice or language expertise, *Directions* is generally similar from one session to another. The other teaching activities can be instructed in Thai. This aspect interferes with the CLIL concept. Technical vocabulary, special expressions, multiple meaning words, syntactical features, and language functions which are particularly related to the lesson should be necessarily demonstrated

for students to achieve key concepts, explain understanding, ask questions, and prepare for future studies in other content areas (Cloud, Genesee & Hamayan, 2000). We can consider this as a misconception of the content and language integrated classroom since the teachers do not combine these two ends putting English for classroom language promotes everyday language; however, content-compatible language is still required.

The restriction of using English in the two classes could be interpreted as teachers' lack of confidence and limited proficiency in English. The main focus of the professional development was to promote a learner-centered environment in the content classroom, however, the teachers focused on the use of English in their class and paid less attention to the new teaching method. As a result, they nervously directed their classrooms and retained their teaching habits. English became their major issue since they believe that after attending the professional development, using English as a medium of instruction they should become adept in English to manage their classrooms. Moreover, the common concern among the teachers was using English in explaining key concepts which confused the students. They were uncertain whether the students would acquire the content they wanted to transfer as they thought they were not expert in English; therefore, it was evident that the teachers would prefer to switch from using English for presenting technical vocabulary to Thai. It should be noted here that rather than switching from English to Thai, teachers could have considered whether the language used was suitable for the students' level. They could simplify technical terms to ensure that students understood them. Also, they could use this opportunity to learn the language with the students. Mehisto, Marsh, and Jesùs Frigols (2008) stated that it is acceptable to use the students' first language in the beginning of the program but teachers should strive to use the target language. Then the students will naturally verbalize more and more language taught to them. We could note that the teachers deliberately paid attention to the target language rather than learning skills.

Opaque Six-Step Classroom Structure

Surprisingly, after participating in the CLIL professional development, none of the teachers entirely implemented the six-step CLIL structure in their content classrooms. According to the structural dimension of the designed CLIL classroom structure, they still practiced their habitual teaching and learning activities; Greetings, Review, *Delivery*, Directions, Task, and Assessment. "Delivery" was introduced right after reviewing the previous lessons as it was structured in the professional development phase. We observed that the teachers considered themselves as the knowledge authority. The classroom remained teacher-led and less dynamic where the teachers transferred learning content and students practiced what they were asked to; for example, complete teacher-prepared worksheets or find answers of particular problems related to the lesson. There was no opportunity for the students to interact, discuss, or debate to complete assigned tasks.

The main reason why we introduced the six-step classroom during the professional development program was to encourage the participating teachers to change their classroom context to improve the quality of teaching and challenge the students' learning process (Stigler & Hiebert, 1999) and also to raise their awareness that the CLIL lesson should be different from their habitual content lesson which is teacher-centered to become teacher as a facilitator (Farrell, 2016). As reported by the participating teachers, integrating English into their content classroom, based on their understanding, was solely changing from Thai to English and the teaching practices remained relatively unchanged. This shows the unfamiliarity of integrating the content and language concept, and we note here that the designed six-step classroom language presented in the professional development program has not been taken into account among the participating teachers.

Discontinuity of Practice

According to the interviews, the school encourages teachers to use English in their classrooms, a group of teachers were engaged in the project. They were struggling to deal with each semester timetable and the continuity of the practice. One semester after another, they rotated from one class to another; they systematically integrated English in their classroom solely in one semester, therefore preparing an achievable CLIL class is hardly possible. We note here again that the policy and the practice diverge.

Also, giving emphasis to the English integrated classroom is contingent on the school director. All of the participating teachers remarked that professional development and other support should come along with the school director. Fostering the use of English is not currently a priority during our data collection period, as teachers pay consistently less attention to the integration of the language in their practices.

Intermittent integration of English in the classroom makes the teachers uncomfortable to use the language. If the teachers frequently practice using the target language, they will naturally conduct their content classrooms similarly to those teachers who understand their teaching materials and prepare their lessons beforehand.

Through the process dimension of teacher behavior, one participating teacher turned his content class into an English integrated classroom since he had prepared beforehand. On the other hand, another teacher stated that the teaching material she used in her mathematics classroom was difficult to follow and their students might not have understood. Adapting ready-to-use teaching materials is one common solution that most of the teachers practice. Selecting teaching materials that correspond to a lesson and students' needs requires thorough knowledge and familiarity. Teachers who discontinuously conduct English integrated classes will struggle in the classroom and act less confident while using English in the classroom. Transforming a regular content classroom means an extra workload for the teacher (Coyle et al., 2010). Searching teaching material that can respond to the lesson is time consuming for teachers who are not competent in the target language (Coonan, 2007).

Teachers have to select the appropriate teaching materials and prepare lesson plans which is a process that requires constant energy and investment of time. Once the lesson is prepared and they get used to it, the teacher will have an ideal structure for future lessons that will shorten the preparation process.

Gaps in a Thai educational context

Schools promote the use of English, nevertheless not all of the teachers follow the idea. As reported by the participating teachers, a group of teachers are assigned to undertake integrating English in their content classrooms. Hence, they unavoidably consider themselves as a particular teacher who have additional responsibilities while other teachers have their typical responsibilities. Some participating teachers were not poised to use English and the collaboration between content and language teacher does not exist so they have stressful teaching tasks. The participating teachers noted that being a CLIL teacher is particularly seen as someone with good command of English but in fact they are under high pressure.

Even though the Ministry of Education promotes English as a medium of instruction, the administrative commitment does not exist; for example, the Ordinary National Test (O-Net) or entrance examination is written in the Thai language. English is used only in the classroom.

Language education should start with shaping appropriate curriculum to support students' plurilingual competences (Byram, 2013) since English in a Thai context is not omnipresent, the opportunity to be fully exposed to English for both students and teachers is scarce compared to other Asian countries such as Singapore, Philippines or Malaysia, where English is an official language. However, the policy and the practice are parallel.

CLIL teachers who have had a specific training program enhance students' English (Sylvén, 2013). Yet, Thai teachers are encouraged to use English in the classroom; however, there is no official training program or school policy to develop content teachers' language skills. Schools can provide occasional training programs for content teachers, at the same time they need time, financial support, and active teachers. CLIL teacher training is a long-term goal that requires eminent collaboration among stakeholders.

Conclusion

This paper attempted to foster content teachers' knowledge about implementing CLIL in content classrooms. CLIL professional development was provided for teachers with attempts to change their teaching practices from a teacher-led structure to a more learner-centered structure. It is evident that the teachers in this study selectively implemented one aspect (classroom language), which fits their immediate needs, of the teacher professional development program (Emshoff et al., 1987). This indicates that implementing CLIL is a challenging task for teachers. It is challenging because teachers do not believe in the power of CLIL to increase students' achievement, they do not believe in their English proficiency, and they do not receive ongoing professional support (Penuel & Means, 2004).

Future research on CLIL teacher professional development should pay careful attention to the affective aspects of teacher professional learning such as beliefs or self-confidence. These aspects seem to be the major hindering factors in our study. Future CLIL teacher professional development should provide a chance for teachers to exercise their teaching practices such as doing teaching demonstrations, discussing the performance of the demonstrations, and providing constructive feedback. These elements must be continuously incorporated in CLIL professional development to enhance the effectiveness of the program.

References

Anderson, L., & Krathwohl, D. R. (2001). A Taxonomy for Learning, Teaching, and Assessing: A revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Bentley, K. (2010). The TKT Course: CLIL Module. Cambridge: Cambridge University Press.

Bozdoğan, D., & Karlıdağ, B. (2013). A case of CLIL practice in the Turkish context: Lending an ear to students. *Asian EFL Journal*, 15(4), 90–111.

Byram, M. (2013). Language teaching and its contexts. *Iranian Journal of Language Teaching Research*, 1(1), 1–26.

- Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science*, 2(1), 1–9
- Cloud, N., Genesee, F., & Hamayan, E. (2000). Dual language instruction: A handbook for enrich education. Portsmouth, NH: Heinle & Heinle.
- Colbert, J., Brown, R. S., Choi, H., & Thomas, S. (2008). An investigation of the impacts of teacher-driven professional development on pedagogy and student learning. *Teacher Education Quarterly*, 35(2), 135–154.
- Coonan, C. M. (2007). Insider views of the CLIL class through teacher self-observation—introspection. *International Journal of Bilingual Education and Bilingualism*, 10(5), 625–646.
- Coyle, D., Hood, P., & Marsh, D. (2010). CLIL: Content and Language Integrated Learning. Cambridge: Cambridge University Press.
- Coyle, D. (2009). Promoting Cultural Diversity through Intercultural Understanding: A Case Study of CLIL Teacher Professional Development at In-service and Pre-service Levels. In M. L. Carrió-Pastor (Ed.), Content and Language Integrated Learning: Cultural Diversity (Vol. 92, pp. 105–124). Frankfurt am Main: Peter Lang.
- Coyle, D. (2013). Listening to learners: an investigation into "successful learning" across CLIL contexts. *International Journal of Bilingual Education and Bilingualism*, 16(3), 244–266.
- Dalton-Puffer, C., Nikula, T., & Smit, U. (Eds.). (2010). Language Use and Language Learning in CLIL Classrooms. John Benjamins Publishing.
- Dhanasobhon, S. (2007). English language teaching dilemma in Thailand. KUforest, 22(1), 53-59.
- Doiz, A., Lasagabaster, D., & Sierra, J. M. (Eds.). (2013). English-medium instruction at universities: global challenges. Bristol: Multilingual Matters.
- Emshoff, J. G., Blackely, C., Gottschalk, R., Mayer, J., Davidson, W. S., & Erickson, S. (1987). Innovation in education and criminal justice: Measuring fidelity of implementation and program effectiveness. *Educational Evaluation and Policy Analysis*, 9, 300-311.
- Farrell, T. S. C. (2016). The teacher is a facilitator: Reflecting on ESL teacher beliefs through metaphor analysis. *Iranian Journal of Language Teaching Research*, 4(1), 1–10.
- Fernández, R., & Halbach, A. (2011). Analysing the Situation of Teachers in the Madrid Bilingual Project After Four Years of Implementation. In Y. Ruiz de Rarobe, J. Sierra, & F. Gallardo del Puerto (Eds.), Content and Foreign Language Integrated Learning. Contributions to Multilingualism in European contexts (pp. 241–270). Frankfurt-am-Main: Peter Lang.

- Freeman, D., Reynolds, D., Toledo, W., & Abu-Tineh, A. H. M. (2016). Who provides professional development? A study of professional development in Qatar. *Iranian Journal of Language Teaching Research*, 4(3), 5–19.
- Hall, G. E., & Loucks, S. F. (1977). A developmental model for determining whether the treatment is actually implemented. *American Educational Research Journal*, 14, 253-267.
- Hillyard, S. (2011). First Steps in CLIL: Training the Teachers. Latin American Journal of Content & Language Integrated Learning, 4(2), 1–12.
- Hunt, M., Neofitou, A., & Redford, J. (2009). Developing CLIL training for modern languages teacher trainees. In D. Marsh, P. Mehisto, D. Wolff, R. Aliaga, T. Asikainen, M. J. Frigols-Martin, G. Langé (Eds.), CLIL Practice: Perspectives from the Field (pp. 110–116). Finland: CCN: University of Jyväskylä.
- Iyobe, B., & Lia, J. (2013). CLIL to What Degree: A Trial in English Medium Education at a Japanese University-Is It CLIL or Not? *Asian EFL Journal*, 15(4), 372–381.
- Kewara, P. (2016). Learning English through CLIL type approach: Concept and perspective for Thai teachers. *Journal of Education*, 27(1), 28–40.
- Klimova, B. (2012). CLIL and the teaching of foreign languages. *Procedia Social and Behavioral Sciences*, 47, 572 576.
- Lasagabaster, D., & Doiz, A. (2017). A Longitudinal Study on the Impact of CLIL on Affective Factors. *Applied Linguistics*, 38(5), 688–712
- Lorenzo, F., Casal, S., & Moore, P. (2010). The Effects of Content and Language Integrated Learning in European Education: Key Findings from the Andalusian Bilingual Sections Evaluation Project. Applied Linguistics, 31(3), 418–442.
- MacKenzie, A. (2008). CLILing me softly in Thailand: Collaboration, creativity and conflict. Retrieved May 11, 2016, from http://www.onestopenglish.com/clil/clil-teacher-magazine/your-perspectives/cliling-me-softly-in-thailand-collaboration-creativity-and-conflict/500927.article
- Madrid Fernández, D. (2006). Bilingual and plurilingual education in the European and Andalusian context. *International Journal of Learning*, 12(4), 177–185.
- March, J. G. (1978). Bounded rationality, ambiguity, and the engineering of choice. Bell Journal of Economics, 9, 587-608.
- Marsh, D., Mehisto, P., Wolff, D., & Frigols Martín, M. J. (2010). European Framework for CLIL Teacher Education. European Center of Modern Language.
- Mehisto, P., Marsh, D., & Jesùs Frigols, M. (2008). *Uncovering CLIL*. Thailand: Macmillan Education.

- Nikula, T., Dalton-Puffer, C., & Llinares, A. (2013). CLIL classroom discourse. *Journal of Immersion and Content-Based Language Education*, 1(1), 70–100.
- O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of Education Research*, 78(1), 33–84.
- Office of Basic Education Commission (OBEC). (2014). Guidelines of teaching English reform. Retrieved September 10, 2016, from http://tesol-itecthailand.com/cefr-in-thailand
- Otwinowska, A. (2015). CLIL teaching in Poland and Finland reflections from the study visit.

 Retrieved November 11, 2016, from https://clil.pedagog.uw.edu.pl/dr-agnieszkaotwinowska-kasztelanic-2/
- Pavón Vázquez, V., & Ellison, M. (2013). Examining teacher roles and competences in Content and Language Integrated Learning (CLIL). *Linguarymarena*, 4, 65–78.
- Pavón Vázquez, V., Ávila López, J., Gallego Segador, A., & Espejo Mohedano, R. (2015). Strategic and organisational considerations in planning content and language integrated learning: a study on the coordination between content and language teachers. *International Journal of Bilingual Education and Bilingualism*, 18(4), 409–425.
- Penuel, R., & Means, B. (2004). Implementation variation and fidelity in an inquiry science program: Analysis of GLOBE data reporting patterns. *Journal of Research in Science Teaching*, 41, 294-315.
- Pérez Cañado, M. L. (2016). Are teachers ready for CLIL? Evidence from a European study. European Journal of Teacher Education, 39(2), 202–221.
- Powell, D. R., & Diamond, K. E. (2013). Implementation fidelity of a coaching-based professional development program for improving head start teachers' literacy and language instruction. *Journal of Early Intervention*, 35(2), 102–128.
- Smala, S. (2014). Sole fighter mentality: stakeholder agency in CLIL programs in Queensland. The Language Learning Journal, 42(2), 195–208.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Stigler, J. W., & Hiebert, J. (1999). The teaching gap; Best ideas from the world's teachers for improving education in the classroom. New York, NY: The Free Press.
- Suwannoppharat, K., & Chinokul, S. (2015). Applying CLIL to English language teaching in Thailand: Issues and challenges. *LACLIL*, 8(2), 237–254.
- Sylvén, L. K. (2013). CLIL in Sweden Why does it not work? A metaperspective on CLIL across contexts in Europe. *International Journal of Bilingual Education and Bilingualism*, 16(May), 301–320.

- Turner, M. (2013a). CLIL in Australia: the importance of context. *International Journal of Bilingual Education and Bilingualism*, 16(4), 395–410.
- Turner, M. (2013b). Content-based Japanese Language Teaching in Australian Schools: Is CLIL a Good Fit? *Japanese Studies*, 33(3), 315–330.
- Wiriyachitra, A. (2002). English-language teaching and learning in Thailand in this decade. ThaiTESOL Focus, 15(1), 4–9.
- Wolff, D. (2007). CLIL: Bridging the gap between school and working life. In D. Marsh & D. Wolff (Eds.), Diverse contexts converging goals. CLIL in Europe (pp. 15–25). Frankfurt: Peter Lang.
- Wolff, D. (2012). The European framework for CLIL teacher education. Synergies Italia, 8, 105–
- Yang, W. (2016). An investigation of learning efficacy, management difficulties and improvements in tertiary CLIL (content and language integrated learning) programmes in Taiwan: A survey of stakeholder Perspectives. Latin American Journal of Content & Language Integrated Learning, 9(1), 64–109.
- Yassin, S. M., Tek, O. E., Alimon, H., Baharom, S., & Ying, L. Y. (2010). Teaching science Journal, through English: Engaging pupils cognitively. *International CLIL Research*, 1(3), 46–59.

Punwalai Kewara, Ph.D., is a faculty member at Faculty of Education, Burapha University in Thailand. She is currently teaching at International Graduate Studies Department. Her research interests are Content and Language Integrated Learning (CLIL), bilingual education and teacher professional development. Her contact is punwalai@go.buu.ac.th.

Denchai Prabjandee, Ed.D., is a faculty member at Faculty of Education, Burapha University in Thailand. He is currently teaching English and EFL methodology. His research interests are teacher professional development, teacher identity, and bilingual education. He can be contacted at denchai@go.buu.ac.th.