

WIKI-ENHANCED SCAFFOLDING TO ENCOURAGE STUDENT PARTICIPATION IN A CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) CLASSROOM

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ABSTRACT

Given the fact that more and more universities stress on using English as medium to teach students with diverse backgrounds, the content and language integrated learning approach (CLIL) is now frequently introduced to faculty to support effective instruction and learning. Inspired by a CLIL workshop I attended, in which the instructor offered an overview of the framework and guidelines, this reflection paper discusses perceived local challenges in Taiwan (e.g., cultural barriers, limited time and resources for planning and assessment). To resolve these challenges, this paper proposes a scaffolding design of using wikis (in light of their collaborative and evolving nature to support participatory, constructive, and self-directed learning) in a local classroom. The findings from an initial implementation will be discussed in the presentation.

KEYWORDS

CLIL, wikis, participatory learning, collaborative learning, scaffolding

1. BACKGROUND

As a junior faculty member, the author prepared this reflection paper not only for presenting at the ICEduTech conference, but also for sketching an adventurous plan for the incoming teaching. Universities in Taiwan have changed rapidly for the past decade – with a decreasing local student population, universities looked for enrolling more international students. In order to recruit international students, as well as to help all students become globally competitive by exposing them to knowledge with diverse sources and perspectives, offering a certain number of undergraduate and graduate courses in English is necessary. This paper presents how the content and language integrated learning approach (CLIL) provides a framework to support such instructional design, discusses what local challenges faculty faces in classrooms, and proposes the strategies to enhance learning through students' active participation by uses of a wiki in a local CLIL classroom. Table 1 presents a summary of the key ideas.

Given to the institutions' goals of recruitment and students' needs for cognitive development, more and more university faculty members have started teaching in English, mostly as a foreign or the second language, but meanwhile facing a number of challenges. Common challenges include students' difficulties in understanding the content in English, lack of motivation or confidence to enroll in such courses, lack of active participation in discussions, and instructors' lack of support in re-designing instruction to reflect learning difficulties.

Fortunately, my university started introducing the CLIL approach to faculty by offering talks and workshops. CLIL, established in Europe for more than two decades, is "a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language." (Coyle, Hood, & Marsh, 2010 p.1)" My personal take-away from the one-week intensive workshop offered by an overseas Australian CLIL expert was the three pillars CLIL framework (i.e., content-related learning, language-related learning, and learning styles and skills). Given the good experience with CLIL, which offers instructional considerations for my future teaching in English, I really want to implement it in the local contexts, while some CLIL-related challenges are expected. In light of my research interest in technology

integration, a design to implement wiki-enhanced participatory learning is proposed to address challenges in local CLIL classrooms. The rationales for the design are explained, whereas the actual initial implementation is in an on-going process and the preliminary results will be shared at the presentation.

2. WIKI TO ENHANCE PARTICIPATION

2.1 The CLIL Approach

Responding to the need for instructional scaffolding, the CLIL framework, based on several learning theories, aims to offer faculty guidelines in regard to effective instruction. The learning theories related include Vygotsky's socio-cultural perspective of zone of proximal development, Bloom's taxonomy thinking skills for cognitive engagement, and Mohan's view of acquiring new areas of knowledge as acquiring new areas of language and meaning. In brief, the CLIL approach places an emphasis on content, communication, cognition, as well as culture in learning contexts (Coyle et al., 2010). Despite of the culture element to be interwoven in curriculum, the other three elements are compatible with the *three CLIL pillars* — *content, language, learning skills* — in supporting effective instruction. An example of key strategies for each includes:

2.1.1 Content-Related Learning

To help students become progressive in gaining new knowledge, skills, and understanding, the reading materials require instructors to carefully review, evaluate, select, annotate, and even recreate at the planning stage prior to classes.

2.1.2 Language-Related Learning/ Communication

Interaction through class participation is crucial in CLIL classrooms. Thus, the design of activities should create opportunities for learners to use the target language expressing and creating meanings. In this way, they will gain not only receptive competence (i.e. reading and listening), but also productive competence (i.e. speaking and writing).

2.1.3 Learning Skills/ Cognition

Formative assessment is critical to support development of cognition and learning skills (Coyle et al., 2010) due to the fact that individual students may present various kinds of evidences of learning at different points of time, allowing instructors to provide timely guidance. In CLIL classrooms, other assessment methods to foster the acquisition of learning skills include peer-assessment and self-assessment.

3. CHALLENGES IN LOCAL CONTEXTS

In addition to instructional strategies to guide practice, recent research investigates how CLIL supports students' competence development in both the content and the language areas. A number of empirical research found that students in CLIL classrooms gained in both flexible cognition, receptive linguistic competence (Dalton-Puffer, 2008) and motivation in learning (Burston & Kyprianou, 2009). From the language learning perspective, Lasagabaster and Sierra (2009) state, "Language is best learned in authentic situations and, if traditional FL [foreign language] learning is compared with good CLIL practice, the latter is clearly far ahead (p.13)" in respect to more meaningful opportunities to use the target language in authentic settings.

However, from the content learning perspective, it may be reasonable to question its disadvantages, such as lower student participation and less developed understanding in complex concepts, compared with content taught and learned in one's mother tongue. Here, I list the expected practical challenges when implementing CLIL in local settings (Taiwan), responding to the strategies discussed in the earlier section 2.1 respectively:

3.1 Neither Efficient nor Effective to Recreate Materials (Content Learning)

It could be inefficient and ineffective for instructors to re-create or annotate reading materials for every class given that the task itself is time-consuming and, most importantly, may not meet students' needs. For instance, local undergraduate or graduate classes consist of students with diverse cultural backgrounds and language skills: Although annotated or re-created considerate reading materials may help some students, native speakers and students competent in English do not rely on instructors' help with vocabulary. Meanwhile, re-created materials sometimes sacrifice professionalism in the original written language. Therefore not all students would find re-created materials suitable for learning.

3.2 Cultural Barrier and Lack of Confidence Hinder Class Participation (Language Learning)

While interaction is desired in CLIL settings, the traditional classroom culture of Taiwan (with a tendency of sit and listening) may hinder local students' active participation in activities. According to a recent survey study conducted by Fwu and Wang (2012), a large percentage of Taiwanese college students are unwilling to participate in discussion or asking questions in class. Students are shy and worried about "losing face," according to their study, in regular classroom settings. Not to say when using English, students, especially who have low confidence in their language skills, might hesitate to verbally express their thoughts.

3.3 Less Possible to Track Individuals' Learning Progress (Learning Skills/Cognition)

Although formative assessment plays a critical role in CLIL settings to collect evidences of learning and support personalized learning, to many instructors, this kind of assessments could be challenging. Compared to common practice of mid-term and final exams, or named summative assessments, formative assessments could be difficult for instructors who expect considerable time and effort to track individuals' progress throughout the process, especially for large classes.

4. WIKI STRATEGIES FOR ENHANCING PARTICIPATION IN LOCAL CLIL CLASSROOMS

This section presents an opportunity to meet the challenges of implementing CLIL in local classrooms by integrating *wikis* for enhancing students' participation in all the three aspects. Wikis, known for knowledge co-creation by massive online users on Wikipedia, offer features to support collaboration: from editing, viewing revision history, subscribing changes, to interacting with other contributors. In educational settings, wikis have been implemented for various tasks, including showcases, portfolios, group projects, and collaborative knowledge building. Research shows that students perceived wikis innovative and transformative because the process of collaboration and consensus building were supported via wikis in a timely, dynamic manner (Hemmi, Bayne, & Land, 2009; Rhoades, Friedel, & Morgan, 2009). With appropriate instructional scaffolding, wikis offer a potential to foster the collaborative, constructive, and customized learning environments to transform higher education and meet the challenges of the 21st century education (Lin, 2013). Thus, I will be discussing the ideas for integrating wikis to enhance such learning experiences with the CLIL approach in local classrooms:

How wikis may be used to enhance the CLIL approach and address challenges in local classrooms?

4.1 Invite *Students to Collaboratively Build* or *Customize Learning Materials* for CLIL on Wikis:

Although instructors' effort to re-create materials is desired for content-related learning, I propose that students should be actively involved in this process of customizing materials through collaboration on wikis.

- Instructors post weekly assigned readings to a class wiki, where all students have access to
- Students are invited to co-create the supplementary materials with their peers remotely prior to classes
- Examples of students' created supplementary materials may be, not limited to, content-obligatory vocabulary, content-compatible vocabulary, glossary, key ideas, relevant background knowledge, or discussion questions

The potential benefit of this approach is: by returning the learning responsibility to students, students can become aware of their individual needs and pursue their personal learning goals before attending classes. Individuals' needs and goals may involve several gaps to be identified and bridged in the progression of understanding, such as the gaps between what they are able to understand on their own without resources, with resources, and with peers and instructors' support in class. In brief, inviting students' active participation in customizing CLIL learning materials with their peers on wikis support students' learning in content, language, and meta-cognitive skills.

4.2 Recognize Students' Interests and Strengths from their Wiki Contributions and Integrate into Class Activities Accordingly when Appropriate to Develop Students' Confidence in Participation:

Because interaction is desired in CLIL classroom, helping students overcome the cultural barrier and gain confidence in class participation requires careful scaffolding.

- Students become familiar with content and language because they are expected to read and co-create supplementary materials on wikis prior to classes
- Instructors should spend some time browsing students' wiki contributions to get a sense of students' interests and strengths
- When possible, instructors may adjust class activities in a way that recognizes students' effort, values their input, and encourages individuals to share what they contributed on wikis in class
- Instructors provide a friendly environment, and many opportunities for students with all levels of language skills to interact with others to build positive experiences

Furthermore, to scaffold the culture change and promote active learning, instructors may help students link the importance of contributions on wikis to participation in class. For example, instructors can discuss with students how their knowledge building on wikis and brainstorming in class can help each other learn; or encourage reflecting on what they have learned from their peers and how they have contributed to their peers' learning.

4.3 Require Students to Document Evidences and Reflections on Wikis For Assessments

One possibility for instructors to conduct formative assessments in CLIL classrooms is to require students self-collect learning evidences, reflecting their own progression in language and content-related learning.

- Each student creates a personal wiki page on class wiki, and self-document online and off-line contributions (i.e., activity logs) on personal wiki pages
- Students update their wiki pages frequently and reflect on their own learning progress, if desired, at any time during the semester
- The personal wiki pages are available to instructors, peers, and the public
- Formative assessments: Instructors evaluate individuals' development in language and content competence at certain points of time based on the evidences presented, and provide feedback
- Peer feedback: Students are encouraged to browse others' personal pages and offer constructive feedback by using the discussion feature on wiki

In this way, students are given the opportunity to review their own learning progress over time, as well as to learn from observing peers' effort in learning. Instructors and peers may offer feedback in regard to students' personal development, quality of their contributions to the class, and strategies for language and content-related learning in a course. Therefore, on the one hand, individuals can frequently self-adjust or improve based on feedback during a semester. On the other hand, instructors may review individuals' learning evidences and customize activities to meet learning needs when needed.

5. CONCLUSION AND DISCUSSIONS

This paper presents a strategic plan of my own personal journey in adopting the CLIL approach: I briefly summarize my take-away from the CLIL workshop, explain the expected challenges when CLIL is implemented in local settings, and then to address the challenges, I propose wikis for increasing students' level of participation in a CLIL classroom (See Table 1).

Table 1. Goals, challenges, and wiki-enhanced participation strategies

CLIL Goals	Local challenges	Wiki-enhanced strategies	Examples
Content: Instructors evaluate, select, and recreate texts for learning to help understanding.	Due to students' diverse language skills, it may be inefficient and ineffective to have instructors recreate materials.	Have students collaboratively construct learning materials on wikis to support customized learning.	Students may co-construct list of glossary from readings, key ideas, or relevant background knowledge
Language: Active class participation is essential to develop receptive competence and productive competence.	Cultural barrier and inadequate language skills may hinder willingness to participate.	Recognize students' contributions on wiki, promote interest and confidence, and emphasize participation.	Quiet students may be encouraged to share their valuable contributions on wikis in class.
Formative assessments are desired. Peer assessment and self-assessment can also be helpful in CLIL.	Tracking individuals' progress over time may be challenging for instructors.	Require students document various evidences of learning on wiki, so formative, peer, and self-assessment can be conducted easily.	Individuals create a wiki page to document online and off-line contributions. Pages are available to instructors and peers, allowing assessment and feedback at different points of time.

I envision that learning in such a wiki-enhanced CLIL classroom, as proposed, requires students to transform their traditional (passive, isolated) learning approach to a collaborative, constructive, and self-directed one. I look forward to share the preliminary findings and personal reflection according to the initial implementation this semester at the conference presentation. Furthermore, as turning the CLIL theory into practice can be complex, it is still in an early adopting stage in Taiwan, further research discussion and implementation are desired. For example, future research on developing and refining the strategies is urgently needed, such as action research, case studies, and design-based research to collect empirical evidences in local contexts and to inform its theoretical basis. Other directions involving educational technologies, such as uses of mobile devices, to support personalized learning in CLIL contexts is also worth exploring as powerful tools to support students' learning in the 21st century.

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