

Design and Implementation of English-Medium Courses in Higher Education in Taiwan: A Qualitative Case Study

Yi-Ping Huang

National Chengchi University

yiphuang@nccu.edu.tw

Abstract

Although content-area courses adopting English-medium (EM) instruction have become more widespread in university-level settings in response to the internationalization of higher education (de Wit, 2002), many operate on the unspoken and inaccurate assumptions that all the students and teachers are capable of learning or teaching content in English (Erling & Hilgendorf, 2006a, 2006b). This paper aims to provide an in-depth understanding of how students, teachers, and administrators perceive the design, implementation, and effectiveness of EM curriculum through a qualitative case study on a university campus in Taiwan. Interviews with three administrators, four teachers, and twenty-four students were conducted. Data were reconstructed and analyzed based on Carspecken's (1996) reconstructive analysis. The findings showed great satisfaction with the socio-cultural aspects of content learning and enhanced English abilities but unanimous concerns over the discipline-specific knowledge and English abilities, rendering unsatisfactory feelings toward the proportional design of the immersion program with the implementation of the English-only policy. The paper, thus, calls for additional attention to EM curriculum design and implementation involving the joint efforts of language and content teachers. Pedagogical implications and directions for future research are also provided.

Key Words: English-medium instruction (EMI), internationalization of higher education, curriculum design

INTRODUCTION

In recent years, content-area courses adopting English-medium instruction (EMI) have become more widespread in university-level settings in response to the internationalization (de Wit, 2002) and marketization of higher education (Healey, 2008), rendering English a *lingua franca* for academia, communication, commerce, and technology (Evans & Morrison, 2011). Not surprisingly, universities in Taiwan have offered English-medium content courses (EMCCs) to enhance students' English proficiency, promote student and teacher mobility, and increase academic transaction (Ministry of Education, 2001), leading to the provision of EMCCs and study abroad opportunities—two popular mechanisms for internationalization (Sauvé, 2002). Studying abroad is important to improve knowledge of a second or foreign language (See Moreno-Lopez, Saenz-de-Tejada, & Smith, 2008; Sasaki, 2007), also mandating the offering of EMCCs.

Despite their popularity, the two internationalization mechanisms, EMCCs and study abroad opportunities, have been under-researched in Taiwan. Yet, they demand further examination since many EMCCs operate on the unspoken and inaccurate assumptions that all students and teachers are capable of learning or teaching content in English (explicitly addressed in Erling & Hilgendorf, 2006a, 2006b; implicitly addressed in Crawford Camiciottoli, 2010 for the necessity of EMCCs for studying abroad). In other words, despite students' positive attitudes toward taking EMCCs because of their recognition of English as an inevitable global communication mechanism, teachers hold a more reserved attitude (see Hudson, 2009; Yeh, 2009). Moreover, teachers (Hudson,

2009; Paseka, 2000) or students (Evans & Morrison, 2011; Hellekjær, 2009) might encounter difficulties when they lack experience teaching or learning content via English. Last, students might not perceive that content teachers (CTs) teach as effectively as they had anticipated (Vinke, Snippe, & Jochems, 1998). All in all, perspectives among students, teachers, and administrators might be in discord, necessitating the re-examination of the assumptions of EM curriculum designs.

Recognition of the importance of re-examining these assumptions in designing EM curriculum underscores the need for attention to three aspects: (1) to uncover the principles underlying EM curriculum designs; that is, what principles ground content courses with English as a medium of instruction (MoI)? Does the EM curriculum in Taiwan correspond to these principles?; (2) to know how EM courses are designed, implemented, and perceived by students, teachers, and administrators—a lens Kelly (2009) calls “totality” of understanding curriculum; (3) to redefine the role of EFL in the rapid growth of EM content courses; that is, in what ways might EFL contribute to the effective design and teaching of EM content courses?

This paper, thus, aims to provide an in-depth understanding of how students, teachers, and administrators perceive the design, implementation, and effectiveness of EM curriculum through a qualitative case study on a university campus in Taiwan characterized by its innovative EM curriculum for studying abroad. It illustrates the need for additional attention to EM curriculum design and implementation involving joint efforts of language and content teachers.

LITERATURE REVIEW

Perceptions of and Rationales for EMCCs

Teaching content courses by using English as a MoI has been promoted by governments or universities in response to the internationalization (de Wit, 2002) and marketization of higher education (Healey, 2008). Higher education policies, then, promote student mobility (Altbach & Knight, 2007) and national or institutional competitiveness through university rankings (Hazelkorn, 2009). The number of EMCCs offered in higher education has thus been proliferating in Expanding Circle countries, where English is not an official but common communication medium (Evans & Morrison, 2011). Likewise, the Ministry of Education in Taiwan has established several initiatives to internationalize higher education. Among them, the provision of EMCCs is justified for the necessity of equipping students with enhanced English (academic) proficiency, attracting international students (and scholars), and enabling students to study abroad (Ministry of Education, 2001). The top-down internationalization policies in Taiwan have been formulated to promote national, institutional, and personal competitiveness (political and economic reasons), as well as broaden citizens' horizons (socio-cultural and academic reasons) (see Chang, 2006).

EMCCs have been promoted not only by the government or universities but also well accepted by students (e.g., Hudson, 2009) but not necessarily teachers (e.g., Yeh, 2009). Students taking EMCCs in EFL settings are instrumentally motivated to learn discipline-specific content in English (Hudson, 2009). College students registering in EMCCs might be motivated to learn content in

English for enhanced English abilities (Paseka, 2000), for future work (Hudson, 2009) or for studying abroad (Huang, 2009). For example, Hudson (2009) found that the pre-service teachers in Malaysia expressed their interests in learning how to teach science in English because it could equip them to teach elementary students science in English in the future. However, not every teacher deems it necessary to learn content in English. Teachers might be concerned about the detrimental consequences if ineffective EMCCs are offered (Yeh, 2009).

Teaching and Learning Difficulties in EMCCs

Both teachers and students experienced difficulties in EMCCs. For example, non-native speaking English (NNSE) CTs might need more time to prepare to teach content in English (Paseka, 2000). Also, they might not assume the responsibility for, or have language awareness of, focusing on forms while teaching content in English (e.g., Snow, 1998). In particular, CTs might not understand what their students need (e.g., Snow, 1998; Srole, 1997; Teemant, Bernhardt, & Rodriguez-Munoz, 1997), that is, learners' needs for linguistic redundancy, accuracy, and flexibility (e.g., Evans & Morrison, 2011; Vinke et al., 1998), their fragile language ego and need for encouragement (e.g., Huang, 2009), and their needs for adjustment from learning English to learning content in English (e.g., Evans & Morrison, 2011; Hellekjær, 2009; Huang, 2009; Naoko & Naeko, 2006). These difficulties might result in CTs' frustration about facilitating students' learning in English, presumably because of their limited awareness of their own language; inadequate English

proficiency; limited understanding of students, curriculum, and pedagogy; or restricted time for preparation.

Likewise, students who study in EMCCs in university settings might encounter linguistic, affective, cultural, and social (adjustment) difficulties (e.g., Evans & Morrison, 2011; Hellekjær, 2009; Huang, 2009; Naoko & Naeko, 2006) in reading (Hellekjær, 2009), lecture (Crawford Camiciottoli, 2010; Mohamed & Banda, 2008; Mulligan & Kirkpatrick, 2000) and writing (Kırkgöz, 2009). With no EM content learning experiences in high school, students need to adjust to the new learning environment, rendering feelings of frustration about group discussion, process writing, or oral presentations (e.g., Evans & Morrison, 2011; Huang, 2009; Naoko & Naeko, 2006). They might have difficulties comprehending, let alone interpreting, taking notes, or summarizing content in English when instructors lecture with fast speed, heavy accents, specialized or idiomatic vocabulary, or about unfamiliar Western culture (see Crawford Camiciottoli, 2010; Evans & Morrison, 2011; Huang, 2009; Hudson, 2009; Mulligan & Kirkpatrick, 2000). With little practice in speaking, students might be unable to pose questions in lectures or articulate their opinions with respect to discipline-specific content (Hellekjær, 2009), and be unwilling to risk discussing in English for fear of losing face or under peer pressure (Huang, 2009). Essential to students' learning problems might be the lack of adequate vocabulary and "frame of reference," that is, "the ability to share meanings with authors of the texts on the topics of their specialist discipline to enable them to engage in discourse with the authors of the texts" (Kırkgöz, 2009, p. 84). Indeed, EFL students still experience difficulties while learning subject matter in English and so need a transferable English for Academic Purpose

(EAP) curriculum (e.g., Crawford Camiciottoli, 2010; Erling & Hilgendorf, 2006a, 2000b; Kırkgöz, 2009) as well as linguistic, conceptual, social, cultural, and academic assistance from teachers to facilitate their studies (e.g., Huang, 2011; Pawan, 2008).

Perceived Effectiveness of EMCCs

Research on the perceived effectiveness of EM content courses has primarily investigated students' perspectives rather than those of administrators or teachers. Research has shown that students perceived improvement in their English after taking EMCCs (Huang, 2009; Hudson, 2009). For example, Huang (2009) found that, aside from gaining independent thinking skills, open attitudes, and frames of references in the discipline, students claimed to have made progress in listening, increased their vocabulary, had greater confidence in communicating in English, and more interest in learning in English. They also gradually acculturated into an academic English environment where they became proactive learners.

Despite the perceived progress in language development, most concerns revolved around the learning of content. Presumably due to their limited English proficiency and incomprehensible input, students worried that they had not learned as much as they should have in EMCCs (Huang, 2009). Scholars have also argued that the limitations of L2 proficiency might hinder students' acquisition of abstract content (Duff, 1997; Evans & Morrison, 2011; Met, 1998; Met & Lorenz, 1997), and so the selection of proficiency-appropriate content and students whose English proficiency is above the threshold becomes important in making curriculum decisions. In order to facilitate students' academic literacy, teachers need to teach not only

general or subject-specific vocabulary (Bernier, 1997) or rhetorical or discursive features in the target disciplines (Kol, 2002; Short, 1997; Srole, 1997), but also academic conventions and tasks so that students can convey content appropriately in academia (Huang, 2011; Kirkgöz, 2009; Lea & Street, 2006).

Principles of Curriculum Designs for Teaching Content in English

Recognition of the mistaken assumptions pinpointed the importance of understanding the principles underlying curriculum designs for teaching content in English. First, there should be a minimum proficiency level to guarantee effective EM content courses (e.g., Erling & Hilgendorf, 2006a, 2000b) since the limitations of L2 proficiency might hinder students' acquisition of content (e.g., Duff, 1997; Evans & Morrison, 2011; Met, 1998; Met & Lorenz, 1997), thus making it imperative for CTs to obtain more than disciplinary or pedagogical knowledge but more importantly pedagogical content knowledge and language awareness to become effective teachers (e.g., Huang, 2011; Pawan, 2008). In particular, CTs need to provide adequate linguistic, conceptual, social, cultural, and academic assistance (Huang, 2011; Pawan, 2008; also see Snow & Brinton, 1997). What counts is not which language becomes the MoI, but the ways through which teachers facilitate students learning via the L2 (e.g., Kyeyune, 2003; Wannagat, 2007).

Because students might not have adequate language proficiency or academic training to learn content in English, it is necessary to offer EAP courses (Erling & Hilgendorf, 2006a, 2000b; Owens, 2002) to acculturate students into specific disciplines and enhance their

academic abilities. Recognition of the importance of learning both content and language necessitates the use of Content-Based Instruction (CBI) since it aims to promote both content and language learning with an emphasis on cooperation across disciplines (especially by language and content teachers). CBI curriculum models vary according to the ends of instruction (Met, 1998; Stoller, 2004). Which model should be adopted depends on where EM content courses are implemented.

Preservice and inservice professional workshops should be provided in response to teaching difficulties (e.g., Feryok, 2008; Peterson, 1997; Snow, 1998; Stewart, Sagliano, & Sagliano, 2002), and cooperation across the curriculum should be promoted (e.g., Stewart et al., 2002). Stewart et al. (2002) emphasize the importance of mentoring new teachers in pre-service and on-going professional development workshops with a particular focus on introducing CBI and promoting cooperative or team-teaching. Additionally, Feryok (2008) proposes a task-based training in TESOL for content teachers in order to increase their language awareness. Indeed, professional development for raising CTs' language awareness is required for CTs to provide the necessary assistance.

The necessity of promoting cooperation across the curriculum and promoting faculty development demands a supportive administration, flexible schedule, and decreased teaching load (Erling & Hilgendorf, 2006a, 2006b; Paseka, 2000). Since CTs might require more time to prepare for teaching in the L2 than in the L1 and since they require additional time for professional development and coordination with language teachers, flexibility is required in designing the curriculum, developing materials, and sharing resources.

Paseka (2000) even calls for the redesign of the original curriculum to provide adequate support to teachers.

CONCEPTUAL FRAMEWORK

Most research on EM content courses has examined the perspectives of either students or teachers. The “totality,” or wholeness, of examining the curriculum (Kelly, 2009) becomes necessary because research has shown a discrepancy between teachers’ and students’ expectations of learning content in English (e.g., Paseka, 2000), and perceptions of the effectiveness of the EMCCs (e.g., Vinke et al., 1998). These mismatches foreground the necessity of examining the EM curriculum design in higher education from multiple perspectives. As Kelly (2009, p. 12) argues, “Curriculum Studies must ultimately be concerned with [the] relationship between these two views of the curriculum, between intention and reality, and, indeed, with closing the gap between them, if it is to succeed in linking the theory and the practice of the curriculum” (Stenhouse, 1975). In other words, multiple lenses can provide curriculum designers a window through which policy makers, teachers, and students can collaborate to create a more conducive learning environment. To achieve these goals, this study includes perspectives from administrators, teachers, and students.

METHODS

Participants and Context

A qualitative case study was employed to “investigate a contemporary phenomenon in depth and within its real-life context” (Yin, 2009, p. 18). Using purposive sampling (Patton, 2002), this study was conducted at a private Taiwanese university that has adopted two popular mechanisms to promote internationalization on the new campus since 2005: EMCCs and Junior Year Abroad. Ninety percent of the curricula on the new campus is taught in English, except for such general courses as Chinese, PE, and service learning. EMCCs are designed as scaffolding for juniors to study abroad in sister schools all over the world. Students should take the TOEFL or the IELTS to demonstrate the minimum language proficiency necessary to take content courses while studying abroad. However, the “minimum” proficiency depends on each school’s policy for language requirements. Students who fail to meet the criteria prior to studying abroad should take language courses while studying abroad, during which time they can re-take the tests to prove they have the skills necessary to succeed. After demonstrating this minimum proficiency, these students can take content courses in the second semester. Students’ language skills thus result in three types of possible courses students may take while studying abroad: content courses (taking discipline-specific courses), language courses (taking courses in intensive English programs), and half-language-and-half-content courses (spending one semester taking language courses and the other content courses).

The new campus houses four interdisciplinary undergraduate programs, one of which was chosen to be the focus of this study because of the researcher's familiarity with the discipline. A total of three administrators, four teachers, and twenty-four students (five freshmen, five sophomores, six juniors, and eight seniors) were recruited. Administrators were chosen based on their familiarity with the policies. Four teachers in the target program were selected because of their willingness to participate. Table 1 shows teachers' teaching experiences, confidence in teaching content in English, and

Table 1
Teacher Participants' Information

	Gender	Length of Teaching Experience	Expertise	Teaching Experiences	Language Teaching Training	Self-Perception of Confidence in Teaching via English
T1	Female	< 5 years Novice	Language	English courses in universities EM ^a courses	No	No
T2	Female	< 5 years Novice	Culture	Content courses in universities CM ^b courses	No	Yes
T3	Male	< 5 years Novice	Culture	Tutoring in Germany EM, CM, & GM ^c courses	No	Yes
T4	Male	> 20 years Experienced	Culture	Content courses in universities Most: CM courses Few: EM courses	No	No

Note. ^aEM: English-medium courses. ^bCM: Chinese-medium courses. ^cGM: German-medium courses.

previous training in (language) teaching. As the table demonstrates, most teachers were novice in terms of teaching content in English and received no previous training in language teaching. T2 (a female Taiwanese teacher) and T4 (a male Taiwanese teacher) earned doctoral degrees in the U.S., T1 (a female Taiwanese teacher) got her doctorate in France, and T3 (a German male teacher) earned his both in Germany and in Taiwan.

Table 2 and Table 3 indicate the demographics of the student participants. All the students received above Level 9 in the General Test in English or the Required Test in English. The freshmen and sophomores were recruited based on their English proficiency levels, willingness to participate, and gender, while the juniors and seniors were chosen based on the three types of courses they took while studying abroad,¹ as well as whether they transferred to another school or campus.

Data Collection

Data were collected from two sources: (1) documents (e.g., syllabi, autobiographies, and regulations related to EM practice) and (2) individual semi-structured interviews. Following Carspecken's (1996) guidelines on interviews, a two-hour, semi-structured interview was held with each participant in the 2008 academic year.²

¹ The three types of courses juniors and seniors took reflected three levels of English proficiency. But J6, despite meeting the minimum requirement of taking content courses, chose to take language courses prior to content courses in the Junior Year Abroad because of his insecure feelings about his academic English abilities.

² Some juniors were unavailable for interviews in the 2008 academic year. These students were interviewed in the 2009 academic year.

Table 2
Student Participants' Information (Freshman & Sophomore)

	Gender	Length of Time Learning English	English Proficiency
Freshman			
F1	Female	10 years	Level 13
F2	Female	10 years	Level 15
F3	Female	5 years	Level 13
F4	Female	6 or 7 years	Unknown
F5	Male	8 years	Level 10
Sophomore			
S1	Female	10 years	Level 9
S2	Female	> 10 years	Level 12-13 & IELTS 5
S3	Female	6 or 7 years	Level 13-14 & IELTS 5
S4	Male	6 or 7 years	Level 9 & TOEFL 37
S5	Male	> 10 years	Level 12-13 & TOEFL 46

Note. English proficiency refers to the level or scores based on the General Learning Test in English or the Required English Test.

These interviews were conducted in person or via Skype, depending on the students' accessibility.³ The purpose of the initial interview was to collect participants' learning- or teaching-history materials and their perceptions of the EM curriculum design, implementation, and effectiveness. In particular, the interviews for administrators aimed to understand the purpose, origin, design, implementation, and perceived effectiveness of the EM content courses and the Junior Year Abroad; those for teachers purported to understand teachers' perceptions of the rationales for EMCCs and the Junior Year Abroad, as well as their curriculum planning, instruction, teaching difficulties, and perceived effectiveness; those for freshman and sophomore participants focused

³ A few junior students were interviewed via Skype because they were abroad.

Table 3
Student Participants' Information (Junior & Senior)

Name	Gender	Length of Time Learning English	English Proficiency	Junior Abroad
Junior				
J1	Female	13 years	IELTS 6.0	Czech Republic Content Courses
J2	Female	10 years	IELTS 6.5	Australia Content Courses
J3	Female	10 years	TOEFL 31	U.S.A. Language Courses
J4	Female	12 years	TOEFL 35	U.S.A. Language Courses
J5	Female	12 to 13 years	Level 10-12	Transfer Student
J6	Male	10 years	IELTS 6.0	Canada Language and Content Courses
Senior				
Se1	Female	12 years	TOEFL 49	U.S.A. Language and Content Courses
Se2	Female	12 years	TOEFL 61 (2nd time)	U.S.A. Language and Content Courses
Se3	Female	11 years	Unknown	U.S.A. Language and Content Courses
Se4	Female	13 years	TOEFL 77	U.S.A. Content Courses
Se5	Female	11 years	TOEFL 81-82	U.S.A. Content Courses
Se6	Female	11 years	TOEFL 53	U.S.A. Languages Courses
Se7	Male	10 years	TOEFL 64 (2nd time)	U.S.A. Language and Content Courses
Se8	Female	13 to 14 years	Unknown	Transfer Student

on their perceptions of the EM course designs, teachers' instruction, and their learning difficulties. Questions related to the study abroad experience and the change of perception of the EM curriculum after the Junior Year Abroad were posed to junior and senior participants. Questions for transfer students aimed to understand their learning experiences and the reasons why they transferred to another university or campus. A second interview was held with each teacher and student participant.⁴ The purpose of this second interview was to supplement the previous analyses and to provide consistency checks. All of the interviews were conducted in Chinese in order to gain richer data.⁵ These interviews were tape-recorded, transcribed, and coded, unless the participants indicated otherwise.

Data Analysis

Adopting Carspecken's (1996) reconstructive analysis, discursive data were reconstructed to uncover the underlying assumptions and classified based on the conceptual framework and common topics; initial codes included the goals of the internationalization of the curriculum, the rationales for EM content courses and the Junior Year Abroad, EM curriculum designs, perceived effectiveness of EM curriculum designs and instruction, teachers' instruction, teaching difficulties and solutions, learning difficulties and solutions, factors impacting the EM curriculum design and implementation, and so forth. Administrators', teachers', and students' codes were compared within each individual, then case by

⁴ Transfer students were interviewed only once.

⁵ Even though T3 is German, he has a high proficiency level of Chinese, since his expertise is in Chinese philosophy and has lived in Taiwan for more than ten years.

case within each domain, and last across domains. The identified codes were then organized, compared, and contrasted with the literature as the fieldwork proceeded. After the recursive coding and comparison, a few common themes emerged. These themes were then organized and compared with the literature as the fieldwork proceeded.

During the analysis process, peer debriefs and triangulation were used for validation. Note that the quotes used in this article were the verbatim translation from Chinese, whose content was re-checked by a bilingual peer reviewer and language by a native speaker of English. Also, the researcher was a colleague in the university studied in this research, so she held an emic perspective to participants' viewpoints, enhancing the validity of the current research. Since the researcher might also be the instructor to some of the student participants, student participants were all interviewed by student assistants who received qualitative interview training before interviews were conducted to ward off ethical issues.

RESULTS

Rationales for Teaching Content Through the Medium of English

Shared educational dreams. EMCCs function as a means of national, institutional, and personal competitiveness (economic and political reasons) (e.g., Healey, 2008; Mulligan & Kirkpatrick, 2000) and to develop the cultivation of global citizens (socio-cultural and academic reasons) (Chang, 2006). In this study, all the participants articulated that 90% of the curriculum on campus was taught in English, which was deemed as a prerequisite for studying abroad. As

T2 expressed, “Because the Junior Year Abroad is enforced, students need to get accustomed to the English-only environment abroad, students need to have an environment in which English is used, (which is why EMCCs are offered).” Through these internationalization mechanisms, all the participants hoped that students could become mature and independent citizens with a global view, critical thinking abilities, multicultural awareness, and better language proficiency after they studied abroad. As A1 argues,

Why should students study abroad?... First, they study abroad in order to improve their language abilities. Language-it’s still faster to learn English in the U.S. than in Taiwan.... Aside from language learning, students need to learn and acculturate into others’ cultures.... Students, after studying abroad, will also grow up, which is important, meaning that they know culture as well as themselves.... They know that no one will take care of themselves so they need to become independent. So, when students return, they become more mature.... They become more mature and know themselves better, which is an important change in their lives and also very important goals of internationalization....

The psychologist Arnett (2002, p. 277) believes “Most people in the world now develop a *bicultural identity*, in which part of their identity is rooted in their local culture while another part stems from an awareness of their relation to the global culture,” and Graddol (2004, p. 1330) asserts that a “major impact [of English] will be in creating new generations of bilingual and multilingual speakers across the world.” A1 argues for the importance of developing a bilingual and bicultural identity through which one can become more open-minded,

mature, and independent through studying abroad. This kind of promotion is rooted in the ethnic culture (Flowerdew & Miller, 1995; Mulligan & Kirkpatrick, 2000) in which Chinese schools and parents, impacted by Confucianism, might emphasize obedience and protection rather than independence or risk-taking. The enhanced language and socio-cultural awareness, hopefully, results in increased individual competitiveness, thus boosting institutional and, eventually, national competitiveness.

Dissonance in academic goals or reasons. Despite the consensus on socio-cultural and economic aims, the participants differed in their understanding of academic goals for offering EMCCs. Though administrators emphasized that the innovative program aimed to increase students' abilities to participate in professional fields via English, teachers worried about the overemphasis of getting good TOEFL/IELTS scores, and most students, especially freshmen and sophomores, focused on general English abilities rather than the ability to communicate discipline-specific content in English. As A2 argues,

The most important thing is not about speaking English well or not; rather, ... it's [English] a tool. Using English as a tool to discuss disciplinary content. so... on this campus we focus not on learning English ... but to learn disciplinary content through English for English is simply a tool.... So my goal is not about whether or not students can speak English like native speakers, since English is a L2. But at least we can be confident enough to express in English in regard to a specific discipline.... So English-medium content courses and degrees are offered. With an additional incentive-study abroad. In fact, these two years are in preparation for Junior Year Abroad.

Although administrators emphasized the importance of learning professional content in English, more emphasis was on developing English courses to help students get above 61 on the TOEFL or 4.5 on the IELTS, so they could take content courses while studying abroad. In order to do so, the campus offered (1) four, two-credit required courses, including “Writing,” “Reading,” “Oral Communication,” and “TOEFL/IELTS” and (2) additional or optional cram-school-like TOEFL/IELTS intensive classes. For the former, all the English teachers would incorporate how to prepare for the TOEFL in the above mentioned skills. For the latter, the students could also choose to take (and pay for) intensive TOEFL/IELTS classes at night. These courses were typically taught by a cram school teacher recruited by the school.

Also, not all teachers understood why teaching subject matter in English could increase students’ academic abilities in English, and thus increase the number of students who take content courses while studying abroad. As T2 expressed,

If our goal is to enable ALL the students to take content courses while studying abroad, then English-medium instruction is our means, or one of our approaches. But if our goal is to offer English-medium content courses, rather than worrying about whether students can take content courses while studying abroad, then we should insist that students learn professional content all in English. So they can have this kind of (academic) English abilities for future work. For me, these are two different things, and the differences require different means.

T2's confusion about whether EM content courses functioned as a means or an end reflected a teaching dilemma in which more efforts were required to put in teaching test-taking skills or general English, rather than offering EMCCs, when the program aimed to increase the number of students who could take content courses while studying abroad. The offering of EMCCs, for her, could not necessarily guarantee students good TOEFL/IELTS scores, but it could enhance students' abilities to communicate professional content in English. The overemphasis on the former worries many teachers that internationalization might promote the idolization of English and that of countries where it is the native language. The dissonance between teachers and administrators might reflect their differences in their roles of an educator focusing on the provision of optimal learning environments and a policy implementer focusing on successful marketization.

In summary, all the participants shared the same educational dream at the socio-cultural and economically competitive level, rather than at the academic level, where administrators focused more on students' academic abilities in English, while students felt diffident, and teachers were confused about students' learning of professional knowledge in English.

Curriculum Design of EMCCs

Administrators' perspectives. Although research indicates that immersion programs are suitable when students have intermediate to advanced levels of English proficiency (e.g., Wesche, 1993), the target university with diverse student English proficiency levels still adopted an immersion program where students were proportionally

mainstreamed into English-only courses. Administrators emphasized that all discipline-specific content can, and should, be taught in English and that only general courses can be taught in Chinese. By so doing, they aimed to have a proportional design of EM immersion programs where freshmen, taking half of their courses in English, could adjust to the new EM learning environment, since high school training, mostly conducted in Chinese, might not facilitate their university learning of content in English (e.g., Hellekjær, 2009; Naoko & Naoko, 2006).

Recognition of students' lack of adequate proficiency levels led to the offering of remedial courses taught in Chinese. In the beginning, one credit-bearing course to each three-credit content course was offered for one year. In the remedial courses, CTs could teach content or administer exams in Chinese, depending on students' needs. Yet these courses were cancelled because administrators observed that these courses were not effective since some CTs simply required assistants to administer tests. When adequate teaching grants permitted, non-credit, evening, remedial courses were offered with an aim to enable students to relearn content in Chinese.

Teachers' and students' perspectives. Despite administrators' insistence in teaching only in English, teacher and student participants did not think all content should be taught in English. The proportional design of the immersion program was problematic because it did not differentiate the difficulty of subject matter in a learnable order (based on the analysis of genres and linguistic structures), rendering both students and teachers frustrated. Even with limited language awareness, most student and teacher participants agreed, "Some content is too abstract to understand in Chinese, let alone in English."

For instance, freshmen took “An Introduction to Philosophy” course taught in English, which is deemed as difficult as studies in social science or mathematics (e.g., Kol, 2002; Snow & Brinton, 1997).

Premising that linked with culture, teachers and students argued that the L2 language courses, such as German and French, or courses related to local culture, such as Chinese philosophy, should be taught in English. Additionally, students tended to resist learning content which disinterested or challenged them. These courses were often offered in other professional fields, such as computers and economics. Student resistance suggests that learners, without adequate L2 proficiency, proficiency-appropriate design, or suitable scaffolding, might have difficulties transferring academic abilities across discourse communities or genres (Kırkgöz, 2009; Lea & Street, 2006).

Could remedial courses help? It depends. Teachers explained that students might be too busy to attend free evening remedial courses, especially those unmotivated students, while students participants expressed that remedial courses might be effective when teachers could provide effective instruction, such as re-explaining the concepts in Chinese, inviting students to pose questions, and discussing exam questions. As S_{e1} expressed,

Toward the end of the freshman year, ... I started to skip classes, because I didn't want to attend.... In the daytime, we learned content in English, and the graduate assistants would simply ask you what you did not know so that s/he could re-explain in the evening. But when I couldn't comprehend the instructor's lecture in English, how could I articulate what I don't know? ... But I really like one of the remedial courses because the students who flunked the test got a chance to re-discuss it with the instructor and

classmates and then we could have the make-up test.... Since my reading abilities were not good, I might not interpret reading materials accurately, so getting a chance to discuss it with the instructor to ascertain my interpretation was beneficial. So for me, I would enjoy the remedial courses when the instructor was effective, but suffer when s/he was ineffective.

How effective a remedial course is then depends on the interaction between students and teachers, as well as teachers' mode of instruction.

In summary, the immersion program with remedial courses might not be suitable for students with inadequate English proficiency and teachers with limited language awareness, requiring the reconsideration of (1) an alternative approach to the curriculum design and (2) providing preservice or on-going professional development for CTs. The design of EM content courses should also consider the cognitive demands of linguistic and genre structures.

Curriculum Implementation

Administrative perspectives: English-only policy. The English-only or monolingual policy has been implemented yet debated on this new campus. Like Phillipson (1992), administrators, as the implementers of a school policy, adopted rationales (ideas), incentives (carrots), and monitoring (sticks) to enforce the monolingual policy. For incentives, a reward system was designed to enable teachers to get tenure or promotion; for monitoring, teachers' EM content courses were checked randomly; they were required to write a report on why they code-switched, if they were found using Chinese. Administrators also reasoned the importance of the monolingual policy. According to

A2, the enforcement of a policy was a part of the organizational culture of the target university, given that the bureaucratic model was designed for administrators and the professional (peer) model for teachers. As an implementer, A2 insisted in the full execution of the English-only policy, which, he believed, was also beneficial for students since the students expressed their appreciation after their participation in the Junior Year Abroad. He also believed that the quality of education did not lie in the medium of instruction but in students' hard work and perseverance.

Teacher and student perspectives: Code-switching. The teachers could understand the administrators' intent that without strict implementation, students might not be proactive to learn as much English as possible. Administrators further maintained that students would gradually become accustomed to the EM learning environment. Yet teachers still felt uncomfortable and disrespected since they desired more professional freedom to determine (1) which subject matter was suitable to be taught in English and/or (2) the timing when they could switch to Chinese for better understanding. In other words, teachers did not view themselves as simply the implementers of a school policy but "curriculum developers" (Shawer, 2010) who design curriculum adapted to students' characteristics.

The monolingual policy was challenged. Except for the international teacher, most teachers lacked confidence in their abilities to teach content in English, attributable to their lack of English proficiency or language awareness. Hence, the insufficient competency might overload teachers and, worse, hinder student-teacher relationships. Complicating the lack of effective instruction

was students' limited proficiency, rendering teachers' hope for, or sometimes use of, code-switching. As T1 expressed,

It's really stressful for teachers. Even if teachers' English is good, students might not be able to understand. Besides, I haven't spoken English for a long time, and for so many years, I have been reading literature, which is different from our daily conversation. So students might not understand my English because I didn't teach using conversation-like vocabulary. The first year of my teaching I used academic English. Without general English, I was unable to joke with students.

Because of the concerns about students' content learning, many teachers, like T1, hoped that they could code-switch when necessary. Chinese, then, is viewed as a means to facilitate, rather than hinder, students' content learning. Teachers sometimes would code-switch when explaining difficult (discipline-specific) terms, summarizing important points, making important announcements, joking with students, or having individual conferences, as evident in Evans and Morrison's (2011) study. Or they might provide the Chinese-translation or Chinese-supplementary materials in order to provide linguistic assistance and display important examples related to the local cultures.

Except for the international teacher, teachers expressed the necessity of code-switching as a type of scaffolding. Some even proposed to teach proportionally in English in one course; that is, teaching half of a course in English and half in Chinese to freshman and gradually increasing the use of English, climaxing in the Junior

Year Abroad. This approach was rejected by the international teacher⁶ because he viewed code-switching as interference.

Like teacher participants, student participants, especially those with low English proficiency, hoped that teachers could, and should, have the professional freedom to code-switch as necessary. As Se1 expressed, she gave up learning Economics after the instructor taught in English:

That is wrong. I think it's completely wrong [if teachers teach in English simply because they need to], which is detrimental, I believe, for both students and teachers. It [whether or not teachers should co-switch] should be flexible. Like many general courses- I took Economics, and for me, it was really difficult.... The instructor switched to teach some in Chinese when he observed that students could not understand. ... but he switched back to teach all in English because he got a warning.... So the first two weeks [when Chinese was also used] I could understand [the lecture], but it was more and more difficult as time proceeded, so eventually I gave up!

For students, Chinese is also viewed as a type of linguistic assistance and so some students, like teachers, also proposed a proportional design of a course—using half English and half Chinese in the freshman year to help them cope with the listening, reading, and speaking difficulties. Yet, as administrators observed, the juniors and seniors became more appreciative of the monolingual policy after they studied abroad because they could “understand what was once deemed unnecessary (whole English or heavy workload) or

⁶ This teacher is multilingual for he can speak German, English, and Chinese.

incomprehensible (course content)” (Huang, 2009). All in all, the monolingual policy is a subject of debate among students, teachers, and administrators.

Perceived Effectiveness and Experiences of Teaching Content through English?

Administrative perspectives. The administrators were satisfied with the socio-cultural but not academic aspect of content learning; in other words, students became bilingual and bicultural citizens with maturity, independence, cultural sensitivity, and global views especially after they studied abroad (socio-cultural aspect). Yet the fact that students were still unable to communicate professional content fluently in English and that not all the students were able to take content courses while studying abroad disappointed the administrators (academic aspect). The dissatisfaction might be attributed to the lack of sufficient funding. As A2 expressed,

I can guarantee this [English-medium program] is promising in the market... if the Ministry of Education could allow us to increase the tuition fees five times.... I want to make it [this school] resemble an elite school.... If the tuition were five times more expensive, we could recruit enough students. Then, we could double the instructors' pay.... and I could be more certain that more capable students would come.... More capable students would study here, and I could establish a small elite school.... In the long run, it can become truly international, also attracting foreigners. Then teaching all in English won't be difficult.

Impacted by marketization, universities tend to introduce “market-based salaries, merit/performance pay and attractive packages to be used to reward and woo high-achieving scholars” (Hazelkorn, 2009, p. 9). Yet the target university might not be able to do so without a sufficient budget so the administrator participants expressed the dream of being able to recruit, train, and retain more capable instructors (given the economically peripheral status of Taiwan) and to recruit students with higher levels of proficiency (given students’ and parents’ preoccupations with university rankings) that would be made possible with increased financial support. Regarding student and teacher factors, many mechanisms were then proposed for improvement, including recruiting more well-informed teachers with the willingness to teach content in English, recruiting students with higher levels of English proficiency, stratifying students according to their English proficiency so homogeneous groups of students could be taught in English courses, and the continuing enforcement of the monolingual policy.

Teacher perspectives. Like administrators, teachers observed students’ improvement in cultural awareness, maturity, and attitudes to learning (more serious, proactive, and diligent). As T1 expressed,

Everyone returning from Junior Year Abroad has become more mature.... I think students’ attitudes have become different in terms of talking with the instructors and learning. Before they studied abroad, they didn’t respect teachers and would skip classes simply because they couldn’t get up, but they came earlier when they were seniors.... So I think apart from English, they improved a lot.

In other words, teachers were satisfied with students' performance in both academic and socio-cultural aspects as a result of participation in study abroad. Yet they did not think seniors had improved a lot in terms of general English abilities, except that they became more confident in expressing themselves in English after studying abroad.

Despite their satisfaction with the study abroad program, teachers voiced unanimous concerns over the amount and the depth of the discipline-content students learned. As T3 expressed, "I could teach only one-fourth of what I had planned and could not teach in as much detail as I had planned, since the articles were too difficult and students' English proficiency was too low." Teachers attributed the lack of effectiveness of teaching content in English to students' low English proficiency, lack of hard work or interest, and classes with mixed levels of proficiency, demanding the use of fewer materials, simpler concepts, more examples, paraphrasing, summary and audiovisual support, and limited discussion/interaction. The problem of low and mixed proficiency levels of students might hinder not only students' understanding of content but also their class participation particularly when it comes to group presentations and discussions. As T1 expressed,

I only know that group oral presentation has always been an interesting and effective way of learning. But I didn't know that how well students could make an oral presentation in English might impact how well student audience could comprehend.

In other words, students with poor English abilities might not give accurate and fluent presentations in English, preventing student

audiences from completely understanding the content and compelling the instructors to re-explain important material after their presentations.

Worse, affective and/or sociocultural factors also came into play. Students with fragile language egos might not risk losing face discussing or interacting in English. The lack of risk-taking might be impacted by the emphasis of collective culture on harmony, hard work, and respect for teachers/the elderly, as evident in the previous literature (e.g., Evans & Morrison, 2011; Huang, 2009; Scollon & Scollon, 1995). As T3 expressed,

Some students expressed that they wanted to participate [in class] but dare not do so because of their lack of language proficiency. They have been learning hard, but still wouldn't be able to participate.... I think it should be not getting used to it... because so far I still think that teachers in Taiwan tend to offer lecture rather than discussion. They haven't got used to interacting with the elders [teachers]....

Even when students with higher levels of English proficiency tended to interact with the instructor, they gradually stopped raising questions or answering the instructor's questions because of peer pressure. Worse, freshmen or sophomores tended to be silent when seniors were present, leading to the domination of teacher talk or interaction between the instructor and seniors or the instructor and the students with high English proficiency.

Student perspectives. Many students, especially those with low proficiency levels, reported such learning difficulties as incomprehensible lectures and readings because of teacher accent and

unfamiliar vocabulary or concepts, ineffective learning strategies (e.g., looking up all the new words), and an overwhelming study load. When they began to learn content in English in universities, they might not have sufficient training in high school, as evident in the previous research (Hellekjær, 2009; Naoko & Naeko, 2006). Yet, they all became accustomed to the EMI environment after one-semester/year of teaching, and those who transferred, despite their complaints and worries about the incomprehensible input in English, transferred because they expressed no interest in the target discipline or they were concerned with the underdeveloped system of the new campus. All who stayed, especially those with low proficiency levels, emphasized their improvement in general English abilities, including the cognitive aspect (receptive skills, productive abilities, and enlarged discipline-specific vocabulary), affective aspect (increased confidence and interest in learning English), and rhetorical or discursive awareness (knowledge of academic writing and presentation in disciplines) (see also Huang, 2009). Their improvement might be attributed to the increased exposure to English input and explicit instruction. As J6 expressed,

I think I have improved a lot in terms of listening. As to speaking, because of “English Oral Communication,” the instructor forced us to speak in English. So if you really want to improve speaking- [you would really need to have the opportunities to speak,] but since I am in Taiwan, [I would think] why I should speak English—a kind of resistance not to speak. But it really makes a difference after being trained how to speak in English!

These students reported more satisfaction after the junior study experience because it equipped students with cross-cultural knowledge, problem-solving abilities, reflective self-understanding, broadened horizons, study habits, and the acquisition of academic content, in addition to enhanced English abilities. Although learners with low proficiency levels encountered many learning difficulties, such as discipline-specific terms, idiomatic words and words with cultural connotations, incomprehensible lectures, and opportunities requiring speaking at the beginning of the study abroad experience, sojourn journey, they gradually got accustomed to the new Western learning environment and they would preview texts, do homework, and pose questions. Many reported improvement in the cognitive aspect (listening, speaking, and discipline-specific vocabulary), affective aspect (increased confidence and interest in learning via English), and rhetorical or discursive awareness (knowledge of academic writing and presentation in disciplines, when students had not learned it in Taiwan). As Se3 said, “My listening abilities have improved. I am more able to understand what the instructor said in lecture in the senior year,” or as Se8 said, “I think my comprehension abilities have been improved. It [Junior Year Abroad] definitely helps!” As Se1 said, “I think the biggest harvest is my enhanced English ability. And I am more assertive about myself. I know that I am no longer a diffident child with poor English.... In the past I always turned off the English websites but now I am able to surf the website even the medium is in English. So I think [to improve] English [abilities] is to help myself.”

Unsurprisingly, juniors and seniors expressed positive attitudes toward their English abilities particularly after the study abroad

experience, in accord with other research (Crawford Camiciottoli, 2010; Moreno-Lopez et al., 2008; Sasaki, 2007) and thus viewed EMCCs as a necessary scaffolding for the Junior Year Abroad, suggesting the necessity of explicit instruction before studying abroad (Crawford Camiciottoli, 2010). In retrospect, students specifically valued the teaching of English writing conventions, academic oral presentations, and the open attitude to a foreign environment. Also, they needed to learn effective learning strategies. As Se3 said, “It’s terrifying! [It’s like] Americans speak.... I am a bit afraid. ... Maybe later on I’ve become familiar with the instructor. I think the tip is to preview and review while studying there, and everything is fine.” The results, thus, suggest that effective strategies (e.g., Evans & Morrison, 2011), rhetorical or discursive features in the target disciplines (Kol, 2002; Short, 1997; Srole, 1997) and academic conventions (Kırkgöz, 2009; Lea & Street, 2006) should be taught in transferable and discipline-specific EAP courses. Indeed, it is the enhanced English abilities that are viewed as a plus for future work, rather than the enhanced academic abilities in English.

Despite the improvement in general English abilities, students did not seem to demonstrate the confidence in communicating professional content via English. As Se4 said, “I have improved a lot in English abilities, but not my professional abilities.” Students attributed their ineffective learning outcomes to the interplay of many factors, teacher, student, administration, affective, and socio-cultural factors. Teacher factors refer to teachers’ lack of English abilities or effective instructional skills. As Se4 complained, “I think it’s because of the ineffective instruction. Considering teaching content in English, the instructor doesn’t have adequate language proficiency and

expresses in a way poorer than us so we don't understand what s/he wants to express. ... So we don't understand the lecture." Student factors refer to students' lack of diligence, English abilities or study skills. As Se1 expressed, "I think learning depends on ourselves! So even if you cannot understand what the instructor lectures, you can still consult the textbook," or as S5 expressed, "We are not native speakers of English so we might understand 80% of the lecture if it's conducted in Chinese, but probably only 50% if it's in English." Content factors refer to students' lack of interest or abilities in content learning, as evident when students sighed, "I am not interested in that subject" or "Taiwanese culture doesn't need to be taught in English." The administration factor refers to the rigid implementation of the English-only policy. As Se1 expressed,

Actually when I became senior, I could understand the school's good intention, but I can only say that many policies are well intended, ... but the school shouldn't hope the instructor could teach all in English without any flexibility for teachers to code-switch ... because the students might not be proficient enough for understanding the difficult subject such as economics, so I think the policy should be more flexible.

Even when students returned from abroad, they still felt diffident in their learning of professional knowledge. Only a few students with high English proficiency and diligence reported that they had learned a lot academically. The results indicate the importance of providing different types of assistance to facilitate student learning, as suggested by Mulligan and Kirkpatrick (2000) and Evans and Morrison (2011),

as well as providing a low-anxiety learning environment (see also Huang, 2009).

Also, despite learning some test-taking skills and writing conventions, students were still dissatisfied with the English courses or cram-school-like intensive classes, since the large class size with mixed proficiency levels did not prepare them for the TOEFL/IELTS. Thus, many students still went to cram schools and even retook the exams until they got the grades required for taking content courses while studying abroad. Most students viewed it as the school's responsibility to offer courses to ensure that they were able to take content courses while studying abroad, while some students, including juniors and seniors, did not perceive that these courses were designed to help them prepare for the tests, and thus viewed them as unnecessary.

In summary, EM content courses, along with the Junior Year Abroad, provided students with enhanced English abilities and confidence in communication in English rather than increased discipline-specific knowledge or skills in English, especially for students with low proficiency levels, which nonetheless was one of the educational objectives of the program. The dissonance might lead to the reconsideration of the curriculum design of EMCCs and EAP courses.

IMPLICATIONS

Summary

Figure 1 summarizes the major themes and factors emerging from the cross-analysis of the data. The administrators designed

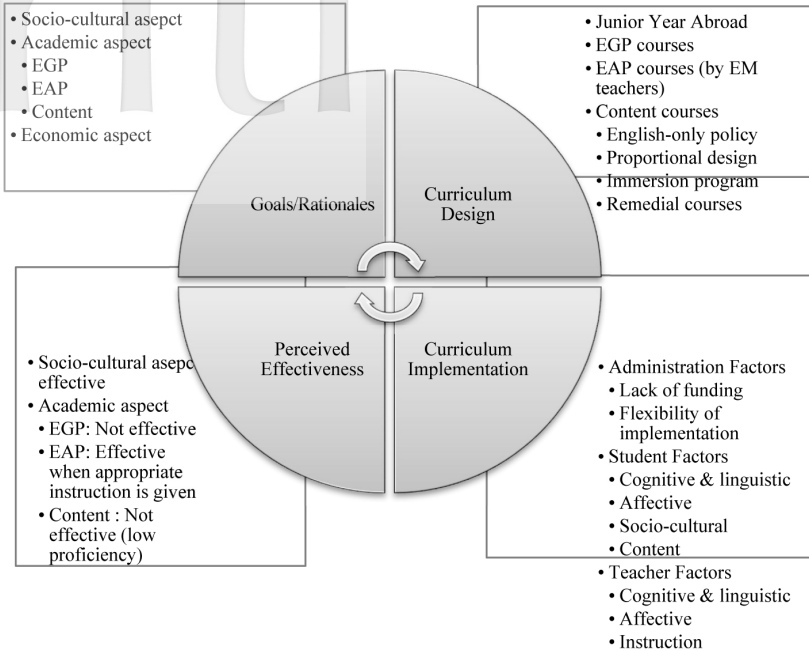


Figure 1
A Sketch of Major Themes Emerging from the Analysis

EMCCs for socio-cultural, academic and economic reasons/goals with a proportional design of an immersion program characteristic of the maximum use of English in the Junior Year Abroad. Despite concerns among students, teachers, and some administrators, the English-only policy was enforced where students were with mixed and/or limited proficiency levels. In order to help the students with low proficiency levels, remedial courses were offered by content teachers in Chinese. The design of the English courses aimed primarily to increase students' TOEFL or IELTS grades for study abroad, while discipline-specific EAP courses were offered in each discipline by content teachers.

Among all the designs, the most effective one seemed to be the study abroad mandate, without which students might not appreciate the implementation of the English-only policy, improve their English abilities, learn academic content, and broaden their perspectives. Students felt the most satisfaction with the sociocultural learning, the enhanced English abilities were next, and academic abilities last. Thus, many students felt it necessary for the school to offer more effective English courses to assist them in preparing to take content courses while studying abroad. Furthermore, the effectiveness of the EM designs might be impacted by the interaction of teacher, student, and administrative factors, consciously or not, at the cognitive, affective, and socio-cultural levels.

Principles of the EM Curriculum in Taiwan

What important principles in designing EM curriculum have we learned from this qualitative case study? What can the EFL faculty do to facilitate the teaching and learning of content in English? Unlike the previous research that operated on the presumption that all students or teachers were able to learn or teach well in EMCCs (Crawford Camiciottoli, 2010; Erling & Hilgendorf, 2006a, 2006b), this university did not assume so. The proportional design of an immersion program with remedial courses for students with low English proficiency and English courses for getting high TOEFL/IELTS grades suggest the recognition of students' needs for adjustment from learning English to learning content in English (e.g., Evans & Morrison, 2011; Hellekjær, 2009; Huang, 2009; Naoko & Naeko, 2006) and adjustment for study abroad (Crawford Camiciottoli, 2010). Moreover, the few lectures that were offered to

inservice teachers might not be adequate to enable teachers with limited language awareness to design proficiency-appropriate materials or cope with the overwhelming workload or teaching difficulties. Indeed, the above curriculum design and implementation and teacher development opportunities might not be helpful for students, especially those with low proficiency levels, to discuss discipline-specific topics in English or teachers to design courses tailoring to students' linguistic, affective, and socio-cultural needs. In order to meet students' needs, the reorganization of the EM curriculum design, the offering of teacher workshops, and the reconsideration of more flexible curriculum implementation are required.

Curriculum design. Instead of the immersion program with language and remedial courses, the sheltered immersion program with careful selection of students and design of transferable, discipline-specific EAP courses could be offered in order to provide a context-appropriate EM module, as suggested by Met (1998) and Stoller (2004). First of all, recruit students who have above Level 14-15 on the General Learning Test in English or the Required English Test since they expressed having the fewest number of difficulties. When the school failed to do so, presumably because Taiwanese parents and students were obsessed by university rankings, then the students who scored lower than Level 14-15 should be required to take preparatory EAP courses in summer prior to their freshman year. Many effective learning strategies and university or discipline-specific conventions can be taught in these classes.

Second, a sheltered immersion program, falling toward the end of the content-driven end of the continuum, should be considered

since student resistance suggests that learners without adequate proficiency, proficiency-appropriate curriculum design, or suitable scaffolding might have difficulties transferring academic abilities across discourse communities or genres (Kırkgöz, 2009; Lea & Street, 2006). Language teachers can, thus, help provide sheltered and transferable EAP courses with cooperation, collaboration, or team-teaching (Dudley-Evans & St. John, 1998) with the content teacher to identify the discipline-specific vocabulary (Bernier, 1997), rhetorical structures, learning strategies, conventions and tasks (e.g., Gonzalez & St. Louis, 2002; Kırkgöz, 2009; Kol, 2002; Lea & Street, 2006; Owens, 2002).

Third, EM teacher resistance to the teachability of all subjects suggests that the design of EMCCs should also consider linguistic and rhetorical difficulties, such that humanities is the most difficult, social science next, and mathematics the least (e.g., Kol, 2002; Snow & Brinton, 1997).

Teacher development. Aside from superior English proficiency, CTs should also know how to tailor information to students' needs, and thus pedagogical content knowledge and language awareness are also necessary, both of which can be facilitated by preservice and inservice teacher professional development programs prior to and during their teaching (e.g., Feryok, 2008; Peterson, 1997; Snow, 1998; Stewart et al., 2002). Preservice professional development refers to the offering of workshops prior to the teaching of content in English. The structure of the workshops can be an interactive lecture, the analysis of teaching videos, mini-teaching and feedback, and the demonstration of cooperation between language and content teachers. And since students might encounter linguistic, affective and social-

cultural difficulties and teachers might have myths surrounding English learning, the topics of the workshop can include (1) the local context and effective curriculum design; (2) the myths of learning and teaching content in English, (3) the teaching/learning difficulties and coping strategies in (interactive) lectures, reading, writing, group discussions, and group participation in specific disciplines, (4) the clarification of myths of learning content in English (e.g., students cannot produce without sufficient academic input), and (5) the principles behind cooperation between the content and language teachers. Regarding inservice professional development, a mentoring program is needed to help CTs (and language teachers) cope with teaching difficulties as teaching proceeds. In other words, each new faculty is paired with an experienced teacher to regularly discuss his/her teaching experiences using videotapes of a lesson and teaching materials (e.g., Power Point slides, textbooks, and exam questions and feedback). With the cooperation of language teachers, they can also help CTs identify linguistic structures and genres as well as provide students with adequate and appropriate linguistic, strategic, discursive or social-cultural assistance in interactive lectures, note-taking, oral presentations, group work, writing, and reading.

Curriculum implementation. In order to facilitate cross-curricular cooperation, the administration should decrease teachers' workloads, increase administrative flexibility, and provide more communication forums. Teachers' workloads can be initially decreased in acknowledgement of the significant work that must go into course preparation. More teacher agency can be encouraged through administrative flexibility such that providing a bi-lingual learning environment where Chinese is viewed as an appropriate type

of scaffolding is allowed. Code-switching, thus, is deemed as a type of linguistic scaffolding for students with low proficiency levels. The EFL faculty can help clarify the myths of learning content in English.

Directions for Future Research

Although this qualitative case study is limited by examining only one kind of EM curriculum design and implementation and by collecting interview-only data, observation can be conducted to further examine the learning and teaching process. Also, further examination of other types of EM curriculum designs might be fruitful, given the importance of contextual factors. The examination of how the EM curriculum designs for study abroad differ from, or are similar to, those for recruiting international students might be of importance in order to provide more context-appropriate curriculum designs.

CONCLUSION

This paper assumes that teaching content in English in higher education is the inevitable by-product of internationalization and marketization. The rapid transnational exchange renders the future student population multicultural and multilingual, necessitating careful curriculum planning for effective learning and teaching. Instead of shying away from the discussion, this paper urges cross-curriculum efforts to enable students/teachers to effectively learn/teach content in English. Given the difficulties CTs encountered, language teachers can cooperate with content teachers to design proficiency- and context- appropriate materials and offer transferable,

discipline-specific EAP courses operating on the assumption that what counts more is the way teachers instruct. True cross-disciplinary cooperation or collaboration, thus, requires restructuring the original isolated teaching styles and inflexible curriculum designs in higher education.

ACKNOWLEDGMENT

Research for this article was supported by the National Science Council in Taiwan (NSC 97-2410-H-004-184). The author would like to express her gratitude to all the participants for their precious time and valuable insights.

REFERENCES

- Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education, 11*, 290-305.
- Arnett, J. J. (2002). The psychology of globalization. *American Psychologist, 57*, 774-783.
- Bernier, A. (1997). The challenge of language and history terminology from the student optic. In M. A. Snow & D. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 95-103). White Plains, NY: Longman.
- Carspecken, P. F. (1996). *Critical ethnography in educational research: A theoretical and practical guide*. New York: Routledge.

- Chang, C. S. (2006). Internationalization of education in Taiwan. *Bimonthly Journal of Educational Resources and Research*, 71, 1-16.
- Crawford Camiciottoli, B. (2010). Meeting the challenges of European student mobility: Preparing Italian Erasmus students for business lectures in English. *English for Specific Purposes*, 29, 268-280.
- de Wit, H. (2002). *Internationalization of higher education in the United States and Europe: A historical, comparative, and conceptual analysis*. London: Greenwood Press.
- Dudley-Evans, T., & St. John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge, UK: Cambridge University Press.
- Duff, P. A. (1997). Immersion in Hungary: An EFL experiment. In K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 19-43). New York: Cambridge University Press.
- Erling, E. J., & Hilgendorf, S. K. (2006a). English at the German university: A means of disadvantage or empowerment? In A. Weideman & B. Smieja (Eds.), *Empowerment through language and education* (pp. 113-128). Frankfurt, Germany: Peter Lang.
- Erling, E. J., & Hilgendorf, S. K. (2006b). Language policies in the context of German higher education. *Language Policy*, 5, 267-292.
- Evans, S., & Morrison, B. (2011). The student experience of English-medium higher education in Hong Kong. *Language and Education*, 25, 147-162.

- Feryok, A. (2008). The impact of TESOL on maths and science teachers. *ELT Journal*, 62, 123-130.
- Flowerdew, J., & Miller, L. (1995). On the notion of culture in L2 lectures. *TESOL Quarterly*, 29, 345-373.
- Gonzalez, D., & St. Louis, R. (2002). Content-based English for specific purposes course design: The case of English for architecture. In J. Crandall & D. Kaufman (Eds.), *Content-based instruction in higher education settings* (pp. 93-108). Alexandria, VA: TESOL.
- Graddol, D. (2004). The future of language. *Science*, 303, 1329-1331.
- Hazelkorn, E. (2009). Rankings and the battle for world-class excellence: Institutional strategies and policy choices. *Higher Education Management and Policy*, 21, 47-68.
- Healey, N. M. (2008). Is higher education in really “internationalizing”? *Higher Education*, 55, 333-355.
- Hellekjær, G. O. (2009). Academic English reading proficiency at the university level: A Norwegian case study. *Reading in a Foreign Language*, 21, 198-222.
- Huang, Y. P. (2009). Effectiveness of English-only instruction in postsecondary education in Taiwan: Voices from students. *Hwa Kang Journal of English Language and Literature*, 15, 123-135.
- Huang, Y. P. (2011). English-medium instruction (EMI) content-area teachers’ pedagogical content knowledge of scaffoldings: A Vygotskian perspective. *Taiwan Journal of TESOL*, 8(1), 35-66.
- Hudson, P. (2009). Learning to teach science using English as the medium of instruction. *Eurasia Journal of Mathematics, Science & Technology Education*, 5, 165-170.

- Kelly, A. V. (2009). *Curriculum and the study of curriculum*. Thousand Oaks, CA: Sage.
- Kırkgöz, Y. (2009). Students' and lecturers' perceptions of the effectiveness of Foreign language instruction in an English-medium university in Turkey. *Teaching in Higher Education*, 14, 81-93.
- Kol, C. (2002). English for mathematics and computer science: A content-based instruction course. In J. Crandall & D. Kaufman (Eds.), *Content-based instruction in higher education settings* (pp. 63-78). Alexandria, VA: TESOL.
- Kyeyune, R. (2003). Challenges of using English as a medium of instruction in multilingual contexts: A view from Ugandan classrooms. *Language, Culture and Curriculum*, 16, 173-184.
- Lea, M. R., & Street, B. V. (2006). The "academic literacies" model: Theory and applications. *Theory into Practice*, 45, 368-377.
- Met, M. (1998). Curriculum decision-making in content-based language teaching. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education* (pp. 35-63). Philadelphia, PA: Multilingual Matters.
- Met, M., & Lorenz, E. (1997). Lessons from US Immersion programs: Two decades of experience. In K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 243-264). Cambridge, UK: Cambridge University Press.
- Ministry of Education. (Ed.). (2001). *White paper on higher education*. Taipei, Taiwan: NIOERAR.
- Moreno-Lopez, I., Saenz-de-Tejada, C., & Smith, T. K. (2008). Language and study abroad across the curriculum: An

- analysis of course development. *Foreign Language Annals*, 41, 674-686.
- Mohamed, H. I., & Banda, F. (2008). Classroom discourse and discursive practices in higher education in Tanzania. *Journal of Multilingual and Multicultural Development*, 29, 95-109.
- Mulligan, D., & Kirkpatrick, A. (2000). How much do they understand? Lectures, students and comprehension. *Higher Education Research & Development*, 19, 311-335.
- Naoko, T., & Naeko, N. (2006). Transition from learning English to learning in English: Students' perceived adjustment difficulties in an English-medium university in Japan. *Asian EFL Journal*, 8(4). Retrieved August 5, 2011, from http://www.asian-efl-journal.com/Dec_06_nt&nn.php
- Owens, C. (2002). Content-based English for academic purposes in a Thai university. In J. Crandall & D. Kaufman (Eds.), *Content-based instruction in higher education settings* (pp. 45-62). Alexandria, VA: TESOL.
- Paseka, A. (2000). Towards internationalization in teacher education: An attempt to use English as the working language in a sociology course. *Teaching in Higher Education*, 5, 359-371.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Pawan, F. (2008). Content-area teachers and scaffolded instruction for English language learners. *Teaching and Teacher Education*, 24, 1450-1462.
- Peterson, P. W. (1997). Knowledge, skills, and attitudes in teacher preparation for content-based instruction. In M. A. Snow & D. Brinton (Ed.), *The content-based classroom: Perspectives on*

- integrating language and content* (pp. 158-174). White Plains, NY: Longman.
- Phillipson, R. (1992). *Linguistic imperialism*. New York: Oxford University Press.
- Sasaki, M. (2007). Effects of study-abroad experiences on EFL writers: A multiple-data analysis. *The Modern Language Journal*, 91, 602-620.
- Sauvé, P. (2002, May). *Trade, Education, and the GATS: What's in, what's out, what's all the fuss about?* Paper presented at the OECD/US Forum on Trades in Educational Services, Washington, DC.
- Scollon, R., & Scollon, S. W. (1995). *Intercultural communication: A discourse approach*. Oxford, UK: Blackwell.
- Shawer, S. F. (2010). Classroom-level curriculum development: EFL teachers as curriculum-developers, curriculum-makers and curriculum-transmitters. *Teaching and Teacher Education*, 26, 173-184.
- Short, D. J. (1997). Reading and 'riting and ... social studies: Research on integrated language and content in secondary classrooms. In M. A. Snow & D. Brinton (Ed.), *The content-based classroom: Perspectives on integrating language and content* (pp. 213-232). White Plains, NY: Longman.
- Snow, M. A. (1998). Trends and issues in content-based instruction. *Annual Review of Applied Linguistics*, 18, 243-267.
- Snow, M. A., & Brinton, D. (Eds.). (1997). *The content-based classroom: Perspectives on integrating language and content*. White Plains, NY: Longman.

- Srole, C. (1997). Pedagogical responses from content faculty: Teaching content and language in history. In M. A. Snow & D. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 104-106). White Plains, NY: Longman.
- Stenhouse, L. (1975). *An introduction to curriculum research and development*. London: Heinemann.
- Stewart, T., Sagliano, M., & Sagliano, J. (2002). Merging expertise: Developing partnerships between language and content specialists. In J. Crandall & D. Kaufman (Eds.), *Content-based instruction in higher education settings* (pp. 29-44). Alexandria, VA: TESOL.
- Stoller, F. L. (2004). Content-based instruction: Perspectives on curriculum planning. *Annual Review of Applied Linguistics*, 24, 261-283.
- Teemant, A., Bernhardt, E., & Rodriguez-Munoz, M. (1997). Collaborating with content-area teachers: What we need to share. In M. A. Snow & D. Brinton (Eds.), *The context-based classroom: Perspectives on integrating language and context* (pp. 311-318). White Plains, NY: Longman.
- Vinke, A. A., Snippe, J., & Jochems, W. (1998). English-medium content courses in non-English higher education: A study of lecturer experiences and teaching behaviours. *Teaching in Higher Education*, 3, 383-394.
- Wannagat, U. (2007). Learning through L2: Content and language integrated learning (CLIL) and English as medium of instruction (EMI). *The International Journal of Bilingual Education and Bilingualism*, 10, 663-682.

- Wesche, M. B. (1993). Discipline-based approaches to language study: Research issues and outcomes. In M. Krueger & F. Ryan (Eds.), *Language and content: Discipline- and content-based approaches to language study* (pp. 57-82). Lexington, MA: D. C. Heath.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
- Yeh, S. N. (2009). 英語教育政策對大學英文教育之影響 [The influence of English education policy on college English education]. In W. C. Chang (Ed.), *臺灣英語教育政策之檢視：從小學到大學 [ELT politics in Taiwan]* (pp. 180-206). Taipei, Taiwan: Crane.

ABOUT THE AUTHOR

Yi-Ping Huang is an assistant professor at National Chengchi University. Her research interests include the internationalization of higher education and language teacher education.

臺灣高等教育「英語授課」科目之 課程設計與實施：質性個案研究

摘要

臺灣高等教育「英語授課」科目雖如雨後春筍般設立，但這些課程到底如何設計或實施都缺乏實證研究，因此，本文以質性個案研究方式，針對北部一所私立大學「英語授課」課程的設計、實施、與成效，從行政主管、教師、與老師等多元角度，提供深入探討。研究結果顯示：各方肯定以沈浸式英語授課為協助學生大三出國作準備的設計，該設計卻無法提升學生以英語表達學術專業的能力。本文點出語言教師在「英語授課」課程設計與實施的重要性，並呼籲跨學科合作，以提高英語授課的品質。

關鍵詞：英語授課 高等教育國際化 課程設計