

Chapter 10

EMI Teacher Development Programs in Taiwan

Cynthia Tsui

Specific Area of Interest: Teacher Education

According to Dearden (2014), a global scoping research team that conducted a massive survey involving 55 countries across four different continents, 83% of the countries reported that a shortage of qualified EMI teachers had created a significant problem. Tsuneyoshi (2005) also noted that one of the biggest challenges in sustaining an EMI program was finding faculty who were willing *and* able to teach content courses in English. A common misconception among policy-makers and administrators is that teachers who have spent time abroad or speak English well are capable of teaching EMI courses. Many nonnative speakers of English who have obtained their doctoral degree from English-speaking countries are assigned to teach EMI courses once they return to their home country. The underlying assumption is that time spent in an English-speaking environment is sufficient to make someone become a competent EMI instructor. Many EMI teachers, however, are not even aware of the level of English proficiency they might need in order to conduct their EMI classes at least as effectively as through their first language. Their ability to read and write in English is perhaps adequate since they needed these skills during their pursuit of the doctoral degree. However, high proficiency in reading and writing in English does not automatically transfer to “effectively explaining key concepts to students in such a way as to make the lectures comprehensible” (Barnard, 2013). Language difficulties experienced by EMI teachers include the inability to express ideas accurately, fluently, and comprehensibly in English (Chang, 2010; Sert, 2008; Tatzl, 2011). Also noted by researchers (Huang, 2012; Macaro, 2015; Tatzl, 2011) are teachers’ inability to detect students’ linguistic limitations that impede their learning and progress in EMI classrooms.

C. Tsui (✉)

Foreign Language Center, National Chengchi University, Taipei, Taiwan
e-mail: ctsui@nccu.edu.tw

In addition to deficiencies in their own English, EMI teachers often have to tackle pedagogical challenges as well. Faculty who are nominated to teach EMI courses may be junior teachers who have yet to polish their pedagogical skills in a real classroom. While managing to plan and design their course material can be time-consuming itself, nonnative English-speaking EMI teachers also need to cope with the challenge of using a second language to deliver their content knowledge. Werther, Denver, Jensen, and Mees (2014) reported how lecturers who had been thrown into English-taught courses haphazardly could experience difficulties and severe stress. The pedagogical deficiency, coupled with language deficiency, could cause a serious strain on junior EMI faculty. And yet, as reported by Tange (2010), few faculty are willing to admit that their English proficiency or pedagogical knowledge is inadequate, as such an acknowledgement could affect their status and career progression.

Research findings on the difficulties experienced by ill-prepared EMI teachers are prevalent (Ellili-Cherif, 2014; Huang, 2014; Li, 2013; Werther et al., 2014). However, training support to upgrade the readiness of EMI teachers has been sporadic. Kling and Støhr (2011) reported on the development of the Test of Oral English Proficiency for Academic Staff to certify the linguistic proficiency of university lecturers. A similar Test of Performance for Teaching at University Level through the Medium of English at the University of Basque Country is also reported (Ball & Lindsay, 2013). Measures to certify the language proficiency of EMI teachers, however, are not a sufficient indicator of teachers' qualification for EMI assignments. Many EMI teachers are found to have developed their own strategies—language specific, content specific, or pedagogy specific—to cope with the day-to-day demands in EMI classrooms. Some may succeed after a few years of trial and error; some drop out or fail without even knowing why. A lack of clear guidelines and standards for EMI teachers has rendered the quality of their teaching questionable (Chapple, 2015).

In recent years, several training courses have been put forward to address the growing needs. In 2013, the British Council organized three one-week Academic Teaching Excellence (ATE) pilot professional development courses for university teachers in Europe (Dearden, 2014). Teachers in these ATE courses were found to have limited or no previous knowledge of the impact that EMI might have on their teaching. While EMI might involve a more interactive, student-centered style, many teachers still believed that they only needed to translate the course material from the students' L1 to English in order to teach effectively. Even though these teachers insisted that their job was not to teach English, they still needed to present concepts and ideas in ways that were accessible to students with different levels of English proficiency. Adjusting the instructional language accordingly and being linguistically sensitive to students' different levels of English became an important part of their pedagogical training.

Additional training courses were documented by Ball and Lindsay (2013). These EMI support courses, ranging from a three-day intensive course to a course of 10 weekly three-hour sessions, covered a broad spectrum of topics, including English pronunciation; suprasegmental issues of intonation, stress, and enunciation;

discourse markers; English-medium pedagogy; classroom practice; and assessment and feedback. In these courses, the skills and content included pronouncing high-frequency academic lexis, accuracy of expression, use of body language and eye contact, presentation skills, promoting learner engagement and participation, clarifying specialist terminology, lecturing to large groups, task design, and testing. Since pedagogical skills were not, in the past, a prerequisite to a successful university career and advancement, many EMI lecturers were not aware of the need to enhance their methodological repertoire. However, teaching in a language other than the instructor's mother tongue, especially at advanced conceptual levels, requires more sophisticated pedagogy. The EMI teachers who completed the training coursework reflected that they were now becoming more aware of the significance of the pedagogical skills in their EMI classroom.

The review above points to the obstacles facing EMI practitioners and, in general, a lack of scaffolding training for EMI teachers before they embark on the EMI journey. Even though an effort has been made to establish EMI training programs by relevant institutes, as described previously, these training programs have only served a small fraction of the overall number of EMI instructors who are currently teaching. Moreover, the design and effects of these programs, in most cases, are still experimental in nature, as no systematic guidelines and standards have been yet agreed upon.

Theoretical Framework

The theoretical framework used in this chapter to evaluate the existing EMI training programs is *The Kirkpatrick Four Levels Model* (Kirkpatrick, 1996)—a business evaluation model designed to measure the effectiveness of training in improving the performance of trainees. The first level (EL1) is reaction, the second level (EL2) learning, the third level (EL3) behavior, and the fourth level (EL4) results or impacts. Reaction and learning evaluations are administered in training class, while behavior and results are administered when trainees return to their workplace. Figure 10.1 below shows how the four levels of evaluation work.

According to Kirkpatrick (1996), reaction level measures how those who participate in a training program react to it. It is important not only to get a reaction but to get a positive reaction. If participants do not react favorably, they probably will not be motivated to learn. Although positive reaction may not guarantee learning, negative reaction almost certainly reduces the effect of learning. The second level, learning, refers to the extent to which participants change attitudes, improve knowledge, and/or increase skill as a result of the training. Attitude, knowledge, and skill are the three areas that a training program can aim at. To witness the occurrence of learning, one or more of the three changes must take place.

Next, the third level, behavior, can be defined as the extent to which change in behavior has occurred because the participant attended the training program. In order for change to occur, four conditions are necessary: (1) the person must have a

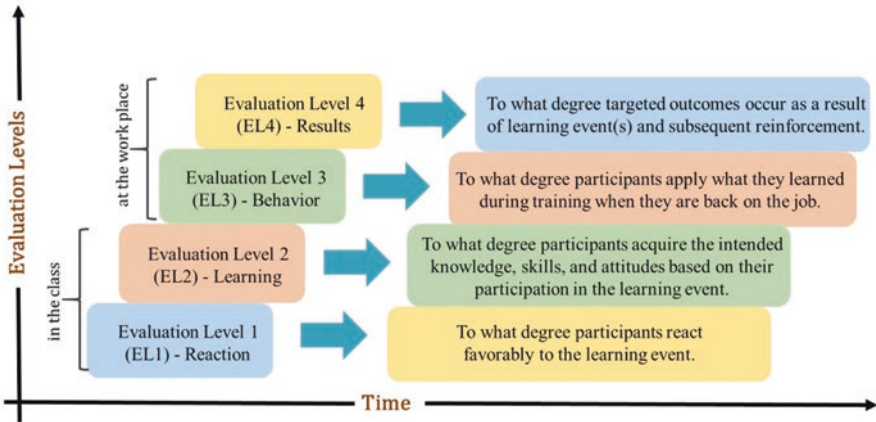


Fig. 10.1 Kirkpatrick's four-level evaluation model (1996)

desire to change; (2) the person must know what to do and how to do it; (3) the person must work in the right climate; and (4) the person must be rewarded for changing. If no change in behavior is present, trainers should not assume that the training is ineffective. Instead, they should reexamine whether the four necessary conditions are fulfilled or not.

Finally, the fourth level, results or impacts, can be defined as the final results because of participation in the training. Possible results can include increased production, improved quality, higher enrollment rates, etc. Tangible results like these are easier to measure in terms of dollars and figures. But for intangible results, such as leadership, decision making, motivation, or empowerment, it is difficult, if not impossible, to measure. But as reminded by Kirkpatrick (1996), trainers or program organizers can still state desired behaviors, as evidence of the results, in terms of short-term or long-term behavior change.

Despite its origin and applications in the field of business training, Kirkpatrick's model is considered ideal in the current study since it examines the effect of a training program with a clear set of criteria that can be equally applied to educational settings. Level three, behavior, and level four, results, in particular, target training effects that should be monitored and assessed by trainee's employers, in this case, the universities with EMI curriculum.

Background of the Case

Taiwan has joined the world in establishing EMI curricula at the tertiary level. The birth rate has continued to plummet in recent years, and university enrollment rates, especially in private universities, have also witnessed a downturn. Recruiting international students from overseas is one way to boost enrollments. EMI programs and

curriculum, therefore, seem a natural step to follow. University teachers from all disciplines are being recruited to teach EMI courses; however, the readiness of these EMI teachers is often not verified.

Beginning in 2010, Taiwan's Ministry of Education began sponsoring EMI faculty development programs, domestically and internationally, to provide training courses to university faculty members who have a need to teach EMI courses. Under the supervision of the Ministry of Education, these enrichment programs have been organized by different Regional Education Resource Centers that are set up to promote inter-collegiate exchanges and sharing of academic resources among universities in close proximity. There is a total of six such centers, each of which consists of anywhere between 12 and 17 partner universities in its alliance. Three of the six regional education resource centers have thus far developed their own EMI teacher development programs. These are the Northern Taiwan Regional Education Resource Center, Regional Education Resource Center for Taoyuan-Xinzhu-Miaoli (TZM), and Central Taiwan Regional Education Resource Center. The current case involves four EMI teacher education programs initiated by these three centers between 2010 and 2014.

EMI Teacher Development Programs in Taiwan

In this section, a total of five EMI teacher development programs initiated by three different Regional Education Resource Centers in recent years will be reviewed here. Highlights of participants' feedback will then be provided. Next, an analysis of the five programs, using Kirkpatrick's four-level model (1996), will be conducted.

Regional Education Resource Center for Taoyuan-Xinzhu-Miaoli (TZM)

In 2010, Yuan Ze University, one of the 12 partner universities in the *Regional Education Resource Center for Taoyuan-Xinzhu-Miaoli (TZM)*, sent 20 of its faculty members to the University of New South Wales in Australia for a two-week EMI faculty development camp. The camp received good reviews and feedback from the participants and has since become an annual event. In 2011, the participants in this EMI camp grew to a group of 28 teachers, including three teachers from the neighboring National Tsing Hua University. In 2012, the camp further expanded to a group of 30 members, including nine teachers from different universities in the same region. Beginning in 2013, the profile of the participants had grown to include six teachers from Yuan Ze University and 25 teachers from 20 other universities across the nation. Details of the 2013 EMI faculty development program are as follows:

Program	2013 Taiwan Universities–University of New South Wales (UNSW) faculty development program
Duration	August 19 ~ 30, 2013
Venue	The University of New South Wales, Australia
Hours	60 h
Areas of training	English language, presentation skills, special lectures on pedagogical strategies, lecture/tutorial observations, meetings with faculty and international students for future research collaborations, visits to educational institutions
Participants	31 faculty members from 21 different universities in Taiwan

Because the pre-screening procedure favored faculty members who had obtained their doctoral degrees domestically, many participants experienced for the first time courses taught in an English-speaking environment by native speakers of English. Through interactions with the instructors in class and observations in other content courses, participants were able to witness firsthand how to conduct an EMI class in real time. Meetings with scholars and international students in their fields of study also allowed participants to exchange ideas and build connections for future collaboration.

One obligation for the participants, after completing the program, was to teach at least one EMI course within the next academic year. This requirement resulted in a total of 41 EMI courses offered by the 20 participants in the 2010 school year; 60 EMI courses offered by the 25 participants in 2011; and 72 EMI courses offered by the 30 participants in 2012. This is an average of more than 2 EMI courses per participant. In addition, many participants committed to becoming “seed” EMI instructors, going from school to school, to share their insights and experiences. This commitment resulted in a total of 16 experience-sharing speeches in 11 universities in the year 2012.

Northern Taiwan Regional Education Resource Center

In 2011, the Ministry of Education commissioned National Chengchi University, one of the 17 partner schools in the *Northern Taiwan Regional Education Resource Center*, to organize an EMI education program to be held in Singapore. Details of the program are as follows:

Program	Teaching content-based subjects through English program for university lecturers from Taiwan
Duration	August 1 ~ 19, 2011
Venue	Southeast Asian Ministers of Education Organization (SEAMEO) Regional language Centre (RELC), Singapore
Hours	90 h

(continued)

Areas of training	Content and language integrated learning (CLIL), lesson planning and delivery, classroom instructional language and oral interactional skills, internationally intelligible English
Participants	18 faculty members from ten different universities in Taiwan

This intensive faculty education program was among the initial attempts by the government to support EMI development. National Chengchi University was responsible for planning the three-week program with the Regional Language Centre (RELC) in Singapore. RELC is part of the Southeast Asian Ministers of Education Organization (SEAMEO) and is committed to promoting regional cooperation and development in the fields of education, science, and culture. It offers custom-made training courses to their clients, in this case a group of 18 university instructors who were teaching their content courses in English and who received 90 h of training. These participants were faculty members from ten different universities (seven national and three private universities) across the nation. Most were junior faculty in the fields of engineering and business.

Two months after completing the program, halfway into the fall semester of 2011, the participants were required to attend a performance demonstration to deliver a presentation in English so as to, on the one hand, demonstrate their learning outcome, and on the other hand, reflect on any improvement in their teaching skills as a result of the training.

Feedback given by the participants indicated that, in general, instructors at RELC were experienced educational trainers, able to respond to the different needs of the trainees. The training courses, offered in four areas of interest, were helpful in the sense that participants were able to rethink their role as an EMI instructor, to learn more teaching techniques, to detect individual problem areas in using the English language in the classroom, and finally, to gain more confidence in teaching.

There were suggestions and room for improvement, however, according to the participants. First, some of the course materials were oriented more toward the needs of middle school teachers and did not sufficiently address the pedagogical issues at the tertiary level. Secondly, several participants suggested to arrange visits to some academic institutions while abroad, so as to observe any cross-cultural differences or to strengthen their understanding of pedagogical principles. Moreover, to make the best use of an overseas training camp, authentic on-site practice of EMI teaching in a real classroom with real students could be arranged to allow participants to experience the challenge firsthand. Finally, the participants strongly recommended the establishment of an EMI certification organization in Taiwan.

In 2012, the Ministry of Education again authorized National Chengchi University to organize an EMI faculty development camp with RELC, Singapore. Similar to the training program in the previous year, important components of the training included content and language integrated learning (CLIL), methods and materials design, and use of functional English language in class. A new component for the second year was a series of visits to higher-education institutions in Singapore. A total of 22 faculty members from 14 universities passed the screening

process to be qualified for the training. This group of participants also showed a good representation of the different universities from various parts of Taiwan. Their fields of expertise included business, social sciences, and the humanities.

As a sustained effort from the Ministry of Education to continue nurturing EMI development in Taiwan, this EMI faculty education program had received wide recognition across the nation. Not only did the program attract more faculty from more universities, it also allowed faculty to form cross-disciplinary ties. Positive feedback from the participants affirmed the changes made possible by the training, including awareness of the importance of establishing quality EMI courses in order to compete in the international academic arena, the need to constantly upgrade one's pedagogical skills to enhance students' learning, and the opportunity to learn from colleagues in the same field.

The participants also gave critical evaluations of the program. Some doubted the need to perform such a training program overseas, costing millions of dollars, while domestic resources could very well yield similar results. A domestic EMI development program, specifically designed to fit the needs of faculty in Taiwan, was thereby called for.

Following two consecutive years of this EMI overseas faculty education program 2011 and 2012, the Ministry of Education decided to continue the program in 2013. However, instead of sending faculty participants overseas for costly camps, the Ministry of Education decided to encourage domestic camps that could be equally effective if the most suitable trainers could be located. Thus, beginning in June, 2013, National Chengchi University was again commissioned by the Ministry of Education to conduct a two-year project to design and implement a domestic EMI faculty development program.

The project began with an online survey of needs assessment distributed to approximately 700 EMI instructors among 17 partner universities in the greater Taipei area. One hundred and twenty eight ($N = 128$, male = 70, female = 58) teachers responded to the survey. A high percentage (76%) of the respondents was found to have taught EMI courses as an assigned duty from their departments. When asked about the biggest concern or difficulty for EMI teaching, many rated "reduced learning effects," "doubled workload," and "compromised course materials" as the top three concerns. Finally, among other things, when asked what training courses would help their EMI undertaking, nearly 70% of the respondents expressed an interest in learning more "teaching techniques" (22%), "content and language integrated learning" (16%), "class management" (15%), and "English presentation skills" (14%). Based on the survey responses, plans were made and courses were arranged to address the specific needs of EMI instructors in the region.

Instead of a standalone intensive program, a series of keynote speeches and workshops were arranged to complement one another across a span of 2 years, with the aim of giving participants the needed time to learn and implement the ideas at their own pace. The two-year project resulted in a total of four plenary speeches, seven workshops, one summer intensive program, and one performance presentation. Details of the project are as follows:

Project	EMI faculty development program
Duration	June 1, 2013 ~ May 31, 2015
Online survey	N = 128 (June ~ September, 2013)
Plenary speeches	<ol style="list-style-type: none"> 1. <i>How to teach effectively in English</i> (November 4, 2013) 2. <i>Why should we teach Chinese culture in English?</i> (November 4, 2013) 3. <i>How to energize an EMI class</i> (November 25, 2013) 4. <i>English, teacher, student</i> (November 25, 2013)
Workshops	<ol style="list-style-type: none"> 1. <i>Writing research articles in English as a second language</i> (January 6, 2014) 2. <i>Meaningful classroom writing in English as a second language</i> (January 7, 2014) 3. <i>Practice of teaching in English by case method</i> (May 26, 2014) 4. <i>Handling small and large teaching</i> (May 26, 2014) 5. <i>A progressive approach to preparing and improving yourself for EMI</i> (November 22, 2014) 6. <i>Designing and managing group work in the classroom</i> (April 18, 2015) 7. <i>Accents and dialects: developing understanding of the world Englishes</i> (April 18, 2015)
Summer training camp	<p><i>2014 faculty enrichment summer program (FESP): English as a medium of instruction</i> (August 29 ~ September 2, 2014)</p> <p>Areas of training (40 h):</p> <p>Cross-cultural awareness, the role of English in CLIL, the flipped classroom, English presentation skills, class management, demonstration of teaching a case, experience sharing from EMI instructors in different fields of study, microteaching</p>
Performance presentation	November 22, 2014

The five-day, 40-hour faculty enrichment summer program (FESP) was the highlight of the two-year project. The participants were 39 faculty members from 13 different universities (five national and eight private universities) in northern Taiwan. Training courses were designed and organized based on the results of the aforementioned survey. Many plenary speakers were invited from overseas, including Dr. Tan Su Hwi, who was one of the key instructors in the EMI enrichment program in Singapore in 2011 and 2012. Another key instructor, Dr. Christopher Hill, was director of research training and academic development at the University of Nottingham Malaysia Campus. The language training component also involved professional language trainers from the British Council.

Participants were engaged in intensive coursework of pedagogical skills and language skills throughout the camp. Most importantly, at the end of the training, they were required to conduct microteaching in which they designed a lesson of their own EMI courses and taught to their fellow trainees, who might be novice learners, as if they were their own students. The microteaching was evaluated by language trainers on how each participant had successfully delivered the lesson to the audience, who was also invited to give constructive feedback.

Three months after completing the program, all participants were required to attend the performance presentation where they gave an oral presentation in English detailing how they had implemented the new ideas in their EMI classes. Feedback from participants described how they used to be self-conscious about their less-than-perfect language skills. After the training, they realized that the English language was actually only a tool and that good design of the content, along with proper use of different teaching techniques, would help vitalize the learning process, which in turn would alleviate teachers' perceived "fear and stress" due to language issues. Many acknowledged that the program had forced them to reexamine their teaching from a student's perspective and that a totally fluent teacher does not necessarily make a good content teacher. How to effectively engage students in the learning process was more vital, and at times more difficult, than speaking the language perfectly. This shift of mentality, from an instructor with language anxiety to a content expert with language proficiency, empowered the participants with greater self-assurance.

Another important gain, according to the feedback from participants, was the interdisciplinary ties built among them. Had it not been for the EMI development program, participants from different fields of study, from different universities, would not have gathered together, under normal circumstances, to work together so closely. During the 5 days of the camp, participants were given ample opportunity to work in small groups, to share teaching experiences, and to tackle problems together. Many of them bonded through the common thread—EMI—and were able to support each other emotionally as well as professionally. Some expressed in their written feedback that they had felt alone in their EMI endeavor prior to the program. During the training, they were exposed to new ideas and new colleagues, which instilled in them an awareness that the difficulties they had experienced were all part of the journey and that, given enough practice and support, the EMI undertaking would prove to be fruitful. The trust and bonds that developed among the participants resulted in continuous dialogues on social network services and academic collaboration through co-teaching of EMI classes.

Central Taiwan Regional Education Resource Center

As the name implies, the *Central Taiwan Regional Education Resource Center* is located in central Taiwan (Taichung) and consists of 13 universities (five national and eight private universities) in the region. In 2014, Providence University organized an EMI training program, sponsored by the Ministry of Education, that consisted of a four-week intensive camp (132 h) at the University of California at Irvine (UCI), USA (Ministry of Education, 2013). Details of the program are as follows:

Program	2014 English-mediated instruction teacher training program
Duration	July 7 ~ 31, 2014
Venue	The University of California at Irvine (UCI), USA
Hours	132 h

(continued)

Orientation	June 24 ~ 25, 2014
	English as a medium of instruction: seminars 1, 2, 3
	Pre-departure briefing
	TOEFL ITP pretest
Areas of training	English-medium instruction practicum, content-based instruction, task-based learning, English for English-teaching professionals, the flipped classroom, specialized training workshops, content class observations, cooperative language teaching, classroom management, whole language approach, assessment, open courseware
Obligation	August 5, 2014
	TOEFL ITP posttest
Participants	20 faculty members from 13 different universities in Taiwan

Participants went through a stringent application process, beginning with a nomination from their respective department or college, a statement of purpose detailing their EMI experiences, and a proof of English proficiency in the form of a standardized test or a videotaped teaching demonstration. Efforts were made to include faculty from as many different disciplines and universities as possible. A total of 20 qualified teachers were chosen by the review committee to represent all 13 partner universities in the region.

A pre-departure briefing, via a teleconference meeting with the UCI personnel, and two orientation seminars on the status quo of EMI in Taiwan were important measures to ensure that participants would be well prepared for the three-week intensive program in California. Among all the EMI programs abroad, this was the only program that included an orientation process. Another important feature of this program was the use of a standardized test to assess the participants' English proficiency. By collecting a pretest score prior to the target training and a posttest score after completing the training, the organizer had an opportunity to examine the effect of the training on a given participant's language ability. Although the areas of training covered more than language skills, data from a language test served as a useful indicator of any change during the training.

Moreover, participants were asked to keep a daily and weekly journal in which they described the biggest challenge of the day or the week and how they dealt with the challenge. These individual records, collected periodically during the training, not only sensitized the program trainers to modify the teaching during the 3 weeks but also helped the organizer to collectively reflect on the results of the program. Most importantly, keeping a journal helped the participants to remain aware of their learning process and difficulty, if any, which in the long run would benefit the learners themselves.

The arrangement to have participants observe classes in their relevant fields of study allowed them to better understand how to present the technical knowledge specific to their fields and how to manage a class in different conditions. For example, participants from the field of business observed a class entitled "Introduction to Managerial Finance," faculty of science a class entitled "Nuclear Environment," and faculty of humanities a class entitled "Critical Reasoning." Participants observed

firsthand how these instructors presented a concept, elicited responses, dealt with silence or interruption, handled questions, or revisited old concepts with new approaches, all well within their fields of expertise. The live demonstration in these content classes, in a way, allowed participants to engage in vicarious learning where learning occurs as a function of observing, retaining, and replicating (Bandura, 1977).

On the other hand, some participants indicated that it would have helped them even more had the content teachers actually observed their own microteaching during the training and given relevant comments. As one of the participants stated, “Language trainers may not necessarily understand every piece of a content course and therefore can only comment so much.”

At the end of the program, all participants were required to make performance presentations, after which they received individualized written feedback from each of their EMI instructors regarding their language and presentation skills. After returning to Taiwan, participants were required to attend a forum—*Internationalization of Taiwan Higher Education through English-mediated Instruction*—on November 28, 2014, at Providence University. Several participants shared their EMI training experiences at the forum.

In general, this EMI overseas training program contained many practical measures that other training programs had not included, such as pre-departure orientation seminars, pretest and posttest, and participant journal writing. These measures helped collect additional data for further analysis and can therefore serve as a helpful index for future faculty development programs to consider.

One concern, however, lies in the language context in which an EMI teacher development program takes place. In an English-speaking country, the use of English as the medium of instruction is a given fact. Usually, the teacher and most of the students speak the language as their mother tongue. Class interactions will typically proceed in English. In an environment where English is neither the native language nor the official language, both the teacher and students will have to try very hard to make a class succeed in English. Even if the teacher has sufficient language skills, the students may not have the ability to understand or interact with the teacher proficiently. Therefore, observing a content class in an English-speaking country, as was the case with the UCI program, may have limited value since the classroom procedures might not be completely replicable in a non-English context such as in Taiwan. This is an important concern to bear in mind for organizers of any future EMI overseas programs.

Evaluation of the Education Programs

In this section, an analysis of the five teacher education programs is presented, using Kirkpatrick’s four-level evaluation model. First of all, in terms of evaluation level 1, reaction, most of the programs reported participants’ positive reaction toward the training content, except the two overseas programs with RELC in Singapore. Some

participants even commented that a great deal of games and songs, often used by teacher trainers of middle school education at RELC, may not apply to their college EMI classrooms.

Level 2, learning, refers to how much participants have changed their attitude, knowledge, and skill as a result of the training. The five programs either conducted a post-training survey or required a post-training report for participants to reflect on their learning. These data helped reveal traces of change in the three aspects above. For example, as mentioned before, participants in various programs were found to have repositioned their role as a content teacher who should be pedagogically competent rather than linguistically perfect. In terms of knowledge and skill, those programs that required participants to demonstrate their new knowledge or skills, upon completion of the training, were fulfilling the second level of Kirkpatrick's evaluation model. Specifically, the program with a measure of pretest and posttest and programs with microteaching were of this kind.

As for level 3, behavior, Kirkpatrick (1996) states that four conditions must be present before a trainee can show his change in behavior at the work place. They are (1) a desire to change, (2) know-how, (3) the right climate, and (4) a reward. Those training programs that documented participants' change in behavior, months after completing the training, were proof of the training effect. Specifically, programs that invited participants to return in order to share how they had revised their course design or teaching techniques were indeed fulfilling the behavior level of Kirkpatrick's model. However, whether these participants will actually continue the learned behavior throughout their EMI career still depends on the academic climate and the rewarding system that surround each and every participant in their own universities.

Finally, level 4, results or impacts, as reminded by Kirkpatrick (1996), intangible results may be difficult to obtain or measure. Nevertheless, the training program series, organized by Yuan Ze University at TZM, was able to demonstrate that many of their participants had committed to becoming "seed" EMI instructors, going from school to school, to share their insights and experiences. This strong commitment clearly fulfills the results level of Kirkpatrick's model. None of the other four programs have participants of this massive scale to travel this far.

In addition to how much these development programs had fulfilled the requirements of Kirkpatrick's four-level model, there were also some pitfalls shared among them. First of all, participants reflected that generic training in language and pedagogical skills oftentimes could not sufficiently address domain-specific needs, which could only be answered by experienced EMI content teachers. For example, a language trainer who is not familiar with a theory in engineering mathematics is probably not likely to comment intelligently on the equations used by a content teacher to prove the theory and, therefore, not able to comment on how well the lesson is designed. Across all five training programs, content teachers were never involved in supervising or monitoring participants' microteaching sessions. An experienced content teacher could easily spot any domain-specific clues that a language trainer could hardly detect. Future enrichment programs need to incorporate this element into the course design.

Another pitfall lies in the effects of the training programs. The intensive nature of the programs, especially the ones overseas, was meant to uplift the English proficiency of the participants. However, because most of the education programs were between 2 and 3 weeks long, such brief training could at best provide language input and exposure to participants. Whether this input and exposure could produce a marked improvement in their English proficiency, especially verbal fluency, has yet to be confirmed. After all, language proficiency is a set of literacy skills that take time to develop and mature. While a great deal of language input received in an intensive fashion may enhance a learner's receptive skills such as listening and reading, productive skills such as speaking and writing usually take more time, above and beyond the given instruction time, to develop. Short-term training programs, therefore, may not yield an immediate quantum leap in participants' language skills. All of the five faculty development programs were short-term and intensive in nature, including the domestic program which, despite a 2-year span, had the component of language training delivered within 1 week. Future faculty education programs need to include the language training component as an on-going, long-term learning process.

The last pitfall concerns the language background of target EMI students. As mentioned before, if students are native speakers of English, they are more able to adapt to different accents and variations in the English spoken by instructors. No matter how foreign the instructor may sound when speaking English, the content will eventually be sorted out and understood. However, if the students are not native speakers of English and are not used to a variety of English accents, the situation can be very different. These students can easily get lost during lectures and not even know how to ask for help.

This is the problem with sending EMI teachers abroad to English-speaking countries. While they can improve their language skills when immersed in an English-speaking environment and attend tailor-made language courses which target the necessary classroom English or personal weak areas, they may face a different student body during observation classes in the host country. The student body of an English-speaking country operates on different parameters than that of a non-English-speaking country. In any English-speaking country, students normally speak the language to perform daily tasks, although due to immigration they may come from diverse language and cultural backgrounds as well. Students in an EMI class, in contrast, are normally in a non-English environment where they do not need to speak the language once outside the classroom. They may not be proficient enough to use the language well in class like their counterpart students in an English-speaking environment. These nonnative speakers of English can be challenging to teach because both the content of the course and the English language can be stumbling blocks. EMI teachers need to constantly check whether it is the content or the language that is interfering with their students' learning, whereas in an English-speaking environment, the language may not even be an issue of concern. In an overseas EMI development program, therefore, not until the trainers are fully aware of the differences between the student bodies can they begin to help their EMI colleagues to handle the task at hand. The organizers of future overseas EMI

development programs, particularly to English-speaking countries, will need to take this into account when designing the training courses. A more accurate replication of the classroom condition in the target EMI setting (e.g., by observing how to teach content knowledge to a group of English-as-a-second-language learners) will not only sensitize the EMI trainers to their trainees' real needs but also help the trainees develop coping strategies.

Framework for Future EMI Teacher Development Programs

The evaluation results show that the five EMI education programs all have their own strengths and weaknesses. Most of them are able to fulfill at least two levels of Kirkpatrick's evaluation model; however, none were able to have all four levels completed. Most importantly, none of the five programs were able to provide sustaining, long-term support to nurture an EMI teacher's growth across different stages of his professional development.

Based on this need, a framework is hereby suggested as a future model for such programs. This framework consists of three components: (1) English language training, (2) pedagogical training, and (3) licensing certification. The third component is not found in any of the five existing programs. The English language training component applies to all nonnative English-speaking EMI teachers. Courses to include are classroom instructional language, oral interaction skills, English for English-teaching professionals, accents and dialects, and world Englishes, just to name a few. The purpose of this training component is to ensure that an EMI instructor will be communicatively competent in delivering their lessons in English.

The second training component—pedagogical skills—involves methodological approaches including, but not limited to, English presentation skills, lesson planning and delivery, classroom management, task-based learning, cooperative learning, case study teaching, handling small and large classes, the flipped classroom, and assessment. In addition, experienced EMI content teachers are invited to offer domain-specific teaching workshops to teachers of the relevant fields. For example, teachers who teach mathematics-oriented courses need to learn how to use “think-aloud” to demonstrate their reasoning while solving an equation. Teachers who teach law courses need to know how to use the Socratic method to engage students. The purpose of these domain-specific workshops, as well as the general pedagogical training, is to enrich the teaching repertoire of potential EMI instructors for any future usage in class.

The third component of the training, licensing certification, is most crucial in sustaining an EMI teacher's development. It entails a certification process, preferably no less than 6 months, whereby EMI teacher trainees are evaluated by language trainers as well as expert content teachers of their respective fields. Feedback will be provided to allow the exchange of ideas between evaluators and trainees. An EMI certificate will be awarded to teachers who successfully complete all the training courses and the evaluation process. In order to build a strong pool of EMI teacher

trainers, it is recommended that an alliance be formed with universities in other Asian countries to enable recruiting of experienced language trainers and content teachers in all fields. Teacher trainees will thus be exposed to trainers who have various linguistic and cultural backgrounds, be it native English speaking or nonnative English speaking, and will therefore be better prepared to handle multilingual EMI classes. At the same time, through working with expert EMI content teachers, trainees will be able to advance their teaching skills, above and beyond generic pedagogical techniques, in that content teachers of the same field can offer their insights into the microteaching of teacher trainees.

Since language capacity, much like teaching capacity, is a set of literacy skills that needs time to develop and advance, these training courses should be offered to potential EMI teachers on a rolling basis on weekends during the school year rather than as an intensive program. If appropriate and logistically possible, some training courses can be completed online over a period of time. Teachers can be encouraged to take the courses in their free time and gradually satisfy all the requirements before receiving their EMI certificate.

The potential EMI teacher's academic affiliation should be responsible for the cost of the training, which will be subsidized by the Ministry of Education. No teacher should be assigned to teach EMI courses until they are awarded the certificate. Administrators and department chairs should encourage faculty members to obtain the EMI certificate by offering promotional credits or other relevant incentives. In order to strengthen the validity of the current EMI certificate, international accreditation should be sought so that certified EMI teachers are qualified to teach EMI courses, as visiting scholars, in universities or countries that recognize the certification. This would greatly increase faculty mobility among universities with EMI programs.

Highlights and Challenges

Although English-medium instruction programs and courses have been offered by many universities in Taiwan over the past decade—and it seems there are more to come—EMI instructors have yet to be properly educated to handle the demand. Beginning in 2010, a series of EMI teacher development programs were initiated by the Ministry of Education and organized by different Regional Education Resource Centers. Most of these programs were conducted overseas in English-speaking countries. The participants—a total of 130 faculty members from around Taiwan—were able to advance both their language and teaching skills through the training. Moreover, these participants have since become EMI seed instructors. They are, however, only a fraction of the total number of university lecturers currently practicing EMI in Taiwan. More teachers need to be groomed with EMI training before they begin or continue their EMI career.

As mentioned before, the teacher training programs conducted in English-speaking countries may overlook the language barriers faced by nonnative

English-speaking students prevalent in Asian contexts. In fact, not only in Asian countries, some European countries, such as Spain, could also face non-English-speaking students struggling in EMI classroom, as reported by Defouz (2011). Future training programs need to sensitize EMI instructors to the potential language difficulties experienced by their students. The future model of EMI teacher education programs suggested earlier can also include training sessions conducted in different Asian contexts where trainees would perform their microteaching. In so doing, trainees will be exposed to a variety of nonnative accents as well as students' language difficulties, for which trainees will learn the necessary coping strategies and teaching techniques. EMI teachers who are sensitive to the language barriers and limitations of their students are more resilient to the disturbing language factors in class. Also, they are better able to provide timely help by adjusting their teaching to meet the needs of the students.

By the same token, universities from different Asian countries can join forces in future EMI teacher education programs. This would not only broaden the pool of the student and faculty bodies for microteaching but also bolster the credentials of the faculty development program in order to meet international accreditation. After all, since EMI courses are part of the internationalization endeavor assumed by many universities, a collaborative effort and a systematic, context-specific certification program would be more promising to ensure the quality of EMI education.

Summary

This chapter begins by briefly reviewing the literature on problems experienced by untrained EMI teachers. Next, a review of Taiwan's EMI teacher development programs in the recent past pinpoints the strengths and weaknesses of these programs and notes the absence of a sustaining EMI licensing certification program. Finally, this chapter proposes a framework for an EMI certification program applicable to Asian contexts.

References

- Ball, P., & Lindsay, D. (2013). Language demands and support for English-medium instruction in tertiary education: Learning from a specific context. In A. Doiz, D. Lasagabaster, & J. M. Sierra (Eds.), *English-medium instruction at universities: Global challenges* (pp. 44–61). Bristol, UK: Multilingual Matters.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barnard, R. (2013). *English medium instruction in Asian universities: Some concerns and a suggested approach to dual-medium instruction*. Paper presented at the 6th CONAPLIN: International Conference on Applied Linguistics: Shaping and Reshaping Linguistic Identity, Indonesian University of Education, Indonesia (October 30–31).

- Chang, Y. Y. (2010). English-medium instruction for subject courses in tertiary education: Reactions from Taiwanese undergraduate students. *Taiwan International ESP Journal*, 2, 55–84.
- Chapple, J. (2015). Teaching in English is not necessarily the teaching of English. *International Education Studies*, 8(3), 1–13.
- Dafouz, E. (2011). English as the medium of instruction in Spanish contexts: A look at teacher discourses. In Y. Ruiz De Zarobe, J. M. Sierra, & F. Gallardo Del Puerto (Eds.), *Content and foreign language integrated learning: Contributions to multilingualism in European contexts* (pp. 189–209). Bern, Switzerland: Peter Lang.
- Dearden, J. (2014). *English as a medium of instruction—a growing global phenomenon: Phase 1 (Interim Report)*. The British Council. http://www.britishcouncil.org/sites/britishcouncil.uk2/files/english_as_a_medium_of_instruction.pdf. Accessed 20 May 2016.
- Ellili-Cherif, M. (2014). Integrated language and content instruction in Qatar independent schools: Teachers' perspectives. *Teacher Development*, 18(2), 211–228.
- Huang, Y. P. (2012). Design and implementation of English-medium courses in higher education in Taiwan: A qualitative case study. *English Teaching and Learning*, 36, 1–51.
- Huang, Y. P. (2014). University instructors use of English as a medium of instruction in Taiwan: Functions of contextual beliefs. *Hwa Kang English Journal*, 20, 27–66. doi:10.3966/221880882014122001002.
- Kirkpatrick, D. L. (1996). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler Publishers, Inc..
- Kling, J., & Stæhr, L. S. (2011). Assessment and assistance: Developing university lecturers language skills through certification feedback. In R. Cancino, K. Jæger, & L. Dam (Eds.), *Policies, principles, practices. New directions in foreign language education in the era of educational globalization* (pp. 213–245). Newcastle upon Tyne, UK: Cambridge Scholars.
- Li, D. C. S. (2013). Linguistic hegemony or linguistic capital? Internationalization and English-medium instruction at the Chinese University of Hong Kong. In A. Doiz, D. Lasagabaster, & J. M. Sierra (Eds.), *English-medium instruction at universities: Global challenges* (pp. 65–83). Bristol, UK: Multilingual Matters.
- Macaro, E. (2015). English medium instruction: Time to start asking some difficult questions. *Modern English Teacher*, 24(2), 4–7.
- Sert, N. (2008). The language of instruction dilemma in the Turkish context. *System*, 36, 156–171.
- Tange, H. (2010). Caught in the tower of Babel: University lecturers' experiences with internationalization. *Language and Intercultural Communication*, 10(2), 137–149.
- Tatzl, D. (2011). English-medium masters' programmes at an Austrian university of applied sciences: Attitudes, experiences and challenges. *Journal of English for Academic Purposes*, 10, 252–270.
- Tsuneyoshi, R. (2005). Internationalization strategies in Japan: The dilemmas and possibilities of study abroad programs using English. *Journal of Research in International Education*, 4, 65–86. <http://dx.doi.org/10.1177/1475240905050291>
- Werther, C., Denver, L., Jensen, C., & Mees, I. M. (2014). Using English as a medium of instruction at university level in Denmark: The lecturer's perspective. *Journal of Multilingual and Multicultural Development*, 35(5), 443–462.