# EMI, CLIL, & CBI: Differing Approaches and Goals

**Howard Brown**
*The University of Niigata Prefecture*

**Annette Bradford**
*Meiji University*

Around the world, the role of English in higher education is changing. Rather than just an object of study, English is now often the language of instruction. In Japan, universities are currently adopting content and language integrated learning (CLIL) and English-medium instruction (EMI), alongside longstanding content-based instruction (CBI) approaches, to convey academic content in English. However, a shared understanding of the goals and outcomes of these approaches has yet to emerge. We argue that key distinctions are based on the relative positions of language and content in learning objectives and assessment. In CBI, content is a vehicle for language learning: The goal is language learning and students are assessed on language performance. In EMI, learning outcomes are tied directly to the content: Language learning is neither planned for nor assessed. Between these extremes, CLIL is an integrated approach with varying degrees of focus on language and content learning.

世界各国の高等教育において、英語は、学習の対象から教授のための言語ツールへと変わりつつある。日本では長い間、内容中心の教授法（CBI）が一般的だったが、最近になって大学では内容言語統合型学習（CLIL）や英語による教育（EMI）の採用が進み、関係者の英語との関わり方も変化した。しかし、こうした新しい取組みの目的や成果に対する明確な共通認識はまだない。本稿では、EMI、CLIL、CBIの特徴的な違いは学習の目的や評価における言語と内容の相対的な関係性によることを主張する。CBIの目的は言語習得であって、学習する内容はそのための手段である。学生は、言語のパフォーマンスで評価される。一方、EMIの学習成果は、学習する内容と直結している。つまり、EMIの本来の目的は言語習得ではないので、言語のパフォーマンスの評価もしない。CLILは、CBIとEMIの2つの異なる教育方法の中庸の教育法であって、言語学習と内容学習の占める割合の違いはあっても、その両方の目的を併せ持っている。

The position of English in higher education has been changing all around the world. Once the object of study, English is now becoming a language of instruction for academic-subject content. Two decades ago, the linguist David Graddol (1997) noted that "one of one of the most significant educational trends world-wide is the teaching of a growing number of courses in universities through the medium of English" (p. 45). This global trend has shown no sign of fading and has gained momentum in recent years that is likely to continue into the foreseeable future (Dearden, 2015; Wachter & Maiworm, 2014).

In Japan, English language learners have interacted with content via content-based instruction (CBI) for some time, at least since the early 1990s (see, e.g., Hayes & Rinnert, 1991, a special edition of *The Language Teacher* on CBI). However, students, instructors, and other stakeholders are now engaging with English in new ways as universities adopt content and language integrated learning (CLIL) and English-medium instruction (EMI). Despite a recent increase in the use of these teaching approaches, a shared understanding of the sometimes-overlapping goals and outcomes of each approach has yet to emerge, and universally agreed-upon definitions of the terms EMI, CLIL, and CBI have not been adopted by educational stakeholders–neither in Japan nor worldwide. For example, MacGregor (2016) reported that the respondents in her study, all language-teaching professionals working in Japan, viewed CBI and CLIL as synonymous terms.

Even in the research community, these terms are not always clear. As discussed below, each of the three terms can be used very widely, encompassing all teaching approaches that involve content in a second language (see, e.g., Dearden & Macaro, 2016; Marsh, 2008; Stoller, 2008). Writers also sometimes conflate the three approaches, describing the same concept simultaneously with different terms. For example, in writing about a multilingual program in Spain, Doiz, Lasagabaster, and Sierra (2011) use both EMI and CLIL to describe the classes (p. 353). Furthermore, understandings of the terms that are used to describe classes taught in English have changed over time. Table 1 highlights the considerable variety of ways that EMI, CLIL, and CBI have been defined in the research

literature.

### Table 1. Differing Images of CBI, CLIL, and EMI in the Literature

| EMI | CLIL | CBI |
|---|---|---|
| "The central focus is on students' content mastery and no language aims are specified" (Unterberger & Wilhelmer, 2011, p. 96). | "Diverse methodologies are used which lead to dual-focused education where attention is given to both topic and language" (Marsh, 2008, p. 1986). | "an integrated approach to language instruction, drawing topics, text, and tasks from content or subject matter classes, but focusing on cognitive, academic language skills" (Crandall & Tucker, 1990, p. 83) |
| "focuses on content learning only" (Smit & Dafouz, 2012, p. 4) | "a dual-focused educational approach . . . a fusion" of both subject content and language learning" (Coyle, Hood, & Marsh, 2010, p. 6) | "an effective way to engage students with content sources, while at the same time improving language abilities" (Mesureur, 2012, p. 71) |
| "an umbrella term for academic subjects taught through English, one making no direct reference to the aim of improving students' English" (Dearden & Macaro, 2016, p. 456) | "Parts of the curriculum are delivered through a foreign language. Learners acquire the target language naturalistically" (Coleman, 2006, p. 4). | "concurrent teaching of academic subject matter and second language skills" (Brinton, Snow, & Wesche, 2003, p. 2) |
| "English-taught degree programs . . . predominately aim at the acquisition of subject knowledge" (Unterberger, 2014, p. 37). | "Learners are engaged in a joint learning practice of subject matter and foreign language" (Smit & Dafouz, 2012, p. 1). | "aims to develop both the students' language and their content knowledge" (Butler, 2005, p. 229) |
| "the use of English to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English" (Dearden, 2015, p. 4) | | "Many language programs endorse [CBI] but only use course content as a vehicle for helping students master language" (Stoller, 2002a, p. 112). |

In this paper, we aim to clarify the English-medium higher education landscape by tracing the evolution of EMI, CLIL, and CBI and offering updated definitions. Note that we seek to clarify the meaning of key terms in EFL contexts, that is, situations where English is not the primary language of education or the wider community. For related issues in ESL contexts, readers may want to refer to García and Baker (2007).

## English-Medium Instruction

The term EMI gained currency in the late 1990s with the changes in European tertiary education attributable to the Bologna Process, which is aimed at harmonizing European higher education to increase academic mobility and facilitate employability (European Higher Education Area and Bologna Process, 2016). Given the status of English as a global lingua franca and language of transnational research (Coleman, 2006), for many European universities, English-medium education became a necessity. The increase in such programs has been phenomenal: For example, between 2001 and 2014, the number of European bachelor and master degrees taught fully in English rose more than tenfold from 725 to 8,089 (Wächter & Maiworm, 2014). This growth has not been limited to Europe; spurred by Bologna and driven by desires to internationalize, universities worldwide have rapidly increased their English-medium offerings (Dearden, 2015).

The growth in EMI is occurring primarily at the tertiary level. Literature on its implementation across the world has largely concluded that internationalization is the main driver of EMI, and that this is very often linked to attracting more foreign students, with language learning remaining of secondary importance (e.g., Ammon & McConnell, 2002; Smit & Dafouz, 2012). However, the rationales for attracting international students are multifaceted, linked to increasing prestige or revenue, presenting a competitive profile, aspirations to rise in university rankings, and improving the international competencies of home students (de Wit, 2013). These rationales contribute to diversity in English-medium programming. EMI courses are offered at the undergraduate and postgraduate levels; they may be taught by subject-content specialists teaching in their field or by language specialists working outside of their own field of specialty; and EMI classrooms may cater to solely international students, a mix of domestic and international students, or domestic students only. Studies have found that the purposes for implementing EMI programs are often not clearly articulated to classroom-level implementers by policy makers and administrators, leaving university teachers to draw their own conclusions about the rationales and intended outcomes for EMI (e.g., Bradford, 2015; Dearden & Macaro, 2016).

EMI has been described as "an umbrella term for academic subjects taught through English" because it makes "no direct reference to the aim of improving students' English" (Dearden & Macaro, 2016, p. 456). EMI could therefore, in theory, encompass varying

amounts of content and language learning, embracing both CLIL and CBI. However, we view EMI not as an umbrella term but rather as an approach to teaching in English distinct from CLIL and CBI. Examination of some of the ways EMI has been defined in the literature (see Table 1) shows that the distinguishing attribute of EMI is its focus on subject-content mastery. All interpretations cited in Table 1 highlight the centrality of academic content and emphasize the lack of explicit language learning aims in EMI courses. It is quite possible to conduct an EMI course with no intention of furthering the language skills of the participating students, and many EMI courses entail a sink-or-swim approach in which students are expected to function as near-native speakers of the language of instruction. This does not mean, however, that EMI courses cannot be directed towards improving students' English skills. The use of the words *focus* and *predominately* in the definitions of the term draws our attention to the fact that content mastery does not have to be the only outcome of EMI; it is merely the primary focus. EMI classes may incorporate elements of language sensitivity and language support. In some cases, EMI programs may include bridge phases with explicit language learning and assessment components for students before they begin taking EMI content classes (Brown, 2014). However, English is, above all, a tool for transmitting subject content, and language learning is an implicit or incidental outcome. Learning outcomes and assessment are both tied directly to subject content.

The extent to which content and language learning are included as implicit or incidental aims of EMI courses is context driven, often depending on the personal attitudes of the individual EMI instructor or the discipline taught. For example, in a study of the linguistic attitudes of physics lecturers in Sweden, Airey (2012) concluded that the phrase "I don't teach language" essentially expressed their feelings about English use in their EMI classrooms. English was clearly only a vehicle for communicating the subject matter. As another example, Iyobe and Li (2013) described an English-medium Economics class in Japan where the lessons "did not provide any explicit language instruction" but incorporated activities that encouraged communication between the professor and students in English because there was "a language learning aim in the teacher's mind" (p. 379).

EMI courses often have an explicit or implicit aim of equipping students with academic skills to operate successfully in international environments, a skill-set of which English is a part (Bradford, 2015). We would therefore like to offer an updated definition of EMI based on the working definition proposed in Dearden's (2015) 55-country study of EMI. Our definition of EMI is as follows:

EMI entails the use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English. It may or may not include the implicit aim of increasing students' English language abilities.

## Content and Language Integrated Learning

The approach to teaching known as CLIL can be traced back to the mid-1990s in Europe. European Commission language policies were promoting the notion of EU citizens having mastery of L+2, or the native language plus two other EU member languages, and proposals were made for teaching secondary school subjects in L2 EU member languages (Llinares, Morton, & Whittaker, 2012). At the same time, the term CLIL was coined by David Marsh in Finland to describe an approach to teaching then evolving in Europe that was partly based on examples from bilingual education programs in Canada and Britain (Marsh, 2008). CLIL is now spreading well beyond its European secondary school origins, with examples of CLIL for English seen in higher education in many EFL contexts (e.g., Wei, 2013) and CLIL for other languages seen, for example, in Australia (Turner, 2013).

Early CLIL programs tended to be bottom-up local initiatives, rather than part of an EU-wide strategy, so a variety of CLIL approaches developed across Europe. Marsh (2008) claimed that CLIL is an umbrella term covering varied approaches to teaching subject matter in a foreign language in which both the topic and language are given attention. However, since the 1990s, a strong research agenda examining CLIL, coordinated curriculum developments, and faculty training have resulted in a clarification of CLIL teaching methods and aims. Unlike EMI and CBI, CLIL is more than an approach; a widely accepted method of teaching CLIL courses has emerged.

For language learning, CLIL lessons are expected to engage students in all four key skill areas: reading, writing, speaking, and listening. In addition, the lessons are designed to balance the students' receptive and productive experience with the target language. CLIL classes do not sequence students' exposure to language elements based on grammatical structure, but rather approach language lexically. From the content perspective, CLIL lessons are expected to foster learning of subject matter as part of the mainstream curriculum. This means that CLIL content is not simply topics of general interest or current affairs, but builds towards mainstream curricular subject learning outcomes. Students in CLIL courses should be studying things they would be learning in first-language medium courses anyway. The integration of content and language is achieved through attention to four key elements of CLIL teaching, known as the four Cs of CLIL: content, communication, cognition, and culture. In addition, CLIL lessons rest on principles of active and cooperative learning and the co-construc-

tion of knowledge. (Coyle, Hood, & Marsh, 2010).

We argue that a complete definition of CLIL must include reference to its dual focus and accepted notions of pedagogy. Our definition of CLIL is as follows:

> CLIL is an approach to education that integrates language and content learning; planning for, fostering, and assessing both, though the focus may shift from one to the other. CLIL is also a method of teaching which draws heavily on constructivist and socio-cultural notions of learning to provide students with opportunities for meaningful input and output in L2 and meaningful engagement with content.

## Content-Based Instruction

CBI arose in the mid-to-late 1980s. Inspired by Canadian French immersion programs and bilingual education initiatives for immigrant communities in the United States, CBI drew heavily on constructivist learning theory and Krashen's (1981) notion of comprehensible input. CBI initially gathered attention in North America, especially in secondary schools and universities, because of its potential to help foreign students and those from immigrant communities rapidly adjust to mainstream subject-matter education.

Many definitions of CBI (see Table 1) refer to it as an umbrella term covering any and all approaches to instruction that teach subject-matter content in a second or foreign language (e.g., Brinton, Snow, & Wesche, 2003; Stoller, 2008). One early influential definition (Met, 1998) established CBI as a continuum with content-driven approaches at one end and language-driven approaches at the other. This places programs as diverse as Canadian-style immersion secondary schools, university EMI programs, and language classes that make occasional use of content for language practice under the same definitional umbrella.

Another broad view of CBI is from Stryker and Leaver (1997), who introduced three distinct models of CBI, each with a different perspective on content and a different role for the teacher. In the first model, sheltered content classes are subject-matter classes in which subject-matter learning is the primary intended outcome. Teachers in this model are sensitive to the particular needs of the second-language students in their class, but are not specifically working towards their language acquisition. The second model of CBI is adjunct-CBI, which refers to language classes taught in parallel to subject-matter classes or team-taught by content and language teachers. These may also be content classes taught by subject-matter specialists who have been trained in language teaching as well. In these classes, both the subject matter and language are represented in the intended learning outcomes. Finally, the theme-based model of CBI describes language classes taught by a language teacher but based upon themes taken from, or relevant to, a subject-matter class. This three-model CBI framework continues to be referred to in discussions of CBI in EFL research literature (e.g., Ahn & Kim, 2013; Brinton et al., 2003; Butler, 2005).

Although these wide definitions have the advantage of being inclusive, they lack specificity and give CBI such a broad purview that it is difficult to have a meaningful discussion of the aims of CBI or teaching practices associated with it. In fact, "variability in the implementation of CBI is one reason it may be difficult for teachers and policy makers to understand the purposes and effectiveness of CBI" (Butler, 2005, p. 230). A narrower, more specific definition that distinguishes CBI from CLIL and EMI is needed.

Though definitions of CBI, particularly those emerging from bilingual education initiatives in second-language contexts, often refer to a dual focus similar to that now seen in CLIL, the role of content learning is often quickly marginalized as authors attempt to explain the implementation and benefits of CBI. Within these discussions, language learning is clearly the focus. Stryker and Leaver (1997), for example, defined a dual focus for CBI when introducing their three models but then quickly shifted their discussion to language teaching, referring to CBI as a "holistic and global approach to foreign language education" (p. 3). They noted that CBI shifts "the focus of instruction from the learning of language per se to the learning of language through the study of subject matter" (p. 6). Crandall and Tucker (1990) provided another example. After defining CBI in terms of both language and content learning, they clearly frame CBI only in terms of language outcomes, calling it "an integrated approach to language instruction, drawing topics, text, and tasks from content or subject matter classes, but focusing on cognitive, academic language skills" (p. 83). In both cases, the aim of CBI is language learning; the subject matter acts as a vehicle for language learning.

This focus on language learning may reflect the fact that in many cases of CBI implementation, especially those in EFL contexts, the theme-based model of CBI is dominant and content is often used "simply as a shell for language teaching" (Stoller, 2002b, p. 1); curricula are driven by language proficiency concerns. In these cases, the purpose of CBI is clearly linked to language-learning outcomes. Content acts simply as a vehicle for meaningful input (Bulter, 2005) or is seen as providing an authenticity of purpose, which is a strong motivator to learn the language (Edsall & Saito, 2012).

Thus, we argue that the use of CBI as an umbrella term is overly wide. In EFL contexts, where CBI is largely implemented by language teachers, the theme-based model of CBI is dominant and this is where our narrower definition of CBI rests:

CBI is an approach to language teaching in which content, texts, activities, and tasks drawn from subject-matter topics are used to provide learners with authentic language input and engage learners in authentic language use.

## Conclusion

All three educational approaches discussed in this paper are present in Japan. Students can now study in EMI content classes in more than a third of the nation's universities (MEXT, 2015) and the number of institutions offering EMI continues to grow. CLIL is likewise becoming more common in language programs in universities, high schools, and even in some elementary schools. However, it is still not widely understood or accepted in language teaching circles. As advocates for CLIL in Japan, Ikeda, Pinner, Mehisto, and Marsh (2013) highlighted CLIL's infancy: "If CLIL in Europe is a toddler, CLIL in Japan is a new-born baby, but it is slowly and steadily crawling forward in Japanese education" (p. 1). Of the three approaches, CBI is perhaps the most common and best understood in Japan, having been a popular approach to language education in universities since the early 1990s.

It is important for language teachers and other stakeholders in Japan to understand the roles that language and academic content play in EMI, CLIL, and CBI so that they can best support their students' learning goals. A class taught in English may have the goal of furthering students' language abilities or may be designed only to develop their understanding of subject content. Yet, the classroom activities and tasks may appear similar, especially because increasing numbers of university programs are adopting active participatory classroom practices. The role that content and language play in each approach is critical to acknowledge (see Appendix): In EMI, content is central; CLIL has a dual focus on content and language; and in CBI, content is peripheral.

## Bio Data

**Howard Brown** heads the Academic Communicative English Program at the University of Niigata Prefecture. His research focuses on best practices for curriculum planning and program design in EMI, and the relationship between EMI and EAP. Howard has been involved in language education for more than 25 years with extensive experience as a teacher, teacher trainer, and administrator in high schools, private language schools, and universities in Canada, Turkey, and Japan.

**Annette Bradford** is an Associate Professor at Meiji University, teaching courses focused on enhancing students' international competencies. Previously, she held a Council on Foreign Relations International Affairs Fellowship in Japan and taught at universities in Japan, the United States, and Indonesia. Her research on the internationalization of higher education, particularly English-medium instruction, student exchange, and education policy, can be found in publications such as the *Journal of Studies in International Education* and *International Higher Education*.

## References

Ahn, H.-J., & Kim, E. (2013). Understanding instructor's challenges of content based instruction: For pre-service teachers in early childhood education. *Korean Journal of Childcare and Education, 9*(5), 181-200. https://doi.org/10.14698/jkcce.2013.9.5.181

Airey, J. (2012). "I don't teach language": The linguistic attitudes of physics lecturers in Sweden. *AILA Review, 25,* 64-79. https://doi.org/10.1075/aila.25.05air

Ammon, U., & McConnell, G. (2002). *English as an academic language in Europe*. Frankfurt am Main, Germany: Peter Lang.

Bradford, A. (2015). *Internationalization policy at the* genba: *Exploring the implementation of social science English-taught undergraduate degree programs in three Japanese universities* (Doctoral dissertation). Retrieved from PQDT Open. (UMI 3687531)

Brinton, D., Snow, M. A., & Wesche, M. B. (2003). *Content-based second language Instruction*. Ann Arbor: University of Michigan Press.

Brown, H. (2014) Contextual factors driving the growth of undergraduate English-medium instruction programmes at universities in Japan. *Asian Journal of Applied Linguistics, 1*, 50-63.

Butler, Y. G. (2005). Content-based instruction in EFL contexts: Considerations for effective implementation. *JALT Journal, 27,* 227-245.

Coleman, J. A. (2006). English-medium teaching in European higher education. *Language Teaching, 39,* 1-14. https://doi.org/10.1017/S026144480600320X

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge, England: Cambridge University Press.

Crandall, J., & Tucker, G. R. (1990). Content-based language instruction in second and foreign languages. In S. Anivan (Ed.), *Language teaching methodology for the nineties* (pp. 83-96). Ann Arbor: University of Michigan.

Dearden, J. (2015). *English as a medium of instruction – A growing phenomenon*. London, UK: British Council.

Dearden, J., & Macaro, E. (2016). Higher education teachers' attitudes towards English medium instruction: A three-country comparison. *Studies in Second Language Learning and Teaching, 6,* 455-486. https://doi.org/10.14746/sllt.2016.6.3.5

de Wit, H. (Ed.). (2013). *An introduction to higher education internationlisation*. Milan, Italy: Center for Higher Education Internationlisation. Università Cattolica Del Sacro Cuore.

Doiz, A., Lasagabaster, D., & Sierra, J. M. (2011). Internationalisation, multilingualism and English-medium instruction. *World Englishes, 30,* 345-359. https://doi.org/10.1111/j.1467-971X.2011.01718.x

Edsall, D., & Saito, Y. (2012). The motivational benefits of content. *OnCue Journal, 6*(2), 66-94.

European Higher Education Area and Bologna Process. (2016). Official website. Retrieved 3 November, 2016, from http://www.ehea.info/

García, O., & Baker, C. (Eds.). (2007). *Bilingual education: An introductory reader*. Clevedon, England: Multilingual Matters.

Graddol, D. (1997). *The future of English: A guide to forecasting the popularity of the English language in the 21st century*. London, England: British Council.

Hayes, T., & Rinnert, C. (Eds.). (1991). Content-based language instruction [Special edition]. *The Language Teacher, 15*(11).

Ikeda, M., Pinner, R. S., Mehisto, P., & Marsh, D. (2013). Editorial: CLIL in Japan. *International CLIL Research Journal, 2*(1), 1-2.

Iyobe, B., & Li, J. (2013). CLIL to what degree: A trial in English medium education at a Japanese university—Is it CLIL or not? *Asian EFL Journal, 15,* 373-382.

Krashen, S. (1981). *Second language acquisition and second language learning*. New York, NY: Prentice-Hall.

Llinares, A., Morton, T., & Whittaker, R. (2012). *The roles of language in CLIL*. Cambridge, England: Cambridge University Press.

Marsh, D. (2008). Language Awareness and CLIL. In N. H. Hornberger (Ed.), *Encyclopedia of language and education* (pp. 1986-1999). Boston, MA: Springer US.

MacGregor, L. (2016). CLIL in Japan: University teachers' viewpoints. In P. Clements, A. Krause, & H. Brown (Eds.), *Focus on the learner* (pp. 426-432)*.* Tokyo: JALT.

Mesureur, G. (2012). Content-based instruction for all levels of EFL students. *Keisen University Bulletin, 24,* 71-80. Retrieved from https://keisen.repo.nii.ac.jp/?action=repository_uri&item_id=691&file_id=22&file_no=1

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). Clevedon, England: Multilingual Matters.

MEXT. (2015). *Heisei 25 nendo no daigaku ni okeru kyouiku nai you tou no kaikaku joukyou ni tsuite* [About the state of affairs regarding university reforms to education in 2013]. Retrieved from http://www.mext.go.jp/a_menu/koutou/daigaku/04052801/__icsFiles/afieldfile/2016/05/12/1361916_1.pdf

Smit, U., & Dafouz, E. (2012). Integrating content and language in higher education: An introduction to English-medium policies, conceptual issues and research practices across Europe. *AILA Review, 25,* 1-12. https://doi.org/10.1075/aila.25.01smi

Stoller, F. L. (2002a, April). *Content-based instruction: A shell for language learning or a framework for strategic language and content learning*? Paper presented at the TESOL convention, Salt Lake City, UT. Retrieved from http://carla.umn.edu/cobaltt/modules/strategies/stoller2002/stoller.pdf

Stoller, F. L. (2002b). Promoting the acquisition of knowledge in a content based course. In J. Crandall & D. Kaufman (Eds.), *Content-based instruction in higher education settings* (pp. 109-123). Alexandria, VA: TESOL.

Stoller, F. L. (2008). Content-based instruction. In N. H. Hornberger (Ed.), *Encyclopedia of language and education* (pp. 1163-1174). Boston, MA: Springer US.

Stryker, S. B., & Leaver, B. L. (1997). *Content-based instruction in foreign language education: Models and methods*. Washington, DC: Georgetown University Press.

Turner, M. (2013). Content-based Japanese language teaching in Australian schools: Is CLIL a good fit? *Japanese Studies, 33,* 315-330. https://doi.org/10.1080/10371397.2013.846211

Unterberger, B. (2014). *English-medium degree programmes in Austrian tertiary business studies: Policies and programme design* (Doctoral dissertation). University of Vienna, Austria. Retrieved from http://othes.univie.ac.at/33961/

Unterberger, B., & Wilhelmer, N. (2011). English-medium education in economics and business studies: Capturing the status quo at Austrian universities. *International Journal of Applied Linguistics, 161,* 90-110.

Wächter, B., & Maiworm, F. (2014). *English-taught programs in European higher education: The state of play in 2014*. Bonn, Germany: Lemmens.

Wei, R. (2013). Chinese-English bilingual education in China: Model, momentum, and driving forces. *Asian EFL Journal, 15,* 184-200.

## Appendix
### *Overview of CBI, CLIL, & EMI: Differing Approaches and Goals*

| Criteria | EMI | CLIL | CBI |
|---|---|---|---|
| Aims | Content mastery → L2 learning is often incidental. May have implicit language learning aims | Dual focus content and language learning → language learning aims are explicit | Language learning |
| Target groups | Nonnative English speakers, native English speakers | Nonnative English learners | Nonnative English learners |
| Teaching staff | Subject specialist; sometimes subject specialist and language specialist in collaboration | Language specialist (often in Britain, Japan, South America); subject specialist (often in Europe); team-teaching with both content and language specialists | Language specialist |
| Pedagogical approaches and teaching formats | Focus on development of subject knowledge, methods depend on those favored by the discipline and instructor; expert-oriented lecture is likely | Multi-modal interactive and learner centered approaches which support subject content and language learning; team teaching possible | Language learning tasks; methods depend on those favored by the instructor |
| The role of language | Language as a tool (vehicular function) | Language as a tool, subject and mediator (for constructing knowledge & sharing expertise) | Language as a subject |

| Criteria | EMI | CLIL | CBI |
|---|---|---|---|
| Expected learning outcomes | Subject knowledge acquisition | Integrated content and language competence development; focus on L2 productive and interactive skills | Language learning outcomes. Content learning is incidental, at a general knowledge level |
| Assessment | Students assessed on subject content knowledge | Students assessed on language proficiency / performance and subject content knowledge | Students assessed on language proficiency / performance |

*Note:* Adapted from Unterberger & Wilhelmer (2011)