# The Implementation of EMI (English Medium Instruction) in Indonesian Universities: Its Opportunities, its Threats, its Problems, and its Possible Solutions* 

Jusuf Ibrahim


#### Abstract

In this paper, I attempt to find out whether EMI (English Medium Instruction) can be an effective means of enhancing students' and teachers' language proficiency at university (bilingualism) and whether bilingualism necessarily leads to biliteracy. In addition, I would like to propose a model on which a smooth transition to a full EMI implementation can be achieved, should it be adopted. From literature reviews, I conclude that EMI (using English to teach content subjects) can be a better means of solving learners' language problems than teaching English as a subject, because it allows learners more exposure to the language (comprehensible input) and more opportunity to use it (comprehensible output). However, due to its classroom-based nature, EMI is not likely to develop the four language skills (listening, reading, speaking, \& writing) equally for both students and teachers. On the other hand, the assumption that EMI will automatically result in biliteracy is unsupported, because only bilinguals competent in both languages can take a full advantage of their bilingualism. Students or teachers who are not adequately developed in the language are likely to suffer academically, socially, and psychologically instead.

Since research has found that total/full immersion is not the right method for language-incompetent students, the writer believes that both a bridging program and a partial EMI program are necessary at least at the initial stage of EMI implementation. The bridging program should be based on students' and teachers' academic and linguistic needs (EAP); the partial EMI program may be based on limitations on three factors: the participants, the scope of use, and the settings. Finally, in order for the program to run smoothly, mixed-mode teaching in the classroom should be discouraged and a conducive atmosphere for second language acquisition should be established both in the classroom and outside the classroom


Keywords: English Medium Instruction, Bilingual Education, Language Policy, Bilingualism, Biliteracy.

## 1. Introduction

The English language has played an important role so far, and its role is becoming increasingly important in the era of globalization. In the past English has served as a lingua franca in countries where people speak different languages and as a language of

[^0]diplomacy, media, transportation, international business, etc. In today's information age, where computers talk to each other in English, the role of the language is certainly essential. According to Naisbitt and Aburdene (1990), over $80 \%$ of all information stored in computers all over the world is in English, and more than half of technical and scientific periodicals in the world are written in the language, which also serves as the language of modern telecommunication technologies, medicine, electronics, and space technology. The fact that in this era of globalization people need a lingua franca to communicate with one another, has no doubt made the English language a necessity especially for those who need access to information stored in the language.

The growing need for English as a key to global communication, relations, and information, is noticeable in universities around the world. Seeing the great opportunities they may derive from the use of the language, many universities have adopted English as a medium of instruction now. This happens not only in ESL settings like India, the Philippines, Singapore, Malaysia, Hong Kong, etc. but also in countries where English is a foreign language like Holland, Germany, Hungary, Kuwait, Saudi Arabia, Thailand, and Indonesia. In Indonesia EMI is no longer a new phenomenon today. It sprouted especially among business schools offering MBA programs in the 1990s and has now spread into bachelor programs and disciplines other than international business. Fast-growing universities like Universitas Indonesia, Universitas Trisakti, Universitas Katolik Atmajaya, and Universitas Kristen Petra are developing international programs using English as a medium of instruction. In response to global challenges, Universitas Kristen Petra, for instance, has outlined in its strategic plans, Fokus Rencana Strategi Universitas Kristen Petra, its goals to be a bilingual university, where English will be used as the second medium of instruction in its classes by the academic year 2004/2005 (see http://www.petra.ac.id/indonesian/focus_rencana.htm).

The growing popularity of EMI at Indonesian universities, however, will not be without problems. The fact that the universities wish to take advantage of global opportunities (accessing up-to-date and valuable information through printed materials and internet, communicating and collaborating with their counterparts all over the world, etc.) and the fact that EMI is increasingly used may suggest that EMI has been considered the solution to the problem of students' and teachers' low proficiency in the English language. Thus, the problem is expected to take care of itself. In addition, the fact that teachers and students have a growing need to acquire information stored in English and to communicate in the language may also imply that the goals are not only bilingual but also biliterate in nature. Thus, EMI in Indonesia is a complex issue-it is not as simple as it looks. Besides, it may also have negative effects in addition to the advantages it has promised earlier. It is, therefore, important to consider all aspects of EMI (its opportunities, its threats, its problems, and its possible solutions for its implementation) before making a decision to adopt it.

## 2. The Opportunities of EMI

There are at least four factors supporting the possible implementation of EMI at Indonesian universities: 1) The fact that bilingualism gives cognitive advantages, 2) The fact that the important role of English would motivate students and teachers to learn the language, 3) The fact that EMI would give students and teachers more exposure to English and more chances to acquire it, and 4) The fact that literacy skills and
strategies acquired in a learner's native language, Indonesian, transfer to her/his second language, English.

### 2.1 Bilingualism gives cognitive advantages

The assumption that bilingualism (the ability in two or more languages) imposes a cognitive burden and deters students' cognitive development is unfounded. In fact, research has found that bilingualism correlates with creative (divergent) thinking. Psychological tests have discovered that bilingual children are better in fluency, flexibility, originality, and elaboration in thinking than their monolingual counterparts (Baker \& Jones, 1998, p. 67). This is probably because bilinguals possess two or more words representing a single object or an idea, which allows them more flexibility and richness of thought. Another cognitive advantage is that bilingualism heightens metalinguistic awareness (Bialystock, 1987a), the ability to reflect upon and manipulate language as a system (as opposed to simply using it). This implies that bilinguals are more sensitive to intentions and inner meanings and are more analytical towards language. The fact that the use of a second language (English) as a medium of instruction is a 'weak' form of bilingual education (Baker \& Jones, 1998) and that bilingualism gives cognitive advantages could encourage EMI implementation.

### 2.2 The important role of English would motivate students and teachers to learn it.

The second factor favoring EMI implementation is students' and teachers' positive attitudes towards English. The fact that English is increasingly instrumental in this era of globalization for social, academic, and professional purposes would certainly stimulate both students and teachers to improve their proficiency in the language. This instrumental motivation is undoubtedly a valuable asset for successful language learning. Although Gardner \& Lambert (1972) originally regarded that it was less powerful than integrative motivation (a desire to know more about the culture and community of the target language group and affiliate with it), later studies by Lukmani in 1972 and by Oller, Baca, \& Vigil in 1977 (see McGroarty 1996) discovered otherwise. For adults who are eager to achieve job success, instrumental motivation can be just as strong as or even stronger than integrative motivation.

### 2.3 EMI provides more exposure to English and more chances to acquire it.

EMI students and teachers will learn not 'about' English (as a subject) but 'through' English (as a medium). As a medium, English is likely to be used to perform academic tasks involving various classroom-related communicative activities like gaining information (listening \& reading) and conveying information (speaking \& writing). This situation certainly provides students and teachers with more exposure to the language and more chances to use it, which are important conditions for second language acquisition. The fact that the goal of EMI is the content of instruction (meaning) rather than the English language (form) suggests that a second language can be acquired simultaneously or unintentionally. This idea finds justification in Krashen's Monitor Model (1982), which believes that it is 'acquisition' (subconscious process) rather than 'learning' (conscious process) which accounts for language development. 'Learning', in his opinion, serves only as a monitor polishing what the acquired system has produced.

In addition, the fact that EMI will allow students and teachers to read in English (textbooks) more extensively can contribute to the success of acquiring the language.

Krashen also believes that second language acquisition can occur only when there is comprehensible input. If the input contains forms and structures just beyond the learner's current proficiency level in the language ('i +1 '), then comprehension and acquisition will take place. Thus, textbook-reading is certainly a good source for rich language input for students, which is a potential source for intake or language acquisition.

The third component present in EMI and necessary for second language acquisition is comprehensible output, the language produced by the learner. According to Swain (see Gass \& Selinker, 1994), comprehensible input alone is not a sufficient condition for second language acquisition. The opportunity to engage in meaningful oral exchanges (in the classroom or in the community) is also a factor necessary for second language acquisition, because it allows learners to test their hypotheses about their interlanguage system, receive feedback on it, and develop fluency and accuracy. The fact that EMI offers students and teachers more opportunities to speak English (e.g. in lectures, comments, discussions, presentations, interactions, tests, etc.) means that it is a source of comprehensible output, another component responsible for second language acquisition.

### 2.4 Literacy skills and strategies gained in a native language transfer to a second language.

According to Cummins in his Common Underlying Proficiency Model (see Baker, 1996), although two languages look different from each other on the surface (in terms of vocabulary, grammar, orthography, etc.), beneath the surface they share a common function in terms of higher-order thinking skills like analysis, synthesis, evaluation, etc. (See his Iceberg Analogy below). His theory above suggests that a reading ability acquired in a learner's native language is transferable to her/his second language. Skills and strategies like scanning, skimming, contextual guessing of words, tolerating ambiguity, making inferences, using background knowledge about the text, etc. are certainly useful in acquiring a second language literacy. The fact that the EMI students are university students who supposedly have adequate literacy skills (reading \& writing) in Indonesian, imply that they can also take advantage of EMI implementation.


## 3. The Threats of EMI

There are at least five factors, which may discourage EMI implementation: 1) the dilemma between 'instruction' and 'English', 2) the unsupportive environment in acquiring English in Indonesia, 3) the general lack of English proficiency among students and teachers, 4) the 'context-reduced' nature of classroom communication, and 5) the limitedness of classroom discourse.

### 3.1 The dilemma between 'instruction' and 'English

Although 'instruction' is often equated to 'teaching', according to Barrow \& Milburn (1990), it is only part of it. Teaching is a broad term encompassing activities like "lecturing, instructing, drilling, eliciting responses, asking questions, testing, providing information, encouraging, and conducting seminars" (p. 306). The purpose of instruction is to impart knowledge and its success depends on whether "a learner follows, and is able to do, something s/he has been shown or told by an instructor" (Blake \& Hanley 1995, p. 80). Since the goal of instruction is to make a learner understand and/or able to perform something, it must connect with the learner's condition (cognitive, affective, etc.). The fact that EMI requires that instruction be delivered in English can certainly lead to a conflict with the condition of the students, whose first language is Indonesian and with which they are probably most comfortable. In fact, Collier (see Baker \& Jones 1998, p. 561) argues that literacy is most easily learnt in the home language. Forcing learners to use undeveloped second language at school may lead to academic failure. Thus, EMI is inherently dilemmatic.

### 3.2 The unsupportive environment in acquiring English in Indonesia

English in Indonesian is only a foreign language (EFL), not a second language (ESL). In countries where English is used as a second language like South Africa, India, Singapore, Philippines, Malaysia, etc., exposure to the language and the opportunity to use it are fairly large. Serving as a lingua franca among different racial/ethnic groups (intranational) and a means of a wider communication (international), English is often used in important domains like bureaucracy, mass media, business, schools, etc. In Indonesia, however, English is only a (special) foreign language usually taught as a subject in schools. The fact that the Indonesian language is also an important language (not just a vernacular) dominating important functions (political, economic, academic, social, etc.) in Indonesian society certainly can impose a barrier towards efforts in acquiring the English language. Should EMI be implemented, students and teachers are likely to get exposure to English (comprehensible input) and opportunity to use it (comprehensible output) only in the classroom, while the general atmosphere (macrocosm) may act as a pressure against it.

### 3.3 The general lack of English proficiency among students and teachers

Although most educated Indonesians have learned English (as a subject) since junior high school (age 12), and have continued learning the language until university, their proficiency in the language remains poor. For instance, a comparison of TOEFL scores across 50 nations done by Educational Testing Service between 1990 and 1991 (see TOEFL Test \& Score Manual) revealed that out of 50 countries joining the test, Indonesia ranked 43 rd with an average score of 496 . Holland topped the list with an average score of 607 . The score of 496 is certainly far below the minimum score usually
expected of a candidate for admission to a graduate program in the United States, 550. In the productive sides, speaking and writing-skills which receive little attention in the TOEFL test-their proficiency would not be better. The fact that schools have emphasized only reading and grammar in their curriculum certainly cannot give us a reason to be optimistic about their performance in these skills. This unfavorable situation will no doubt have negative academic, social, and psychological impacts.

Academically, teachers' and students' low proficiency may lead to inefficient and ineffective teaching and learning processes. Teachers who cannot speak English fluently and accurately will probably be rendered incompetent to perform one of their chief traditional roles, lecturing. Pauses, hesitancies, circumlocutions, wordiness, and grammatical, lexical, and pronunciation inaccuracies may characterize much of their explanation, and this certainly will slow down or even hamper their students' grasp of the content of instruction. In addition, teachers' poor reading comprehension of English textbooks, an essential source of information for them, may cause them a lack of understanding or even a misunderstanding, which in turn may result in misinformation, an effect damaging to students' academic development. On the other hand, students who lack listening comprehension skills are likely to miss the points their teachers deliver in their lectures; those incompetent in reading will not be able to retrieve the loss and get the details from their textbooks; those poor in oral proficiency will not have courage to ask questions to clarify their confusion.

Besides potentially causing academic problems, a lack of proficiency in English may inflict a social cost. Teachers who have a large vocabulary and good grammar competence may be able to convey their thoughts and emotion expressively, but this does not follow that they can do it communicatively. Language is not simply a matter of form but also of function, whose meaning depends largely on factors like participants (addressor and addressee), setting, purpose, and topic (Holmes, 1998). Thus, language serves social functions too. Since a classroom is also a community, various language functions can be expected to occur there. Teachers are likely to perform not only giving information (transactional) but also soliciting answers, checking comprehension, encouraging, suggesting, stirring, persuading, etc. (interactional)-all of which are essential to create a lively class and establish a good rapport with students. On the other hand, students who have difficulty in expressing themselves would be reluctant not only to ask questions (academic) but also to initiate and develop interpersonal relationship with their teachers and friends (social). In this situation, a classroom is a place only for 'studying' not for 'learning' too; a place for developing only cognitive skills, not social skills too.

The third negative effect of a low language-ability among students and teachers is psychological. Being educated people, they must have reasonably developed literacy skills in their native language, Indonesian. However, if their second language (English) is not adequately developed, they will have difficulty in expressing themselves in it, and this situation can create a feeling of frustration or powerlessness, which in turn may affect their self-esteem or self-confidence. This condition can be counterproductive for their language and academic developments. In addition to lowering self-confidence, a poor English proficiency among teachers may lead to students' negative perception of them. This can occur because a person's perception or attitude to a language depends on who uses it and how it is used (Holmes, 1998). Since educated people frequently employ the English language in prestigious domains, its image is then associated with these attributes. Thus, teachers who cannot speak or write English well are likely to be
negatively viewed and lowly regarded by their students, regardless of the teachers' grasp of the course content material.

### 3.4 The 'context-reduced' nature of classroom communication

Cummins (see Baker, 1996) outlines two types of language a student should have in order to succeed in bilingual schooling: BICS (Basic Interpersonal Communication Skills) and CALP (Cognitive/Academic Language Proficiency). BICS occurs when there is much contextual support in the classroom, and especially in the street and home. In face-to-face conversations (verbal language), for instance, nonverbal features like gestures, body movement, and facial expressions all convey meaning and aid understanding. Due to contextual support, a second language is more easily acquired in this 'context-embedded' situation. However, a student's good performance in BICS is not a predictor for her/his success in schools, where CALP is required instead. In the classroom, where higher-order thinking skills (analysis, synthesis, evaluation, etc.) are involved, the language is frequently more formal, more technical, more specialized, and more abstract-'disembedded' from a meaningful, supporting context. This 'contextreduced' classroom communication (in listening, speaking, reading, and writing) would certainly pose more difficulty to students and teachers in acquiring language and literacy in English. Even if they have adequate literacy skills and strategies in Indonesian (top-down processing)-and these are transferable to English (see B.4, p. 5)still they are not sufficient conditions for a thorough comprehension of texts in English, for instance. Adequate knowledge of and skills in English vocabulary, grammar and orthography (bottom-up processing) are also necessary components for a full understanding.

### 3.5 The limitedness of classroom discourse

The fact that EMI activities usually take place in the classroom may mean that they will employ classroom language and communication. In a typical traditional classroom, communication is usually between teachers and students and between students and other students; the purpose of communication is mainly informative (transactional); and the topics are academic (related to students' disciplines). Teachers' activities normally involve reading textbooks (reading), lecturing (speaking), and preparing outlines or summaries for their lectures (some writing). Their students, on the other hand, are expected to understand lectures (listening), comprehend textbooks or handouts (reading), take notes of lectures (some writing), and ask \& answer questions (some speaking). This classroom-limited situation is certainly not ideal for a maximum second language acquisition. The fact that the classroom discourse involves only one setting/context (classroom), certain language skills (mainly reading and speaking for teachers; listening, reading, and some writing for students), certain language tasks (chiefly comprehending texts and lecturing for teachers; understanding lectures and taking notes for students), certain topics (academic), and a certain purpose of communication (informative) suggests that it provides students and teachers only with a formal register. This situation certainly will not allow them enough opportunity to develop the social functions of language, a condition necessary for appropriate and effective communication.

## 4. Problems \& Possible Solutions

Given the possible advantages and disadvantages of EMI implementation above, questions may arise as to whether EMI should be implemented-and if it is implemented, how is the program to be run to maximum returns?

### 4.1 Submersion or Transitional Bilingual Education?

One problem in EMI implementation is whether learners should be thrown immediately into the 'pool' of English in EMI and made to 'swim' in it regardless of their language proficiency ("Submersion Education") or whether they should be allowed to use their Indonesian language until they are ready for EMI ("Transitional Bilingual Education"). Proponents of submersion believe that if learners are constantly encircled by a second language, they will quickly learn it. Allowing them to use their native language will only suspend the development of their second language. However reasonable this idea may seem, bilingualism theory and research have found otherwise. According to the Thresholds theory (cited in Baker, 1996), for instance, not all bilinguals can benefit from their bilingualism. Only those who have surpassed the second threshold and reached the top level (competence in both languages) can enjoy cognitive advantages. Bilinguals who are still in the second level (competence in one language only) may have either positive or negative cognitive consequences, while those at the bottom level (low levels of competence in both languages) are likely to derive even disadvantages. This theory suggests that EMI students and teachers should reach the top level (a good proficiency in English too) if the negative effects of EMI implementation are to be avoided.

In addition to the Thresholds theory, several studies (see Baker \& Jones, 1998) have also discovered the weaknesses of submersion education. One study is on 'Immersion' (or 'submersion' is a more appropriate term according to Baker \& Jones, 1998) bilingual education in Canada. Although it is often regarded as a successful bilingual program, further evaluations, however, have revealed that the English-speaking children experience an initial temporary lag behind their monolingual (mainstream) peers in academic achievement. Apparently, the use of the French medium hampers their performance in Mathematics and Science. In addition, research on Spanish-speaking children in the United States has also found that their academic performance drops soon after they are mainstreamed into English-only schooling despite their seeming conversational ability. Finally, recent experiments in the United States, Canada, and Europe have disclosed that language minority children who are allowed to use their native language for some or much of their elementary schooling do not demonstrate retardation in their academic achievement as well as their majority language proficiency. The theory and evidence above have clearly argued against submersion education and imply that a premature EMI implementation may jeopardize learners' cognitive or academic development if their second language is not adequately developed to cope with cognitively challenging tasks at university. Transitional Bilingual Program (TBE) is, therefore, a sound alternative to prepare learners for EMI implementation.

TBE, like Submersion education, is assimilationist. The goal is not to produce thoroughly bilingual, biliterate, or bicultural students (as in Immersion or Two-Way Bilingual Education), but rather to assimilate them into the host society (often developed nations) by providing them with schooling so that they can function in the majority language (the language of 'power'). Due to its assimilationist nature, TBE is dubbed a 'weak' form of bilingualism. Unlike Submersion education, however, TBE allows
students (children) to use their home language for sometime before they are mainstreamed as rapidly as possible into the majority language (e.g. English in the United States). The period of transition depends on the types of TBE offered: early-exit or late-exit TBE. Early-exit TBE normally allows children approximately two-years' use of home language before transition to mainstream class. In late-exit TBE, students are allowed to use around $40 \%$ of the classroom teaching in their mother tongue until the sixth grade. Early-exit and late-exit TBE, however, differ not only in time but also in outcome. Research has demonstrated that children tend to succeed more in late-exit than in early-exit TBE. Ramirez and Merino (cited in Baker \& Jones, 1998), for instance, have discovered from their studies of schools in New York, New Jersey, Florida, Texas, and California that-despite little difference in curriculum performance (Mathematics, English language, and English reading) by the end of the third grade-late-exit TBE students outperform their peers by the sixth grade.

### 4.2 A Bridging Program: Is it necessary?

Another problem in EMI implementation is whether a preparatory course or a bridging program is necessary. If it is, what is it to focus on? All the evidence above supporting TBE rather than Submersion education and late-exit rather than early-exit TBE implies that learners must develop their English language skills to a level sufficient to cope with cognitively demanding academic tasks before they are submerged in EMI. The fact that, on the one hand, university-level courses are cognitively challenging and linguistically context-reduced, and the fact that, on the other hand, most university students and teachers are still poor in their English language skills (especially speaking and writing) indicate that there is a gap that needs bridging to ease the discrepancy between their low language ability and the high demand of university tasks. The importance of a bridging program is underscored by Baker \& Jones (1998), who argue: "The more demanding the curriculum area, the higher the level of learning expected, and the later switch to learning through a second language, the more important it is to provide bridging programs" (p.500).

Since the goal of a bridging program is to provide a transition to EMI, and EMI mainly involves academic tasks, which take place mostly in the classroom, the syllabus of the bridging program should be based on students' and teachers' academic needs in the classroom. In EMI programs, teachers' needs may differ from students' needs. In traditional classroom teaching, basically teachers may have to read textbooks (reading), deliver lectures (speaking), and prepare outlines or summaries for their lectures (writing). On the other hand, students' basic needs may involve comprehending lectures (listening), understanding textbooks or handouts (reading), taking notes of lectures (writing), and asking \& answering questions (speaking).

These classroom tasks and communicative needs, however, may develop when teachers employ innovative teaching methods emphasizing learner-centeredness and activity-based learning. In this approach, students are expected to be actively involved in more communicative activities. In reading, students may have to read not only textbooks or handouts in English but also e-mail messages, newspapers/magazines, reports, journal articles, etc. In listening, students will listen not only to lectures or speeches merely from their teachers, but also to other discourse types like newsbroadcasts, interviews, discussions, etc. coming from other resources delivered in person or electronically. In written language, students may be expected not only to take notes but also to write journals, summaries, reports, papers, etc. In spoken language, students are likely to do more than just asking and answering questions. They will
probably participate actively in interviews, discussions, role-plays, simulations, presentations, debates, problem-solving activities, etc. Thus, if a student-centered approach is employed, information comes not only from teachers, and learning occurs not only in the classroom. All resources are potential sources of information; therefore, learning can take place anywhere. Used in this way, EMI can be linguistically and cognitively more demanding; however, it can be a means of empowering both students and teachers in acquiring the English language and literacy. Instead of providing them merely with a limited classroom discourse, EMI can get them involved in various types of communicative activities rich in comprehensible input and output; instead of hindering teaching and learning processes which may inhibit their cognitive/academic development, EMI can expand their learning opportunity and make learning become more meaningful, interesting, and richer.

### 4.3 Full or Partial EMI?

The third dilemma in EMI implementation is whether it is to be 'full EMI' (full/total immersion) or 'partial EMI' (partial immersion). According to Swain \& Johnson (1997, p. 9), a full immersion is a form of bilingual education using no native language at all in its curriculum, while a partial immersion is a bilingual program with as little or less than $50 \%$ of the curriculum taught via a second language. Given the unfavorable conditions for EMI implementations described earlier-the unsupportive EMI environment outside the classroom, the general lack of language proficiency among students and teachers, the high cognitive demand of university tasks, and the evidence against submersion education-full/total EMI is apparently unreasonable, and partial EMI is, therefore, a viable option.

### 4.4 What is partial EMI and how to implement it?

The fourth problem, which may confront EMI implementation, is what is partial EMI and how is it to be implemented successfully? In fact, partial EMI can be defined not only in terms of the amount of percentage of the curriculum taught in the native language, as broadly defined by Swain \& Johnson above. It may also refer to limitations in participants, scope, and settings. These are the dimensions that can be considered in implementing partial EMI.

### 4.4.1 Participants (students \& teachers)

Basically, there are two kinds of EMI participants: students and teachers. Since effective teaching and learning processes depend on them, both groups need to be linguistically prepared. The level of proficiency expected, however, may bank upon the types of tasks usually performed in the classroom and the types of teaching methods to be employed. For instance, since teachers are normally expected to teach (or lecture) and to absorb information from textbooks in order to transmit it to their students (at least in traditional teaching methods), they are supposed to have a good competence in speaking (lecturing) and reading (textbooks). On the other hand, the recipients, students, are usually expected to comprehend lectures (listening) and to take notes (writing). The level of language competence required of both groups, however, may rise if classes become learner-centered and activity-based. In this situation, they are more likely to get involved in various cognitive and communicative activities, which certainly demand a higher level of proficiency in four language skills: listening, speaking, reading, and writing. Either option, a teacher-centered or student-centered approach, brings its own
consequences; however, if a smooth transition is to take place, the partial EMI should start only with language-competent teachers and students at the initial stage.

### 4.4.2 Scope of Use (courses, language skills, and tasks)

The Scope of Use can be another dimension to consider for a smooth EMI implementation. The Scope can be divided into three components: courses, language skills, and tasks. At the initial stage, EMI programs do not have to encompass all university courses. Due to their nature, some courses are more easily delivered or communicated in a particular language. 'Locally-based' and 'culture-specific' courses (like history, geography, social sciences, etc.) and 'reflective' or 'creative' courses (like philosophy, literature, and art) may be best left in their original form, Indonesian, while courses often considered 'universal' (like mathematics and natural sciences) or 'international' (like engineering, business, accounting, etc.) can be attempted in English. In addition, the fact that certain disciplines have jargons and registers may imply that they are more easily communicated in the language where the jargons or registers are found, often in English.

The second component of the Scope worth taking into account is the nature of language skills. At the initial stage, EMI classes may not need to cover all language skills. In traditional teaching, teachers and students play clearly defined roles, so they also have distinct communicative needs. Teachers may want to emphasize-in the order of importance-reading, speaking, writing, and listening, while students may need to prioritize listening, writing, reading, and speaking. These differences, however, can be reconciled by starting with receptive skills (listening \& reading) and gradually move on to productive skills (speaking \& writing). Since reading provides rich input important for production and students cannot rely too much on their teachers for comprehensible input, and since it serves as a common ground in which teachers' and students' needs meet, reading may be preferred to other language skills at the initial stage of EMI implementation. On the other hand, writing in its complex forms like essays or papers should be delayed until learners have reached an adequate development in their English.

The third component important to consider for EMI implementation is the nature of tasks. In communicative language teaching, which aims to produce grammatically correct sentences as well as to develop the ability to use language to get things done, tasks have become a common thing. They are frequently incorporated in the syllabus to engage language learners in communicative activities and to enable them to perform the language and, sometimes, the activities in real-life situations. Nunan (1988) distinguishes tasks into two types: pedagogic and real-world tasks. He further defines pedagogic tasks as "..tasks the learner is required to carry out in the classroom", while real-world tasks as "...tasks the learner might be called upon to perform in real life" (p. 45). Thus, 'task' is a broad concept, referring not only to classroom academic tasks students are normally required to do but also to all aspects of life, which can be used for learning purposes in the classroom. Since tasks are central for classroom learning purposes, an understanding of task difficulty is very important for teachers in order to ensure an effective learning process.

Some factors may determine the difficulty of a task. One cause of task difficulty, according to Mohan (see Nunan, 1988), is cognitive complexity. He maintains that on the practical level, a description is less difficult than a narration, and a narration is less complex than an argumentation. On the theoretical side, a classification is easier than an identification of principles, which in turn is less complex than an evaluation. Nunan (1988) attributes difficulty in a listening task to a number of factors: the number of
speakers, the addressee, and the degree of familiarity with the topic. Thus, a listening text that has more than one speaker, which is not addressed to the listener, and whose topic is not familiar to the listener will be more difficult to comprehend. Candlin (see Nunan, 1998), mentions some factors influencing task difficulty, four of which are: cognitive load (the complexity of the mental processes required), content continuity (the extent to which the tasks relate to learners' needs), particularity \& generalizability (the extent to which the tasks follow universal or specific principles), and communicative stress (the degree of anxiety caused by the situation). The last factor, communicative stress, may also imply that doing a test can be a challenging task for students.

Finally, Cummins (see Baker, 1996) outlines two dimensions affecting task difficulty: the degree of contextual support in communication (linguistic) and the level of cognitive demands required in communication (cognitive). See Cummins' diagram on the relationship between language and cognition below.


The diagram above demonstrates that the most difficult tasks (cognitively \& linguistically) are in the fourth quadrant; the least difficult tasks in the first quadrant. The tasks in the third quadrant are cognitively demanding but linguistically undemanding; the tasks in the second quadrant are cognitively simple but linguistically demanding. The diagram also suggests that teachers should avoid assigning the kinds of tasks like those listed in fourth quadrant at the early stages of EMI implementation. However, should cognitive needs arise, teachers may compensate the cognitive complexity with linguistic simplicity by contextualizing the tasks. Thus, instead of asking students to listen to a story on a cassette tape (quadrant no. 2), for instance, teachers can read out the story to them by dramatizing it, adding gestures, pictures, facial expressions, and other acting skills (quadrant no. 3).

Frederickson \& Cline (see Baker, 1996) develop the two dimensions above to produce an appropriate teaching strategy. Below are several teaching strategies they propose for a teacher who wants her/his students to understand the concept of height and learn how to measure it.


Note: (1) One to One refers to individual teaching using various objects to measure height
(2)

Demonstration
refers to a demonstration from the front of the room by teacher using various objects
(3)

Oral Explanation
refers to teacher giving oral instructions without objects
(4) Workcard refers to reading instructions from a workcard without pictures

The diagram above suggests that there is more than one way of making students comprehend a concept or acquire a skill. However, the best ways are by personalizing the tasks-relating them to their knowledge and experience ('One to One')-and by taking advantage of students' senses ('Demonstration'). Thus, tasks are an essential component for the success or failure of an EMI program. To begin with, teachers may want to use the kinds of tasks that are cognitively and linguistically undemanding (quadrant no. 1), which can be achieved by personalizing the tasks and by taking advantage of students' senses (at least the sense of sight).

### 4.4.3 Settings (classroom \& semester level)

There are two components of settings: place and time. Since most academic activities take place in the classroom, the first component is more or less fixed; however, the second component is variable. Therefore, semester level can be used as a factor to
consider in implementing a partial EMI program. A semester level is a possible indicator of a student's academic standing. The higher a student's semester level is, the more time s/he has spent in studying and, to some extent, the more s/he has learned. Students who have achieved an advanced stage in their studies may mean not only that they have learned more in their fields of studies (more knowledge or experience) but also that they have coped with increasing cognitive difficulties characteristic of higher academic levels. Thus, students with a higher semester level can be expected to have acquired better learning skills and strategies. This is not to mention the fact that students at a higher semester level may have acquired a better language proficiency too due to the bridging program and/or the immersion program. Considering the importance of semester level for a successful EMI program, policy makers should avoid cramming low-semester students for EMI; instead, EMI classes should gradually increase with their semester level.

### 4.5 Mixed-mode teaching in the classroom: Should it be allowed?

The last problem often confronting EMI implementation is whether mixed-mode teaching or code-switching, the use of English and Indonesian simultaneously in a classroom, should be allowed or even encouraged. Codeswitching is the introduction of items (words, phrases, or sentences) from another language into the base language, which occurs within sentences or between sentences within the course of a single conversation. Jacobson (see Baker \& Jones, 1998) cites a few possible motives responsible for a teacher's switch from one language to another: to reinforce concepts, to review points, to capture students' attention, to compliment or admonish students, to change a topic, to change from formality to informality (e.g., from explaining to joking), to win rapport, and to avoid (more) fatigue.

Mixed-mode teaching is not uncommon in Hong Kong's schools and universities, where English is used as a medium of instruction from primary education. For example, from his survey of 2,500 Grade 7 students from English-medium schools in Hong Kong, Tam (see Tung, Lam, \& Tsang, 1997) obtained statistically significant results showing that students wished that their teachers had used Chinese more often in their teaching and had allowed them to talk to their teachers more in Chinese in class. These students, however, were not in favor of a complete switch to Chinese as the only medium of instruction. At universities, where students' English is expected to have developed greatly by this time, the use of codeswitching is still common among lecturers. From their study of twenty lecturers from Hong Kong Chinese University, Flowerdew, Li, \& Miller (1998) discovered that all the lecturers (20) admitted using some Cantonese in their teaching although they were aware of the official English-medium policy. Among the reasons they gave for using Cantonese were students' poor English proficiency (16), students' difficulty using and participating in English (16), and the ease with which they can promote interaction (13). However, should this practice be condoned or even encouraged in EMI?

Although some people assume that mixed-mode teaching may serve as a transition to a full EMI program, some language and education theorists argue that this practice can be counter-productive. Baker \& Jones (1998), for example, maintain that just like in diglossic societies, where two languages or varieties may co-exist in a relatively stable condition, "for a minority language to survive, it must have separate and distinct uses in society" ( p .587 ). In a similar way, Johnson (1997) argues "Mixing and switching are counterproductive because they are self-perpetuating substitutes for L2 acquisition" (p. 182). Maintaining this practice, he believes, would raise a question on whether L1 is
meant to support or to replace L2 development. Finally, from Hong Kong schools' and universities' long experience with mixed-mode teaching, Lewkowicz (1990) concludes that, although there may be some truth in teachers' reasons in doing codeswitching, "... it may also be true that teachers have been using mixed-code for so long that they would find it difficult to change" (p. 5). From the arguments above it can be inferred that using Indonesian for an academic or social purpose in the classroom cannot be justified. The fact that social pressures against English from outside the classroom as well as from the general community can be enormous may imply that the least that should be done and that can be reasonably expected is setting the classroom for an English-only zone. In this way, an EMI program may find purpose and strength.

## 5. Conclusion \& Implications for Implementation

The general assumption underlying EMI implementation at Indonesian universities that it will improve students' and teachers' general proficiency in English is not entirely wrong, because using English as a medium to teach content subjects (EMI) allows students and teachers more exposure to the language (comprehensible input) and opportunity to use it (comprehensible output) rather than teaching English as a subject. However, due to its classroom-based nature, there is a great possibility that EMI will not improve the four language skills equally for both students and teachers. However, the assumption that bilingualism will necessarily result in biliteracy may be unfounded, because only bilinguals competent in both languages (or in other words, students and teachers who are really proficient in English) can take full advantage of their bilingualism. Those not adequately developed in the language are likely to reap only disadvantages-academic, social, and psychological.

Since there is a general lack of English among university students and teachers and a low proficiency in the language can have pervasive negative effects, they need to develop it through a bridging program based on students' and teachers' academic and linguistic needs (EAP). The low students' language competence may also imply that teachers need to adopt teaching strategies that are linguistically and cognitively undemanding.

Since traditional teaching methods do not allow students and teachers opportunity for a maximum second language acquisition and literacy, learner-centered and activitybased teaching methods-which provide them with opportunity to take a full advantage of bilingualism and biliteracy-are worth introducing. Although these methods may require a higher English proficiency, they offer more linguistic and academic benefits.

Since social pressures against the use of English from the classroom, outside the classroom, and the general community are great, a policy to allocate the classroom for an English-only zone is necessary. To create a more conducive environment for English language acquisition, the university should provide learners with opportunities to use it outside the classroom too by conducting activities or occasions like conversation clubs, cultural festivals, competitions, week-end/semester-end camps, student/teacher exchanges, etc. These activities will help reinforce the English language acquisition process that takes place in the classroom.

Since total immersion is not feasible, a partial EMI program is a viable option. To implement it smoothly, limitations should be imposed on the participants (teachers \& students), scope of use (courses, language skills, \& tasks), or the settings (classroom \& semester level).

Although mixed-mode teaching or codeswitching in the classroom sometimes helps to make teaching and learning processes become more efficient, it should not be used to serve as a transition to a full EMI program, because it may inhibit the process of acquiring English and undermine the very existence of an EMI program.

## References

Baker, C. (1996). Foundations of bilingual education and bilingualism. $2^{\text {nd }}$ ed. Clevedon: Multilingual Matters Ltd.

Baker, E., \& Jones, S. P. (1998). Encyclopedia of bilingualism and bilingual education.Philadelphia: Multilingual Matters.

Barrow, R., \& Milburn, G. (1990). A critical dictionary of educational concept. $2^{\text {nd }}$ ed. New York: Teachers College Press.

Bialystock, E., (1987a). Influences of bilingualism on metalinguistic development. Second language research, 3 (2), 154-166.

Blake, D., \& Hanley, V. (1995). The dictionary of educational terms. Vermont: Ashgate Publishing Company.

Flowerdew, J., Li, D., \& Miller, L. (1998). Attitudes towards English and Cantonese among, Hong Kong Chinese University. TESOL Quarterly, 32 (2), 201-231.

Fokus Rencana Strategi Universitas Kristen Petra_1999/2000-2001/2005. http:// www.petra.ac.id/Indonesian/focus_rencana.htm.

Gardner, R. C., \& Lambert, W. E. (1972). Attitudes \& motivation in second language learning. Rowley, Mass.: Newbury House.

Gass, S. M., \& Selinker, L. (1994). Second language acquisition: An introductory course. New Jersey: Lawrence Erlbaum Associates.

Holmes, J. (1998). Introduction to sociolinguistics. London: Longman.
Johnson, R. K. (1997). The Hong Kong education system: Late immersion under stress. In R. K. Johnson \& M. Swain (Eds.), Immersion education: International perspectives. Cambridge: University Press.

Krashen, S. (1982). Principles and practice in second language acquisition. Oxford: Pergamon.

Lewkowicz, J. (1990). Language in education: Hard choices for Hong Kong. Hong Kong Papers in Linguistics and Language Teaching, 13, 1-8.

Mcgroarty, M. (1996). Language attitudes, motivation, and standards. In S. L. McKay \& N. H. Hornberger (Eds.), Sociolinguistics and language teaching. Cambridge: Cambridge University Press.

Naisbitt, J., \& Aburdene, P. (1990). Megatrends 2000: The New Directions for the 1990's. New York: Avon Books.

Nunan, D. (1988). Syllabus Design. Oxford: Oxford University Press.
Swain, M., \& Johnson, R. K. (1997). Immersion education: A category within bilingual education. In R. K. Johnson \& M. Swain (Eds.), Immersion education: International perspectives. Cambridge: Cambridge University Press.

TOEFL test and score manual. (1990/1991). Princeton, NJ.: Educational Testing Service.

Tung, P., Lam, R., \& Tsang, W. K. (1997). English as a medium of instruction in post1997 Hong Kong: What students, teachers, and parents think. Journal of Pragmatics, 28, 441-459.


[^0]:    * Presented at the 49 ${ }^{\text {th }}$ International TEFLIN Conference in Bali, November 6-8, 2001

