

Schools of Fish: English for Access to International Academic and Professional Communities

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What language variety should be the target of learning for English as an international language? This paper proposes that in those Asian countries where English learners' primary purpose is to be able to use English for academic and professional purposes (EAPP) in order to join international academic and professional discourse communities, it is the language and culture of the academic and professional varieties of English which should be the primary target of instruction rather than 'general English' and 'general culture'. The analytical framework of genre analysis (Swales, 1990) naturally shifts the focus of analysis away from the "idealized native speaker" of an idealized target language defined by national borders, and allows us instead to analyze and teach to the actual performance of expert members of real professional English-medium discourse communities. Such expert members may as easily be non-native speakers of English as native speakers. Content-based instruction (CBI), and language immersion provide promising models of instruction in the primary and secondary institutions to prepare students for this kind of learning purpose; alternative models for CBI and EAPP are also suggested for tertiary education. Web-based resources for teachers and administrators on CBI and language immersion are included in the references.

WHY ASIAN STUDENTS LEARN ENGLISH

Why do Asian students want to learn English as an international language?

What is their ultimate learning goal? The answer to this question is likely to be complex and to vary from nation to nation, but there may be some general observations we can make.

McKay (2004, p. 3) pointed out in her plenary address at the first annual meeting of AsiaTEFL that English has assumed the role of an international language. In her address, McKay stated that one of the central features of English is an international language is that “English is the product of a world econocultural system, and is the preferred medium of the international communities of business, science, culture and intellectual life.” McKay went on to suggest that we should teach English as an international language (EIL). But EIL can be very abstract: what specific EIL language model can we provide for EFL classrooms? In addition, McKay (2004) suggested that the cultural content for teaching materials in EIL can be target culture materials (e.g., American scenes), local culture materials (e.g., Japanese holidays), or international culture materials (e.g., international tourism and social contact). However, it is striking that none of her examples of these three kinds of course cultural content is consistent with the central feature of international English cited above: its use as a medium to communicate the content (and the culture) of business, science and intellectual life.

Yoshida (2002) proposes a useful metaphor for use in thinking about English as an international language. He suggests that many Asian EFL classes are like fishbowls, whereas the real world is like the open sea. In ‘fishbowl’ classrooms, (a) students are passive and the teacher is in control, (b) the classroom provides a homogeneous ideal environment, where the language model is the ideal native speaker and no errors are permitted, and (c) students do not communicate with others outside the classroom, and focus on the knowledge they need to pass an English test. However, Yoshida points out that the real world (the ‘open seas’), where EFL students would like to use their English, (a) speakers must rely on themselves and initiate communication, (b) speakers will encounter a diversity of linguistic varieties and values, and formal errors will be common, and (c) speakers will need to use English to communicate to other non-native speakers of English from

many different language and culture backgrounds, a purpose for which they need to have *communicability*.¹ The point here is that the ‘fishbowl’ classroom does not prepare EFL students to use English out in the real world, where English is an international language needed for communication in a multilingual/multidialectal context. To prepare them to deal with this world, students must be placed in a more active role in the classroom, the ideal native speaker model must be abandoned, and errors must be permitted as student learn to use English to communicate with linguistically diverse partners.

Yoshida’s model is very useful in understanding some of the complex issues involved in English use in Asia. But English teachers need SOME language model; if it is not the ideal native speaker, what is it? In light of the primary goal that students have in many Asian countries for learning English in the first place – to be able to join academic or professional discourse communities in which English is the medium of communication – I would like, with Yoshida’s permission, to suggest a small addition to his metaphor of the open sea: schools of fish. Most fish in the open seas do not interact with other fish individually, at random; rather, they join *schools of fish* that are swimming in the same direction for a similar purpose. Simply put, in the real world, individuals belong or want to belong to *groups*, each one characterized by a specifically different language variety. If an individual is to be a member of an international English-speaking group, that individual must learn to use the distinct variety of English that characterizes that group, or “school of fish.”

In other words, in those Asian countries and contexts where students are clearly learning English primarily in order to join international academic and professional discourse communities, the primary content of teaching materials in English ought to be academic and professional content, and the primary language presented in those teaching materials should be the English language varieties and discourse patterns that deliver this content in the real

¹ For Yoshida, ‘communicability’ means something similar to ‘intelligibility’, except it implies both the ability to produce and to comprehend language.

world.

It seems clear from McKay's (2004) formulation above that in many countries², Asian students' primary purpose in studying English as a foreign language is to be able to improve their access to the international communities of business, science, culture and intellectual life. They hope to do this by adding English to their linguistic repertoire in a process of additive bilingualism.

LEARNING PURPOSE

My first point about this learning purpose is that it is clearly focused, not on 'general' or social uses of English but rather on the specifically academic and professional uses of English. The primary learning purpose for English language learners in many Asian countries is not social: thus, the primary purpose of such Asian students in learning English is not to use it at home with their families, at the store to buy groceries and clothing, on the street to chat with neighbors, or in their local civic institutions. In many Asian countries, EFL students use their native languages at home and in the local community, and do not want to replace those home languages with English. While such students may find a secondary purpose for use of English outside the classroom but within their nation, as, for example, to communicate with international tourists and sojourners, I would imagine that for most of these, this purpose is quite secondary to its use for academic and professional purposes and decidedly secondary to the use of the native language at home.³

² This generalization may not be true of countries like India, where English is actually used outside the classroom as a national language, along with other languages, for social purposes. In such countries, English is learned for several purposes, only one of which may be academic or professional. However, in countries like Korea and Japan, this is not the case.

³ The English variety used to communicate with international sojourners and tourists will have its own unique and specialized phonological, syntactic and lexical

In ESL learning in the United States, for example, and perhaps in some Asian nations such as India, the situation may be different. In formulating guiding standards for English as a second language instruction in a country where English is used extensively outside the classroom in society at large, our K-12 educational institutions have set up dual, parallel sets of standards in recognition of the fact that ESL students have a dual learning purpose: social and academic. First, because they live in a society where English is spoken in the homes, markets, buses, sports arenas, entertainment complexes and civic institutions, they need to learn English for use in all of these social settings. They must speak English to ride the bus, to buy groceries, to get a driver's license, to go to the doctor or to the movies, and so on. But, second, these students also must succeed in school, and for this purpose they need a more formal and complex register of English: academic English. So they must learn two broad registers of English: social and academic, and the schools must set up two different sets of learning standards for each register, and assess students' achievement of those two sets of standards differently. However, the model of international English described above suggests that in many Asian countries there is just one primary target register of English in classrooms, and that is some form of academic or professional English.

BEST MODEL OF ENGLISH

Who is the best model of English language use for academic and professional purposes? It is important to note that the speaker/writer of English who we take to be our target model is not the *ideal* speaker/hearer. The *ideal* native speaker knows only one register of English, knows it perfectly, and never makes errors. Such a speaker does not exist in the real world. All real speakers of any language know several varieties of that language, each appropriate for use with a particular group or social context.

characteristics. It will not be 'general English'.

In addition, the notion of native speaker, ideal or otherwise, is irrelevant when one is teaching the academic and professional uses of English. No one is a native speaker of an academic or professional register of English. Such registers are never learned, for example, by pre-schoolers at home. Such registers are always acquired late, in school contexts, and they take many years for native speakers of English to acquire as secondary registers to their home dialect (Ravid & Tolchinsky, 2002). Many native speakers of English do not themselves know how to use some of the academic registers of English that Asian English students aspire to learn. And, those who best know how to use academic and professional registers of English – those who teach academic subject matter in our schools and universities – are very often not native speakers of English at all. What matters is not their native speaker status, but the fact that they use English in an expert fashion in producing the core genres of their academic or professional discourse community. Thus, I would suggest that when we teach academic and professional registers of English (cf. Carkin, 2005; Master, 2005), the ideal language model for our students should not be assumed to be the native speaker of English but rather should be the expert member of the target academic discourse community. In the world of English as an international language, the experts on academic and professional English must be our language models; whether or not they are native speakers of English is irrelevant. As we shall see in the following discussion of genre analysis, it is their discourse communities' recognition of them as experts that matters.

GENRE ANALYSIS AND DISCOURSE COMMUNITIES

A very helpful analytical framework for our understanding of the dimensions of academic and professional language use is the framework of *genre analysis* proposed by Swales (1990, pp. 21-32, 45-82). Scholars who have used this genre analysis framework to good effect include Berkenkotter and Huckin (1995), Lewin, Fine and Young (2001), Flowerdew and Peacock

(2001), Tarone (2005) and White (2005). In Swales' framework, a core construct is that of the discourse community.

A *discourse community* is a group of people who have among their core characteristics the following: (a) a broadly agreed set of common public goals, (b) mechanisms of communication among themselves, (c) one or more genres used in the communicative pursuance of its goals, (d) some specific lexis, and (e) some members who are expert in content and course and some members who are relative novices. Examples of discourse communities are cardiologists, electrical engineers, information technology specialists, EFL teachers. I think you will agree with me that these are exactly the sorts of professional communities that Asian students are learning English in order to be able to enter, because international achievement in these professions requires the ability to use English the way these professionals use it in pursuing their professional goals.

A *genre* used by one of these discourse communities is a class of communicative events that have a shared set of communicative purposes; these purposes shape the allowable content and form of the genre within the discourse community. Expert members can identify prototypical examples of a discourse community's genres that share similar linguistic structures, style and content. Examples of genres are, for EFL teachers, plenary talks, conference presentations, textbooks, journal articles, department newsletters, letters of recommendation, requests for offprints, and many others. Where the language of a discourse community is English, then these are English genres, and novices must learn how to organize information in these genres, what linguistic forms to use to present that information, and what pragmatic rules to follow in doing so.

Research in genre analysis has clearly shown that all these factors can be quite different from one discourse community and genre to another. At the tertiary level, the exact English register one must learn may vary quite dramatically from one academic discourse community to another. Swales (1990) and others (e.g., Berkenkotter & Huckin, 1995; White, 2005) show how the genre of the English language research article is structured in some

different fields of study. For example, in many empirical academic fields, the research article's information structure can be viewed as having an IMRD structure: an Introduction with generalizations and a review of general research findings, a Methods section with very specific detail on experiment procedures, a Results section again with very specific outcomes of those procedures, and a Discussion section that returns to a more general level of discussion of implications of those findings. Swales further shows that very specific English linguistic structures are used to transmit and signal this information structure. For example, present, present perfect and past tenses and passive voice are systematically used in the Introduction to review the published literature and indicate the degree to which the writer agrees (or not) with each study being reviewed. In the Methods section however, the past tense is preferred, and typically the passive voice increases in use in this section as well. But different academic discourse communities (disciplines) can change the shape of the research article genre to suit their own purposes. Tarone, Gillette, Dwyer and Icke (1998) show that in the discourse community of astrophysics scholars, research articles do not follow the IMRD information structure at all; rather the information structure moves from general to specific in a kind of inverted pyramid structure. This impacts grammatical and lexical choice within the genre; astrophysics articles use active and passive voices in a unique way, to index points in an argument that are the author's unique contribution as opposed to points that simply follow standard procedure. In the same way, White (2005) shows that the mathematics discourse community has re-shaped the genre of research article to suit its own purposes as well. Math research articles function quite differently from empirical research articles in other fields, requiring extensive use of active voice as well as simple present tense throughout.

The analytical framework of genre analysis naturally shifts the focus of analysis away from the "idealized native speaker" of an idealized target language defined by national borders, and allows us instead to analyze and teach to the actual performance of expert members of real academic and professional English-medium discourse communities. In the Tarone, et al.

(1998) study of the astrophysics journal article, one of our co-authors, Vincent Icke, an expert member of the discourse community of astrophysicists at the University of Minnesota, was not in fact a native speaker of English. However, he had edited submissions to astrophysics journals and was recognized by his discourse community as an expert subject specialist on this genre. It was his insider knowledge and confident communication of his expertise that enabled our team to accurately describe the genre in a way that native speakers like Icke's other co-authors could not.

GENRES AT THE PRIMARY AND SECONDARY SCHOOL LEVELS

Though my examples have focused on university-level genres such as the research article, the constructs of discourse community and genre are also very relevant to our understanding of the uses of English in primary and secondary schooling, where such genres as textbook and worksheet may play a bigger role. At the primary education level, in grades K-6, there is much less specialization in the form of the English language needed to embody academic content. Certainly the academic language standards laid out by departments of education in the United States, for example, show that the use of English to talk about academic content requires very specific linguistic structures that aren't usually needed in social English: complex relative clauses, complementation, passive voice, noun compounds and so on. However, it is very clear that by the secondary level of schooling, in grades 7 through 12, the ability to use academic English genres such as science textbooks and lab reports as opposed to mathematics textbooks or internet websites can require very distinct linguistic structures, lexis, and rhetorical organizational patterns, all of which must be learned by novices studying these disciplines for the first time. Thus, subject matter discourse communities and subject matter genres also exist in primary and secondary schools. If students are to learn to use English to convey academic subject matter, then they do not need

to wait until university; they can begin using English for this purpose in primary and secondary school.

ADDITIVE BILINGUALISM

At the beginning of this paper, I stated that the goal of learning of most Asian students includes *additive bilingualism*. While these may seem to be elementary concepts, they are worth reviewing here from the point of view of public policy. Recall that there are two kinds of bilingualism: subtractive and additive. In subtractive bilingualism, an individual learns a second language and in the process loses proficiency in his native language. For example, in the United States language minority students in the public schools – children whose home language is Spanish, Hmong, or Korean and so on – learn English as a second language in the schools, but do not study their home language in school. As a result of such “bilingual education” programs, they do not in fact become bilingual: they lose their proficiency in their home language. They may graduate knowing English well, but they have lost proficiency in their home language. This is clearly not the goal of most Asian students learning English in Asia, who want to retain full proficiency in their native language while adding full proficiency in English, their secondary language. This is additive bilingualism; the result of the learning process is an individual who has expert proficiency in both languages. Additive bilingualism should certainly be the goal of EFL programs for Asian students, because Asian students do not wish to replace their native language with English. In many Asian countries, they do not necessarily wish to use English to socialize at home, with their best friends or in their neighborhoods; they have a native language for those purposes. They DO wish to add English to their repertoire for use as a tool for participation and advancement in some clearly targeted communities: namely, international academic and professional communities.

The route these learners must take to gain access to those communities is through their local educational systems: primary, secondary and tertiary

educational institutions that offer classes and programs in English. So: given Asian students' learning purpose, which is to be able to USE English for academic and professional purposes, exactly how should these educational institutions structure their English language programs and curricula?

At this point, it may be helpful to consider an old educational adage: *As the twig is bent, so grows the tree*. This adage may be applied to our current topic in the following way. If your ultimate goal is to have a 'tree' that has expert ability to read, write, speak and understand English for academic purposes, then you must from the beginning provide the 'twig' with instruction in reading, writing, speaking and understanding English for academic purposes. Of course you will not bend the 'twig' in the direction of social registers of English if that is not the kind of 'tree' you want. By the same token, asking the 'twig' to analyze the grammar of English – even the grammar of academic English – and tell you about it in class will produce only a 'tree' that can analyze the grammar of English and tell you about it. It will not produce a 'tree' that can use English to communicate about academic or professional matters. Research on second language acquisition (see, e.g., Doughty & Williams, 1998; Schachter, 1998; Williams, 2005) is very clear on this point: in the language classroom, conscious focus solely or even primarily on the form of the English language does not produce the ability to use the English language when the student's attention is focused on content. If English classrooms do not provide exposure to the academic register of English, or provide the opportunity to use English to talk about academic content, then English students will not acquire the ability to use English to talk or write about academic content. *As the twig is bent in your classroom, so grows the tree*.

INSTRUCTIONAL MODELS: CONTENT-BASED INSTRUCTION AND LANGUAGE IMMERSION

Assuming that this adage applies to our current discussion, then we turn to

our next question. How do English programs in Asia best prepare their students to use English for academic purposes by giving them opportunities to learn it in class? In fact, there are already in existence some excellent English programs in Asian countries that do just this. In primary and secondary institutions, we will consider two educational models that follow the twig/tree adage: Content-Based Language Instruction (CBI) and Language Immersion. In tertiary institutions, we will consider post-secondary CBI models such as adjunct language instruction, immersion models and English-medium tertiary institutional models.

Content-Based Instruction is defined by Brinton, Snow and Wesche (1989) as "...the integration of particular content with language teaching aims...the concurrent teaching of academic subject matter and second language skills" (p. 2) in an approach that views "...the target language largely as the vehicle through which subject matter content is learned rather than as the immediate object of study" (p. 5). The crucial language learning target here is the discourse itself, as Eskey (1997) states:

...what we [foreign language teachers] teach in any kind of content-based course is not the content itself but some form of the discourse of that content—not, for example, 'literature' itself (which can only be experienced) but how to analyze literature...for every body of content that we recognize as such—like the physical world or human cultural behavior—there is a discourse community—like physics or anthropology—which provides us with the means to analyze, talk about, and write about that content...Thus, for teachers the problem is how to acculturate students to the relevant discourse communities, and for students the problem is how to become acculturated to those communities (Eskey, 1997, pp. 139-140).

The principles of content based foreign language instruction as applied to primary and secondary school contexts are laid out clearly at the CARLA Content Based Language Learning Through Technology (COBALLT) website (address provided in the References below). On the CARLA website, teachers learn how to use tools of internet technology to support a content based instruction curriculum in their regular foreign language classroom

contexts. In such contexts, students may study the foreign language just one hour a day, with the rest of their subject matter learned through their native language. However, the lessons in their foreign language classroom have academic subject matter content, delivered through the medium of the foreign language. Thus, the content of an ESL/EFL lesson becomes a science reading, or a biology lab experiment, or a history lecture – delivered in and through English, the foreign language, rather than the student's native language.

Foreign language immersion is a very specific type of content-based instruction. In foreign language immersion programs, the regular school curriculum is taught in the immersion language for at least half of the school day. In partial immersion programs, instructional time is divided equally between the native language and the immersion language throughout the elementary grades. In full immersion programs, teachers use no native language at all in the early grades. In Grade 2, 3, or 4, teachers introduce native language arts and reading for one period per day and gradually move toward an even distribution of native language and the immersion language by Grade 5 or 6. In the secondary school grades, immersion students typically have access to at least two course offerings in the immersion language, most often in social studies and language arts. A comprehensive source of information about language immersion programs can be found at the CARLA Language Immersion website (address provided in the References), and in Fortune and Tedick (2003). French immersion programs have been used with great success in the public schools in Canada for forty years, and American public schools are offering language immersion programs at the primary and secondary levels in French, Spanish, German, Korean, Japanese, and a range of native American Indian languages as well. Primary and secondary level English immersion programs in such Asian countries as Hong Kong and Japan have been in existence for 8 to 15 years, and have similar successes to report. For one such success story, and a description of its K-12 curriculum, visit the website of Katoh Gatuen's English Immersion Program.

What are the characteristics of a language immersion program? Swain and Johnson (1997) lay out the following core features of prototypical language

immersion programs at the primary and secondary levels of schooling:

1. The immersion language is the medium of instruction. The teachers and staff use the immersion language at all times, and all books and written materials are in the immersion language.
2. The immersion curriculum parallels, or mirrors, the local native language curriculum. Students are given their regular science, math, and history lessons at grade-appropriate levels of instruction, but this curriculum is delivered entirely through the foreign language. Thus, language immersion programs offer a two-for-one deal: students are able to learn two things at the same time, academic content and second-language ability. One additional segment that must be added is time spent focusing on the structure of the immersion language itself; practitioners have learned that students do need some focus on accuracy in use of the immersion language.
3. Overt support exists for the native language.⁴ In a partial immersion model, the immersion language is used 50% of the day and the native language is used 50% of the day. In full immersion, the immersion language is initially used 90% of the time, and the native language just 10% of the day. This 10% focuses on native language arts, especially reading and writing; as students get older this percentage may grow as needed.
4. The program aims for additive bilingualism. The goal is for students to be expert users of both the immersion language and the native language. There should be no loss of native language proficiency. I might note here that researchers such as Genesee (2004) find that

⁴ Increasingly, in Canadian and American language immersion programs, immersion students have many different native languages. This violates one of the core assumptions underlying traditional language immersion education. Immersion specialists are beginning to develop new techniques that teachers can use to permit students to use all their native languages meaningfully in the immersion classroom, while still focusing on the development of the immersion language for academic purposes.

children's brains are neurologically wired to acquire two or more languages simultaneously and perfectly; children have the cognitive capacity to do this if we can organize the curriculum and instruction in two or more languages in the right way.

5. Exposure to the immersion language is largely confined to the classroom. That is, a foreign language context is assumed. As a result, it is the academic register of the immersion language that the children acquire – precisely the register that we have learned is needed for English as an international language.
6. Students enter with similar and limited levels of proficiency in the immersion language. Thus, there is no need for extensive preschool classes to prepare children to enter immersion programs in kindergarten; this kind of costly and time-consuming preschool preparation is not linguistically necessary.
7. The teachers are bilingual. Note that it is extremely important that the teachers know both languages well enough to use them to talk about academic subject matter. They must model the proper uses of academic English, and though they should only use the native language in class themselves for restricted purposes, they must understand their students when they speak in NL.
8. The classroom culture is that of the local L1 community. Because academic cultures now vary in different nations, it may be desirable at some point to prepare EFL students to enter such cultures in the future. This can be done by making classroom cultures the content of a series of lessons. The class can explicitly read about and discuss (in English of course) the different cultural norms of classrooms in different parts of the world, in a kind of cross-cultural anthropology lesson.

As I say, both CBI and language immersion programs have been highly successful in promoting additive bilingualism in foreign languages for children in public schools located in a wide range of nations. Given the purposes for which international English is used, such models seem quite

suitable for primary and secondary education in English in many Asian countries.

MODELS FOR THE TERTIARY LEVEL

Finally, I would like to point out that several models of content based instruction are being used at the tertiary, or post-secondary level, in business schools, colleges and universities around the world. At the university level, such models are often referred to as English for Academic Purposes or English for Specific Purposes programs; as FLIP (Foreign Language Immersion Programs); as language adjunct programs; as English-medium-of-instruction institutions. All these models provide slightly different ways of delivering academic subject matter – course content—through the medium of a second language.

In ESP or EAP courses in university ESL programs, students may be taught explicitly about some forms of academic or professional genres. For example, they may be taught about the English language empirical research article: its information structure and linguistic structure. An example of such an ESP course is the “Business Communication” course taught by Prof. Jihyeon Jeon in the Department of International Office Management at Ewha Womens University here in Seoul. The description of her course, which is offered entirely in English, makes it clear that this course follows the principles of CBI:

This course is designed to provide knowledge, skills, strategies needed for effective communication in English to achieve personal and business goals. The course will offer foundations of business communication, and sharpen skills such as communicating in teams, listening, nonverbal communication, writing business messages, designing and delivering oral presentations, writing employment messages, and communicating interculturality. Students will have opportunities to analyze interesting communication cases and a variety of up-to-date sample business documents, and to exercise communication skills with practical assignments like those that students

will most often face at work. (Jeon, 2004)

Another model of tertiary level CBI consists of adjunct English courses offered in cooperation with subject matter courses. An ESL professor may attend a biology course with her international students, and immediately afterward hold an English class which focuses on the language and discourse patterns that were used in the biology class. The biology and ESL professors may meet as a team to develop an adjunct curriculum in advance, so that the English language course prepares and supports students as they struggle to master the biology content through English, their second language.

Another tertiary CBI model is the FLIP (Foreign Language Immersion Program) program, such as the one at my own university, the University of Minnesota. Students who have studied a given foreign language for two years at the university level may then enroll for one semester in a FLIP: a set of content classes in that language. For example, faculty members whose native language is Spanish, and who are housed in diverse departments such as sociology, history or biology, each offer one regular course in their discipline in Spanish during Spring semester. That semester, American students can thus take all their courses in Spanish, their second language: their readings, lectures, and classroom discussions on sociology, history and biology all take place through the medium of Spanish. This same FLIP model could be used to regularly offer university course content through English as a foreign language in an Asian university program. For a description of the FLIP program see Cohen and Allison (1998); for a research study on student achievement in this program see Lynch, Klee and Tedick (2001) and the CARLA website.

Finally, in a more radical version of CBI, an entire tertiary level institution that is located in an Asian country may declare itself an English-language-medium university; the entire curriculum may be offered through the students' second (or third) language, just as in a primary level immersion program. While I know that English-language-medium private universities now are being developed in Turkey, I do not know whether they meet all

eight of the core features of immersion programs identified by Swain & Johnson (1997). They certainly should do so, if the intent is to produce truly bilingual graduates, fluent in both Turkish and English.

CONCLUSION

In summary: I have suggested that Asian students' primary purposes in learning English ought to be taken into account in considering the goal of English instruction. For many Asian students, those purposes are to gain access to international academic and professional discourse communities that use English language communication and genres. I've suggested, using an old adage about twigs growing into trees, that Asian language classrooms teach English by using the content of those same academic and professional disciplines, and by teaching the English language genres those communities use. I've noted that the expert members of those communities who we can take as our models of English language use in CBI and EAP may be either native or non-native speakers, as long as they are expert users of both languages. Thus, the EAPP model supersedes the notion of the native speaker as the ultimate goal of English language learning. And finally, I've recommended some possible educational models of content based instruction at the primary, secondary and tertiary educational levels, and given examples of many of these models that have been developed in Asian contexts.

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REFERENCES

- Berkenkotter, C., & Huckin, T. (1995) *Genre knowledge in disciplinary communication: Cognition/culture/power*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brinton, D., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction*. Boston: Heinle and Heinle.
- Carlin, S. (2005). English for academic purposes. In E. Hinkel (Ed.), *Handbook of research in second language research and teaching* (pp. ??). Hillsdale, NJ: Lawrence Erlbaum Associates.
- CARLA Language Immersion Education and Research. (2004). Website address: <http://www.carla.umn.edu/immersion/> (accessed 10/21/04)
- CARLA Content-Based Teaching Through Technology, COBALLT. (2004). Website address: <http://www.carla.umn.edu/coballt/> (accessed 10/21/04)
- Cohen, A. D., & Allison, K. (1998). Bilingual processing strategies in a university-level immersion program. *Ilha do Desterro*, 35, 187-201.
- Doughty, C., & Williams, J. (Eds.). (1998). *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press.
- Eskey, D. E. (1997). Syllabus design in content-based instruction. In M. A. Snow & D. A. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 132-141). White Plains, NY: Longman.
- Flowerdew, J., & Peacock, M. (2001). Issues in EAP: A preliminary perspective. In J. Flowerdew & M. Peacock (Eds.), *Research Perspectives on English for Academic Purposes* (pp. 8-24). Cambridge: Cambridge University Press.
- Fortune, T., & Tedick, D. J. (2003). What parents want to know about foreign language immersion programs. Center for Applied Linguistics Online Resources. Website address: <http://www.cal.org/resources/digest/0304fortune.html> (accessed 10/23/04)
- Genesee, F. (2004). Bilingualism in the global village. Keynote address at Pathways to bilingualism: Evolving perspectives of immersion education, Second International CARLA Conference on Language Immersion Education, Oct. 21-23, 2004. Website: <http://www.carla.umn.edu/conferences/immersion/genesee.html>.
- Jeon, J. (2004). Syllabus for "Business Communication" course, Ewha Women's University, Seoul. Available: Jihyeon.Jeon@ewha.ac.kr
- Katoh Gakuen's English Immersion Program. (2004). Website address: <http://www.bi-lingual.com/> (accessed 10/23/04).
- Lewin, B., Fine, J., & Young, L. (2001). *Expository discourse: A genre-based approach to social science research texts*. London, New York: Continuum.

- Lynch, A., Klee, C. A., & Tedick, D. J. (2001). Social factors and Spanish language proficiency in postsecondary Spanish immersion: Issues and implications. *Hispania*, 84, 265-279.
- Master, P. (2005). English for specific purposes. In E. Hinkel (Ed.), *Handbook of research in second language research and teaching*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- McKay, S. L. (2004). Teaching English as an international language: The role of culture in Asian contexts. *The Journal of Asia TEFL*, 1(1), 1-22.
- Pica, T. (2005). Second language acquisition. In E. Hinkel (Ed.), *Handbook of research in second language research and teaching*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ravid, D., & Tolchinsky, L. (2002). Developing linguistic literacy: A comprehensive model. *Journal of Child Language*, 29, 417-447.
- Schachter, J. (1998). Recent research in language learning studies: Promises and problems. *Language Learning*, 48(4), 557-583.
- Swain, M., & Johnson, R. K. (1997). Immersion education: A category within bilingual education. In R. K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp 1-16). Cambridge, UK: Cambridge University Press.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Tarone, E. (2005). English for Specific Purposes and interlanguage pragmatics. In K. Bardovi-Harlig & B. Hartford (Eds.), *Interlanguage pragmatics: Exploring institutional talk*. Lawrence Erlbaum Publishers.
- Tarone, E., & Yule, G. (1989). *Focus on the language learner: Approaches to identifying and meeting the needs of second language learners*. Oxford: Oxford University Press.
- Tarone, E., Gillette, S., Dwyer, S., & Icke, V. (1998). On the use of the passive and active voice in astrophysics journal papers: With extensions to other languages and other fields. *English for Specific Purposes*, 17, 113-132.
- White, R. (2005) Do mathematics articles belong to the RA genre? A case study. Paper to be presented at AILA (International Association of Applied Linguistics), Madison Wisconsin July 2005.
- Williams, J. (2005). Form-focused instruction. In E. Hinkel (Ed.), *Handbook of research in second language research and teaching*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Yoshida, K. (2002). Fish bowl, open seas and the teaching of English in Japan. In S. Baker (Ed.), *Language policy: Lessons from global models* (pp. 194-205). Monterey: Monterey Institute.