Cultivating Language Proficiency Adapted to Students' Majors
— An Approach Incorporating Interpreter Training Techniques —

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1. Introduction
Interpreter training techniques are endowed with properties which can be extensively applied to language learning in general, or English for general purposes. In light of interpreters' experience in wide-ranging specialized fields and increasing needs for English for specific purposes, interpreter training techniques have a lot to offer for English for specific purposes. English for specific purposes refers to English adapted to students' majors in this paper. Out of 20 kinds of interpreter training techniques developed by the author, techniques frequently used in actual class settings are: shadowing, repeating, paraphrasing, sense group reading (or listening), acronym guessing, and morphological guessing. All the techniques are essentially related to findings brought about by cognitive science and interpreting research. A case study is illustrated starting with the relationships between language and the brain, with the aim of developing students' awareness and motivation toward what they are to practice during the course. Middle-of-the-road fusion of English for general purposes and English for specific purposes should be pursued and reinforced by incorporating EGP-flavored elements whenever deemed appropriate.

2. Interpreter training and second language acquisition
With the development of interpretation research in Japan, the interface between interpreter training and second language acquisition (SLA) has been also explored. One of such pioneer works is Yashima (1988), which looked into the application of shadowing to English language teaching. Another practical reason for attention being paid to interpreter training is attributed to the anecdotal evidence that learners successfully achieved language development regardless of whether they actually became professional interpreters or not. According to Mizuno (2001) and other sources, the number of Japanese universities which offer interpretation-related subjects/courses is well over 50, the phenomenon being in marked contrast with a handful of such universities about a decade ago.

Torikai (1997) lists eight reasons for interpreter training techniques being applied to English language teaching: three of them having the potentiality to support English acquisition, which can be used in actual working communication; the remaining five reasons serving for compensating weak points inherent in the "communicative approach." The former three reasons are: top-down processing, listening strategies, and output skills. The latter five reasons are: vocabulary, prosody, accuracy, critical-thinking (logical analysis), and
intercultural communication.

Incidentally, regarding practitioners of English for specific purposes, English as liberal subjects is primarily taught by teachers of English rather than by teachers of the specialized fields. It can be naturally assumed from this fact that somewhat EGP-colored elements are often observed in actual instruction of ESP.

Terauchi (2000) states that there are only a few number of ESP research associations in Japan, and lists four of them: ESP-J, JACET-ESP Study Group, the Japan Association of Business English, and the Japan Society for Medical English Education (JASMEE). The author is a member of JASMEE. Its membership list as of June 2001 shows that 60 % represents the medical side, whereas the remaining 40 % are from the language side. Further survey from the list indicates that more than 80 % of actual instruction is conducted by the teachers of English. The medical people are primarily engaged in curriculum designing.

3. English for general purposes and English for specific purposes

English language teaching can be categorized into two types: English for general purposes (EGP) and English for specific purposes (ESP). Conventional teaching modes as observed in Japanese universities, specifically when the so-called faculty of liberal arts existed, revolved around EGP-colored education. However, ever since the "outlining the official requirements for university establishment" announced by the Ministry of Education in 1991, universities were urged to express their own education policies and had to work on substantial curriculum reformation (Terauchi 2000). The Japan Association of College English Teachers (JACET) stated in 1996, in response to this outlining, that university education in the 21st century needs to incorporate the ESP approach and to substantiate ESP education including teacher training, syllabus designing, effect-assessing tools (Terauchi 2000). With this background, ESP has been catching more attention than EGP.

4. Nature and scope of instruction

When it comes to the issue of receptive or productive ESP, the majority of practitioners would stand on the side of receptive one. This is not surprising when we turn to the fact that writing/speaking practices are on the rise but yet minor even in EGP. Furthermore, to write papers of specialized fields entails affluent expertise, often turning out to be beyond the expected role of English teachers.

What to teach or to use as materials greatly varies among practitioners; some possible choices are journal reading, essay reading, technical terminology acquisition, etc. The safest way for teachers of English would be to read essays written in plain language. Most importantly, instructors are encouraged to be always willing to expand their schemata related to the specialized fields in that "literacy" effectively enhances language acquisition. Literacy, commonly defined as the ability to read and write, in this sense connotes general learnedness (Kern 2000). Teachers with the career of interpreting can serve as fine examples for other peers because they have been experienced in various specialized fields.
through their jobs.

Noguchi (2000) lists five kinds of English classes at Japanese universities which are seemingly and broadly categorized into ESP. They range from level 1 to level 5. The level 1 class is actually an EGP class, employing materials the topics of which only are related to ESP. The level 5 is indeed a full ESP class, where an ESP teacher, in close collaboration with specialists, uses teaching materials specifically developed for ESP. The crucial point to determine the authenticity of ESP classes is whether teaching materials specifically developed for ESP are used or not.

Some teachers from the language side feel reluctant to jump into the seemingly rough seas of ESP of which realms are different from theirs, notably toward English for science and technology (EST). It is important for them to raise awareness that they are equipping the students with the useful navigator called English to secure the voyage to the specialized fields. Preferably, the minimum condition required of them is to use the specific materials developed for ESP.

Japan has not satisfactorily developed ESP education as compared with Western countries. We are in a dilemma between rising needs for ESP and poorly developed ESP educational conditions. The current teacher training system in Japan cannot readily meet the needs for raising ESP specialists. A proposal and provisional solution to this issue is that teachers autonomously equip themselves with each fundamental expertise depending on their aptitude. As a benchmark, basic knowledge of biology at the high school level is necessary and sufficient for instructing general medical English.

5. A course description
The author is mainly engaged in EST, especially medical English and technical English. A course description will be presented on how class activities are carried out involving an ESP-centered approach colored with EGP.

The course usually starts with emphasizing the importance of “reading aloud” using an excerpt of Kunihiro (1999). The crux of Kunihiro’s assertion is to read basic materials aloud repeatedly to have a good working knowledge of English. To solidify Kunihiro’s assertion, a discussion follows about the relationships between language and the brain based on the findings in cognitive science and interpreting research. Uemura (1999) is presented to the students confirming the significance of the practice of “repetition” espoused by a neuroscientist. The practice of repetition is substantially the same as the interpreter training technique named “repeating” by Hiramatsu (1999).

Students will be thus made aware of and motivated about what they are to do during the course.

ESP partially colored with EGP serves to arouse students’ motivation. A cultural, linguistic, and literate approach to ESP is addressed. This is where indispensable roles proper to English teachers become manifest. For example, when addressing technical terms, English teachers have to exert themselves to go beyond a superficial explanation of the terms. It is vital to try to incorporate EGP elements whenever possible. In so doing consciously and
continuously, we can get the students to keep abreast of literate and cultural appreciation.

In medical English, for example, the term "medicine" is explained etymologically referring to the Latin word *medeor* (=to cure). Followed by this explanation, students are asked to guess relationships between the words "medicine, medium, media, middle and so on." When we turn to the Greek mythology, medical professions in those days must have served as "mediators" between the gods and the sick. This is a cognitive association expected to be yielded on the part of the students. Another example of a medical term "apoptosis," meaning programmed death of cells or cell suicide, often used in contrast with necrosis, is presented not only etymologically but also anecdotally: introducing Hippocrates' inspiration for the programmed death when he saw leaves falling off. Incidentally, the etymological explanation is: *ap* means "off," *pto(m)* means "to fall," and *sis* means "condition or illness" in Greek. Also, regarding Hippocrates, the Hippocratic oath is almost always used irrespective of students' majors. The Hippocratic oath is the most famous of the Hippocratic documents. It has served as an ideal for the professional attitude and ethics of physicians up to the present. Because of the lofty nature of its ethics, the oath is often taken up as a teaching material by practitioners of English as are involved in global education.

An ESP course is usually completed in one semester comprised of about 15 sessions. The actual training includes interpreter training techniques described in the following section: "6. Incorporating interpreter training techniques."

6. Incorporating interpreter training techniques

Technical and working boosters in the language acquisition are, for the most part, derived from interpreter training techniques (ITT). The fundamental nature of the techniques, amounting to some 20 kinds, is linked to brain physiology and neurolinguistics. In a nutshell, it encourages the activation of main language areas in the brain related to speech and language: Wernicke's area (receptive functions) and Broca's area (productive functions).

The taxonomy of ITT developed by Hiramatsu (1999) are as follows: quick response, shadowing, repeating, reproduction, note-taking, paraphrasing, sight translation, acronym guessing, morphological guessing, note-guessing, phonological guessing, prediction, sense group reading (or listening), slash reading, description, narration, logic analysis, summarization, dictation, and delivery.

Of these ITT, the following items have an important place, therefore being exploited in actual class settings all the time: shadowing, repeating, paraphrasing, sense group reading (or listening), acronym guessing, morphological guessing. Since the order of acquisition/instruction has not been empirically reported or studied, these techniques are used concurrently in expectation of synergetic and complementary effects. The basic characteristics of the techniques are as follows.

shadowing: to perform listening and speaking simultaneously without language conversion.
repeating: sentence-level repeating during a pause after the original utterance.
paraphrasing: to express meanings in various ways.
sense group reading (or listening): to comprehend the message by the unit of sense groups.
acronym guessing: to inference the original words from acronyms.
morphological guessing: to inference meanings by considering morphemes.

In consideration of the relationships between language and the brain, a detailed explanation is given to the students as to shadowing and repeating to enhance their awareness and motivation.

The word shadowing originally comes from psychology. Lambert (1988:381) defines shadowing as “a paced, auditory tracking task which involves the immediate vocalization of auditorily presented stimuli, i.e. word-for-word repetition in the same language, parrot-style, of a message presented through headphones.” As Yashima (1988) admits, there was no established terminology for this skill in the 1980’s. For this reason, it has been also called “repeating/follow-up/following.” The classification by Someya (1996) provided momentum for the taxonomy by Hiramatsu (1999) to make a distinction between shadowing and repeating. Shadowing contributes to improving accent, pronunciation, stress, etc. Of course, it serves to enhance so-called active listening.

While shadowing is practiced with a time lag of a few seconds, repeating needs a “pause” after the utterance. Repeating or repetition in the traditional language class is, in many cases, carried out while seeing the written text. But it is more effective to practice repeating without referring to the text. This mode gives greater load to the brain, resulting in enhanced working memory retention and accelerating automatized language use. This practice is inseparably related to the term “elicited imitation” used in SLA. When learners are instructed to repeat a sentence which they see or hear, they often make changes in the sentence so that it becomes more like their own utterance. This takes place due to their insufficient knowledge of linguistics rules. Therefore, elicited imitation can be employed as a grammaticality judgment test to measure the learners’ knowledge of a language.

In a nutshell, shadowing nurtures flex and response, whereas repeating serves to enhance automatized or working knowledge of the target language.

7. Process-oriented nature of ITT
Most ITT are process-oriented rather than product-oriented. This nature manifests itself more clearly regarding the two guessing activities: acronym guessing and morphological guessing. Optimal guessing activities on the part of students are encouraged toward acronyms and morphemes. This gives reinforcement to the conventional etymological approach to medical terminology learning.

In addressing the acronym MPD, for example, students are first given an explanation as follows: it is related to illness or an abnormal mental condition. More than one nature or character of one person is observed. Then, they get engaged in guessing what each letter stands for. Possible words may be as follows:
M...mind, mixed, mental, malignant, much, many, malicious, missing, mode, mad, etc.
P...person, problem, people, panic, plenty, peculiar, pathetic, paranoia, possessed, etc.
D...disease, difficulty, diversified, disabled, depressed, dilemma, dying, double, etc.
The final step students are supposed to work on is to incorporate these individual words into meaningful/phrasal entity by using articles, prepositions as needed. It is of course important to give the correct answer: multiple personality disorder (currently referred to as dissociative identity disorder). But the inferencing process itself is more important than the product. In this sense, the practice of "crossword puzzles" is somewhat product-oriented.

Morphological guessing can be exercised in isolation, or in pairs, or in threes or fours or more. When practiced in pairs or more, this guessing activity is seen as associative learning, a technical term which means "learning which happens when a connection or association is made usually between two things." For example, when words "health and heal" are presented, students are induced to notice the relationship between these two words; health is derived from heal. And the suffix -th indicates that the word is a noun and means the state or quality of something. Explanation supplemented by the teacher will furthermore be that the word heal is etymologically related to "whole and holy." Another example is "DNA (deoxyribonucleic acid) and RNA (ribonucleic acid). By breaking them into morphemes, de=off oxy-(oxygen), ribo-(ribose), nucleic, acid for DNA and ribo-, nucleic, acid for RNA, students can have a better understanding that DNA has fewer elements of oxygen than RNA.

8. Conclusion
Acknowledging the irreversible trend toward the ESP-centered approach now observed at Japanese universities, teachers of English are encouraged to cultivate their literacy and aptitude in conducting ESP. In so doing, middle-of-the-road fusion of EGP and ESP should be pursued and reinforced by incorporating EGP-flavored elements whenever deemed appropriate.

Applying ITT to SLA has been also spotlighted. Practitioners of English teaching do not always have to be able to perform interpreting. But it is beneficial for them to appreciate and learn from the "courage" of interpreters to jump into the rough seas of specialized fields which are different from their original specialties. And it is important to understand and acquire the way to apply some ITT to the practice of SLA. Coupling the ESP-centered approach with the application of ITT will meet the needs of contemporary university education and society.

REFERENCES
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