

Integrative Task-Based Instruction in English for Medicine: Insights from the Evolution of ESP

HIGUCHI Akihiko*

(Received 27 October, 2009)

Abstract

English for Specific Purposes (ESP) in Japan has been getting widespread among ESP practitioners and teachers in college and university since the late 1980s. Courses in English for Medical Purposes (EMP) have also been attaining status as EAP (English for Academic Purposes) among medical and nursing students, but they are still small in number. The number of textbooks and teaching materials in EMP is still limited although there are strong needs from the field of medicine and nursing.

In light of the current EMP instruction, this present study tries to suggest an instruction of EMP with special emphasis on Task-Based Instruction (TBI) which has an integrative instruction of EMP including four language skills. And this method is also based on Communicative Language Teaching (CLT).

For the future prospects in EMP, genre-driven EMP textbooks and teaching materials should be developed and they should be based on TBI in which the contents and tasks are considered from the needs analyses both pre-clinical and post-clinical in medicine. And they should be integrative instruction including four language skills based on CLT.

Key words: ESP, EMP, EAP, specific genre, integrative instruction, TBI, CLT, language skills, the evolution of ESP

* Professor of Kagoshima University, Faculty of Education

1. Introduction and rationale

For the past few decades in Japan, with the increase of ESP (English for Specific Purposes), it has been getting gradually widespread among college English teachers and practitioners since the late 1980s. Many of the ESP textbooks, however, were based on 'register analysis' in which concepts of register emerged from notions of variation in sociolinguistic, occupational, and stylistic aspects. In early days, register analysis was identified with quantitative studies of linguistic properties of functional varieties and registers associated with occupationally defined contexts. (e.g. Business English, Legal English, Medical English). In fact, because ESP in the 1960s' was heavily identified with EST (English for Science and Technology), most research was into 'Scientific English'. The aims of the research were to identify distributional frequencies of formal features to provide a basis for selection of syllabus items (Hutchingson & Waters, 1987). Then main 'target situations' of language use were described in some ESP genre-driven textbooks, but mostly they were focused on salient linguistic features in the written texts in specific genre-driven ESP textbooks. Integrative instruction with four language skills were still small in number.

In light of the current situation in ESP instructions at collegiate level, this present study tries to launch on English for Medical Purposes (EMP) because many textbooks published in this field in Japan are still 'register analysis based' not integrative text type. Therefore we need to consider methodology and materials to establish the integrative and learning-oriented instruction in EMP. How should it be taught in an integrative way? What kind of knowledge is required for EMP teachers? What are the tasks and assessment in EMP? They are the issues in the present study. To find out successful integrative and learning-centered instruction in EMP, this present study takes Task-Based Instruction (TBI) along with Communicative Language Teaching (CLT), which will be discussed later on in this study.

2. Theoretical development of ESP

First of all, by looking at the theoretical development of ESP, this study explains the current situation of ESP from the historical overview to the current 'genre-driven' instruction that is currently used as learning-centered approach in ESP.

2.1. Phase 1: The Register Analysis Phase

ESP back in the 1950s-60s was not a theoretically coherent, planned, or motivated movement. It was largely a response to post-war language learning needs, and strongly market - driven. A theoretical super structure came later to support and legitimate the development of ESP(Hutchingson & Waters. 1987).

Concepts of register emerged from notions of variation in sociolinguistics, occupational, and stylistics. According to Swales (1990), in early days, register analysis was identified with quantitative studies of linguistic properties of functional varieties and registers associated with occupationally defined contexts.

(e.g. Business English, Legal English, Medical English). In fact, because ESP in the 1960s was heavily identified with EST (English for Science and Technology), most research was into 'Scientific English' (Hutchingson, & Waters, 1987). The aims of research were to identify distributional frequencies of formal features - partly to provide basis for selection of syllabus items. Teaching materials of the time was, for example, *A Course in Basic Scientific English* by Ewer and Latorre (1969) that tended to take formal features of register as their syllabus and gave priority to forms students would meet in their science studies in English (e.g. few continuous forms, and the passive without agents in the written texts).

2.1.1. Weakness of the Approach

- (i) Sentence based and form focused (though some useful discoveries were made in this field) This approach did not ask what uses forms were put to.
- (ii) Early ESP teaching differed little from traditional ELT except that scientific texts were substituted for general interest texts (similar comprehension-type exercise)

3. Phase 2: The Discourse Analysis and Functional Phase

In the 1970s, the view developed and that students difficulties arose not only from their poor knowledge of language system but also from unfamiliarity with the use of English to perform communicative acts. For example, Widdowson (1983) argued for a program of research into the discourse of scientific texts to identify organizational patterns in texts and how those patterns were linguistically signaled. It was important for us to find out what value stretches of language had in communication. Widdowson (ibid) and others suggested that a rhetorical or functional approach was particularly suitable in EST because scientific discourse could be seen as a series of rhetorical acts such as definition, classification, exemplification, contrast etc. Scientific English could be thought of as a kind of discourse not as a text type defined by its formal properties. There was a strong impact on teaching materials.

3.1. Impact on materials

- (i) People's concern with the use of sentences in combination and with rhetorical functions led to *Focus Series*. The starting point was not inventory of grammatical items but rhetorical functions such as classify, define, generalize etc., and their linguistic realization. Students were taught to recognize and use discourse markers, and recognize textual patterns.

3.2. Weakness of Approach

- (i) *Focus Series* was not a critical or commercial success (Swales, 1990) because the main focus was on language use rather than communicative instruction with the use of four language skills in an integrative

way.

- (ii) This approach was dealing with static inventories and rhetorical functions not grammatical structure.
- (iii) What was the status of a function? How many were there? How did we map functions onto stretches of language? There was overemphasis on homogeneity of discourse and so paid insufficient attention to discourses of, and within, particular disciplines.

Here we should note that there was the Longman's *Nucleus Series*. First volume *General Science* appeared two years after beginning of *Focus* in 1976. This was historically important in ESP because of its best-selling status. *Nucleus* was aimed at low level learners, a concept and notion driven syllabus design (not rhetorical) that was limited to language of observation and description. Topics were like properties and shapes, location, structure, and measurement etc. *Nucleus General Science*, the most successful ESP textbook in those days, had following merits and criticisms. Merits: teacher friendly, attractive lay-out, tight structural control, inventive visual prompts etc. Criticisms were insufficient reading material, neglects discourse, variable quality of different volumes etc.

4. Phase 3: Target Situation Analysis/skills & Strategies Phase

This phase was marked by greater variety and diversity within ESP (a fuller maturity of the field). The emphasis was placed on Needs analysis where course design should proceed by identifying linguistic features, communication skills and tasks common to target situation which would then form syllabus of ESP course (Swales, *ibid*).

Need analysis reached its apotheosis with Munby's *Communicative Syllabus Design* (1981), and went into decline. His CNP provided detailed profile of learner's needs in terms of communicative purposes, communicative setting, means of communication such as language skills, functions, and structures. Important innovation, however, was to place learners explicitly at the center of ESP operation, not language or discourse. (learner-centered approach)

4.1. Skills

For sociolinguistic reasons, ESP often prioritized the skill of reading. Hence, historically important projects were: University of Andes project (Reading and Thinking in English), and University of Malaya project (Skill for Learning). These projects were quite different but certain common features were found

- (i) There was concentration on reading skills and strategies. Putative reasons and interpreting processes were underlying in language skills that were incorporated into design of language teaching materials.
- (ii) So materials drew students attention quite explicitly to reading strategies in hope that this would improve their reading ability (ex. scanning, skimming, guessing word meaning, identifying text structure etc.)

- (iii) Widdowson's influence (1983) was apparent in notional-functional discourse approach.
- (iv) EAP (English for Academic Purposes)-oriented, non subject-specific, and interdisciplinary topics, they were quite sophisticated view of reading process

5. Phase 4: The Learning-Centered/Genre Analysis Phase

This phase started in around 1987 with greater maturity of ESP field that included increasing variety of approach within ESP. However, this phase also had a breakdown in theoretical consensus. What is ESP? How should it progress? Several issues emerged.

In contrast to this, Hutchingson and Water's (1987) book ushered in what they thought would be a learning-centered approach to ESP. Essentially this amounted to a reinstatement of the psychological and educational bases of ESP - (the primacy of methodology, of learning process) rather than the linguistics. Previous approaches were held to be flawed in that they were based on descriptions of language in use rather than considerations of how language was learnt. Hutchingson and Waters (ibid) also questioned the need for highly subject-specific materials that were implicitly casting doubt on one pillar of ESP. Widdowson (ibid) also probed the theoretical basis of ESP, asking ESP essentially a training rather than educational concept?

In one direction, then, there had been greater concern with classroom tasks/activities facilitating learning (emphasis on process even more than materials). There was also a growing divergence between occupational ESP (EOP: English for Occupational Purposes) and EAP (English for Academic Purposes).

In another direction, under influence of Swales (ibid), and Dudley-Evans (1984, 1985), Genre analysis increased in popularity. Genre Analysis involved study of the forms of discourse that particular discourse communities engaged in, their communicative conventions, their communicative purposes, the role texts play in particular environments, their genre products and crucially the differences between the discourses within and of different discourse communities.

Hence, genre analysis is narrower and deeper than the discourse analysis of phase 2. It shows that terms like 'Legal English' gives a misleading image of homogeneity. Genre analysis can give rise to 'genre-driven' pedagogic activities. This should bear in mind and quite important for many Japanese ESP practitioners and researchers mainly because of the fact that they have put much emphasis on descriptions of language in use rather than considerations of how language is learnt. Quite a few of ESP textbooks published in Japan by Japanese ESP practitioners for the past decade show the evidence. Therefore, ESP should be conducted within a framework of integrative instruction in which four language skills are combined together in learner-oriented instruction.

6. Integrated instruction

For the past two decades, genre analysis and learning-centered approach in the 1980s and 1990s have surely given us something to offer in ESP disciplines. However, there have been misunderstanding among Japanese ESP practitioners and researchers in their excessive reliance on highly subject-specific materials. As a matter of fact, previous approaches and ESP textbooks in Japan resulted in flaw in that they were, more often than not, based on descriptions of language use rather than how language was learnt. Classroom activities and tasks should be introduced more in college and university than in the present situation otherwise we cannot facilitate learning for students. The emphasis should be placed more on learning process rather than materials. Therefore, the balance of the text (materials) and the process of learning should be counted for the better instruction and understanding ESP. This is the crux of the issue of this present study. This study deals with integrative instruction of medical English later on with special emphasis on Task-Based Instruction (TBI) for Japanese medical students learning English as a foreign language.

7. Medical English

English for Medical Purposes (EMP) is one of the genres in English for Specific Purposes (ESP). Class subjects in ESP have been getting widespread among Japanese university. ESP has been trying to attain its popularity since the 1990s among Japanese university in the growing necessities in ESP genres such as English for economics, business, English for law, and English for Science and Technology (EST), judging from the JACET annual conferences for the past two decades.

However, class subjects in EMP are still small in number in Japan compared to other ESP genres despite the strong need of EMP, judging from the proceedings of JACET annual conferences in 2008 and 2009. In fact medical students and nursing students have various reasons for learning medical English (Kawagoe, 2009). They need to read journals and books in medical genres. Doctors and nurses also need to read journals and books to speak to colleagues on professional visits, to make use of the expanding and increasingly important database available through the Internet, to participate in international conferences, to write up research for journal publication, to take postgraduate courses in the U.S. or in U.K. to work in hospitals where English is the first language or the lingua franca.

7.1. Medical English courses

EMP is different from English for General Purposes (EGP) in the selection of language that is to be taught. There is an overlap with EGP course content (a common core), especially in grammar. EGP teachers who start teaching EMP have to learn how to deal with the new area not included in the common core - most noticeably vocabulary. They also have to get to know the classic "genres" or text types, so that the

language work can be appropriately contextualized.

However, depending on the type of learner, EMP courses can also differ from EGP courses in that they may focus on specific skills: e.g. interviewing patients, or reading for information (as opposed to extensive reading of stories). Typically, grammar is taught remedially, as arising from other work, rather than being an organizing focus.

7.2. Distinctive characteristics of the course

EMP courses for young students (preclinical) tend to be “wide-angle courses”, developing skills for the future. Accessible medical topics are used partly for the surface validity and partly to extend relevant vocabulary. Courses often include work on forms and pronunciation of basic medical terminology. Traditionally medical English courses for young students focused on reading but now speaking and, to a lesser extent, listening are seen to be equally important. This present study focuses on integrative instruction of EMP so that the courses include four language skills for preclinical medical and nursing students.

7.3. Subject knowledge

How much knowledge and what kind of knowledge do EMP teachers need to know about medical science, the work patterns of doctors and nurses, or the study modes of medical and nursing students? This is one of the oldest and maybe traditional questions in EMP. It is relevant to our choice of text, task and course design.

There are varied answers, and we cannot choose only one as its best answer. At the one end of the spectrum is the view that no specialist knowledge is required or desirable. EMP teaching roles, materials and techniques are not significantly different from EGP. Moreover, EMP teachers should not put themselves in the false position of seeming to teach medical subjects.

At the other end is the view that EMP teachers should have at least a lay knowledge of medicine and an interest in the way in which doctors and nurses work or study; and that they should ideally know as much as possible about the register of medical English. For example, these are typical “genres” or text types, typical collocations and their use, and the pronunciation of basic medical terminology etc.

Then to what extent do we take into account in our teaching the specialist knowledge the learner brings to the EMP classroom? In most EMP classrooms, the medical knowledge of the learners is the most important resource in the EMP classroom. In order to best exploit this resource, EMP teachers need some understanding of basic medical concepts and work patterns in medicine.

7.4. Roles of the EMP teacher

EMP teachers are not expert in the field of medicine. They are, ideally speaking, expert in the field of medicine but not in reality. They are expert in teaching English for medicine but not necessarily expert in other things that may come up in the classroom. EMP teachers might have quite a good knowledge in medicine but even so they are still not experts in medicine. It is said that EMP teachers are activator, consultant, and manager in teaching English for medicine. According to Gillies (2009), there are several points considered to be the roles that often apply to the EMP teacher:

1. Material writer - Often no suitable teaching materials are available, so teachers must prepare their own.
2. Course designer - A teacher of a small team may be asked to set up, design and administer courses.
3. Evaluator - Educational institutions often require student evaluation, for which test must be specially written and administered. Sponsors may require individual reports, and students may ask for references. Course evaluation may also be necessary, especially if the course and materials are either very new or very old.
4. Consultant - Teachers may have to diagnose individual learner needs and plan individual programs, especially for postgraduates writing theses and academics preparing research articles.
5. Diplomat - Obtaining the information and source materials to devise an EMP course may require diplomacy. So may explaining the nature of an ESP course and gaining the approval of those who are paying for it.
6. Analyst - the teacher requires analytic techniques to identify and select the appropriate language for the course. (ibid, 2009)

The six items above, according to Gillies (ibid), can be considered as the roles that often apply to the EMP teachers. The next chapter deals with the instruction of EMP with special emphasis on TBI (Task-Based Instruction) for Japanese medical and nursing students, taking the above items into consideration.

8. Task-Based Instruction (TBI)

Task-Based Instruction (TBI), also known as Task-Based Learning (TBL), was popularized by Prabhu (1987) while in Bangalore, India. TBI is a method of language instruction in the field of second language acquisition (SLA). TBI has some salient features in the use of authentic language. So students in the TBI classes are doing meaningful tasks using target language such as doctor-patient talk, and conducting interview. There is a belief that TBI is more effective than the traditional model of PPP (presentation, practice and production). "The belief that a precise focus on a particular form leads to learning and automatization (that learners will learn what is taught in the order in which it is taught) no longer

carries much credibility in linguistics or psychology” (Skehan, 1996: 18). Indeed, according to Ellis (1994), research into SLA has indicated that grammatical features are mastered according to an inbuilt developmental sequence, even in adult learners, and that errors are a natural and essential part of the learning process. As well as natural sequence of mastery, there is variation in performance across learners and interestingly variation in individual learner performance (Skehan, *ibid*).

Tasks in TBI, according to Willis(1996), provide an opportunity for learners to learn in their own way through activities in which meaning is communicated. For some time, it has been argued that the most effective tasks are those in which learners have to work hard to express themselves and negotiate meaning with each other. Therefore, problem-solving tasks are preferable to simple information-gap activities (Foster, 1996). This is because learners can recognize that the tasks are necessary and they can concentrate on their tasks. And tasks which require learners to agree on a single solution (convergent tasks) are also preferable to those which allow different options (divergent tasks). This is because the effort of having to communicate clearly, effectively and precisely in to achieve task outcome taxes learners’ resources to the full, and leads them to “notice” language at their personal limit. Therefore, recently, researchers have become more interested in the value of “noticing” , and most would now advocate more emphasis on post-task analysis of the language used in the task performance (Robinson, 1995). And the assessment in TBI is primarily based on task outcome rather than simply accuracy of language forms. This is also important for us to bear in mind, but this monitoring of tasks is difficult. This will be discussed later in “disadvantages of TBI” in 9.2.

9. Advantages and disadvantages of TBI

TBI is advantageous to the students because it is more student-oriented, more meaningful communication. On the other hand, TBI is also disadvantageous particularly for novice learners as the foundation of the target language (Skehan, 1996). Skehan(*ibid*) summarized the advantages and disadvantages in TBI as follows:

9.1. Advantages

1. Face validity that is surface validity and not a real validity but something artificial. If the task is authentic, which leads learners to motivation, but if not, the task does not lead learners to successful motivation.
2. More student-oriented with more meaningful communication, and often provides for practical extra-linguistic skill building.
3. Creates a need to communicate: “Language ability develops in direct relation to communicational effort” (Prabhu 1987)

4. Creates a need for language. This means that vocabulary and syntax are creatively used not just reproduced.
5. Makes a better teacher/learner balance of talk in the classroom (Skehan, *ibid*)

9.2. Disadvantages

According to the studies in Skehan(*ibid*), Prabhu (*ibid*), and Willis, J & Willis, D. (*ibid*), the disadvantages in TBI can be summarized as follows:

1. Task monitoring is difficult, particularly in large classes, so teachers cannot know everything that is going on
2. Not appropriate as the foundation of a class for novice students
3. Personal feedback is difficult to give everyone
4. Learners may use other methods of communication than language - gesture, drawing etc. and so they do not struggle enough with language to extend their language competence
5. Learners are only exposed to certain forms of language, and are being neglected of others, such as discussion or debate.

There might be some more in advantages and disadvantages in TBI. In light of some disadvantages in TBI, we need to consider how to manage tasks to best advantage. The next chapter deals with this issue in order to enhance TBI more effectively and successfully for the learners.

10. Managing tasks to best advantage

In order to make TBI successful, teachers have to set up an optimal situation for learning. In so doing, many of the disadvantages can be minimized and the advantages can be enhanced. There are some important points for the teacher to bear in their minds in each three phases of the activities: before main activity, during the main activity, and after the main activity.

10.1. Pre-main activities

According to research in TBI, it is important and effective for the teachers to give planning time to the students in pre-main activity. Foster(1996), for example, demonstrated that if learners were given ten minutes planning time before a task, they were then not only more fluent but also accurate, the improvement being more marked with more difficult tasks. She also found that if learners were encouraged to think in the planning phase about the specific language they would use in the task, that their language was then more complex, but less accurate. This is presumably because of the stress of trying to use more sophisticated language. Therefore what the teacher asks the learners to do even before the task can have an effect on their language behavior.

10.2. During-main activities

Gillies(2009) suggested that during-main activities in TBI, the following points should keep in mind for language teachers:

- Make sure that learners know WHY they are doing the task and the language learning objectives (in fact, this should be done before the planning phase if there is one).
- Make sure the task is structured so that everyone has something to do.
- Give task instructions clearly, including how much time they have, and the expected outcome.
- Group together learners who will work well together.
- Monitor the task process for progress, timing across groups, individual contributions.
- Do not intervene with language points, but troubleshoot when the task is not being implemented properly or support quiet groups by joining in to get them moving.
- Note language points as possible and appropriate, for the whole class and for individuals. (Example) During the reading activities, learners take memos where they find ‘inanimate subject plus action verb construction’ and ‘the use of the passive without agent’. They are some of the salient linguistic features in written text in EAP.

10.3. Post main activity

We need feedback after the main activity, because the primary focus during the task is on the task itself rather than on the language used. The initial feedback should be on the task itself, rather than the language. Teachers should ask the learners first for their views, and discuss with them. The language feedback can be in several ways as in the following:

- Plenary feedback on selected points that could be general problems
- Individual feedback is necessary if the group size is small
- Peer feed back is also necessary
- A/V recording and review. This is monotonous if you go through a recording of the whole task with the whole class. But fragments can be selected for particular points, or If you have enough cassette-players, learners can be asked to transcribe four or five minutes of their “performance” and then edit the transcript. This is a popular activity (Foster, 1996).

Here we should bear in minds that the feedback stage is crucial for activating “noticing” in language learning. This is important when the class is conducting a series of tasks, because they know during the task that the feedback stage will follow. According to Gillies(2009), it is important for the teacher to maintain

a balance between “real-life language use” and “noticing”, and to guide individual learners towards an appropriate balance of increased accuracy, fluency and complexity.

11. Teaching plan

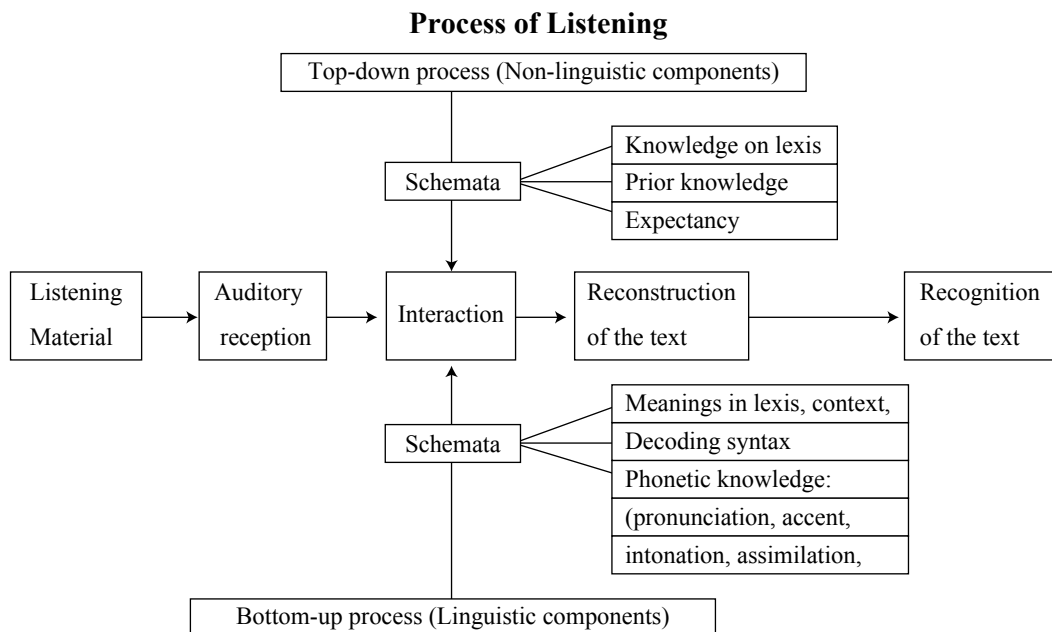
The following is a teaching plan for EMP with the use of TBI. The main focus is listening activities, then following to reading activities. The students in the course are pre-clinical students learning English as a foreign language (EFL) in Japanese university. So, they have some difficulties in listening comprehension in doctor-patient talks (in this case it is a history taking between a doctor and a patient).

11.1. Listening

The listening process is also an interaction between top-down and bottom-up processing as defined by Anderson & Lynch(1988), and summarized below by Higuchi(2007). Top-down processing consist of non-linguistic components, and makes use of previous knowledge (on words, and topics), and expectancy.

Bottom-up processing, on the other hand, consists of linguistic components, and makes uses of word meanings, decoding syntax, and phonetic knowledge (pronunciation, stress, accents, phonetic changes such as assimilation, deletion, and liaison etc.).

In successful listening comprehension, two listening processes complement each other. And an excessive reliance on one of the processes results in error: (ex. Too much reliance on bottom-up process will result in slow understanding of the text). The diagram of the listening process can be considered as follows:



Higuchi (1998) arranged from “Schema Theory” (Rumelhart, 1980)

Pre-listening activities: Activating top-down schemata TAVI(see note 1)

Task 1. Brain storming in group work. Discuss with your group members on the following questions:

- (a) How are your bowel movements? Do you have regular bowel movements?
- (b) How are your waterworks? And how often do you urinate?
- (c) Do you ever have constipation?
- (d) What do you know about women's periods?

While-listening activities (L) (W)

Task 2. Listen to the interview between a doctor and his patient then take some case notes in the following:

Surname: _____ Marital Status: _____ Sex: _____ Age: _____

Occupation: _____ Present complaint: _____

Points of Notes: _____

Task 3. Listen to the interview again, and fill in the blanks with proper words. (Gaps filling: content words, and words with phonetic changes where Japanese EFL students have difficulty to recognize)

Post-listening activities (W)

Task 4. Answer the following questions, then check the answers in your group. Students write the answers in English.

- (a) What was Mrs.Jones' presenting complaints?
- (b) How was her appetite? Was she eating enough?
- (c) How were her periods?
- (d) What did the doctor say about the result later?
- (e) What does "Anaemic" mean?

A student in each group presents the answers. Then correct answers are given to the students by the teacher.
(Feedback) (S)(L)

Language Focus 1: Starting the interview

How did the doctor start the interview?

- *What can I do for you?*

Other ways of starting an interview are:

- *What's brought you along today?*

- *What seems to be the problem?*

How did the doctor ask when the problem started?

- *When did you start feeling like this?*

Other ways of asking about this are:

- *When did it/they start?*

- *How long have they/has it been?*

- *How long have you had them/it?*

Task 5. Practice the following dialogue with your partner. He/She should play the part of the patient.

The patient can select the replies from the following lists. Be sure to use all the ways of starting an interview and asking how long the problem has lasted. (S)(L)

Doctor: Hello, Mrs. Jones. What's brought you along today? (A)

Patient: I've had a terrible headache. (B)

D: How long has it been bothering you?

P: Three or four days, I suppose.(C)

[Substitution drills]

(A) *What can I do for you?*

What seems to be the problem?

How can I help?

(B) *a terrible pain in my stomach*

swollen ankles

terrible headache

(C) *For two days*

For almost two weeks

Since last Monday

Language Focus 2: Examination, Preparing the patient

How did the doctor say in the examination for the patient?

- *Well what I'm going to do is to take a blood sample.....*

Other ways of examining the patient are: **Softening**

- *I'm just going to (check your blood pressure)*

- *I'd just like to (test your reflexes)*

- *I'll just check (your temperature)*

Reading Anemia

Pre-reading activity

Task 1. By brain storming in group work, discuss with your group members on the following questions:

(S)(L)

- (a) What do you know about "anemia" ?
- (b) What do you know about red blood cell?
- (c) What do you know about hemoglobin?

Then showing terminologies and collocations.

While-reading activity

Task 2. Read the following passage and find and underline this information about "anemia" as quickly as you can. (R)

- (a) What is the definition of anemia?
- (b) How can it be classified?
- (c) What is the abbreviation of RBC?

(d) What is hemoglobin deficiency?

Post-reading activity.

Task 3. Check the answers in Task 2 with your group members. Then answer the following questions:

(R)(W)

- (a) Fill in the gaps with proper words. (Gap filling activity follows). Students fill in the gaps with proper words listed.
- (b) Arrange the sentences and make them in right order. (Jigsaw activity)
- (c) What is hemorrhage?
- (d) What is hemolysis?

Task 4. Dicto-gloss. Listen to the text, then take memos. After that, write sentence information from the text. **(L)(W)**

Language Focus 1.

1. The passive without agent

- *Anemia is defined as a reduction of the red blood cell (RBC) volume or hemoglobin below the normal range.*
- *Anemia can be classified in a variety of...*
- *The normocytic anemia can be differentiated.....*

N.B. The focus is the fact not the agent.

2. Anthropomorphic Structure : Inanimate subject + action verb

- *The three main classes of anemia include excessive blood loss...*

3. Subjunctive conditional “with”

- *With increasingly lower levels, weakness, tachypnea,....*

4. Nominalization

- *decreased oxygen-binding ability of each hemoglobin molecule*
- *a wide range of clinical consequences*

5. Abbreviation

- *RBC*

6. Past-participle

-*varying degrees of anemia*....

-, *underlying etiologic mechanisms*.....

For managing these tasks successful in the class, we should pay attention to important points in pre-, during-, and post- main activities discussed in the previous chapter. At the same time, teachers should also keep in mind that students in the class engage in not only task and activities but also to “language focus” . This is because Japanese medical students are learning English as a foreign language in Japanese context. Language focus is also important asset for Japanese EFL students to learn, and it should not be neglected in the instruction of EMP.

12. Prospects

For the past decades, genre analysis and learning-centered approach in the 1980s and 1990s have surely given us something to offer in ESP disciplines. However, there has been misunderstanding among Japanese ESP practitioners and researchers. They put excessive reliance on highly subject-specific materials in ESP. As a matter of fact, previous approaches and ESP textbooks in Japan resulted in flaws in that they were, more often than not, based on descriptions of language use rather than how language was learnt. Classroom activities, even in college and universities, should be more introduced otherwise we cannot facilitate learning for students. The emphasis should be placed more on learning process rather than materials. Therefore, for the future prospects in ESP, the balance of the text (materials) and the process of learning should be considered for the better instruction and understanding of ESP.

13. Conclusion

Medical and nursing students in Japan have various reasons for learning medical English; e.g. to read journals and books, to speak to colleagues on professional visits, to make use of the expanding and increasingly important database available through the Internet, to participate in international conferences, to write up research for journal publication. There may be some medical students who want to take postgraduate courses in UK or the US, and to work in hospitals where English is the first language or the lingua franca. They have strong needs to have a good command of English language proficiency in EMP.

However, despite of their strong needs and motivation in learning EMP, the EMP courses have not been established yet in many colleges and universities. Several reasons for this can be considered, and the main

reason for this is the problem of teachers who have good knowledge in the instruction of EMP. Most of Japanese college English teachers have never studied and learned EMP, one of the English for Academic Purposes (EAP). EMP textbooks published for med students are still small in number and the contents are varied not coherent mostly they are language focused, register driven textbooks, not communicative driven texts.

Therefore, for the future prospects in EMP, genre-driven EMP textbooks should be developed and they should be based on TBI. The contents and tasks in the textbooks should be considered from the needs analyses of medical and nursing students both pre-clinical and post-clinical. And they should be integrative textbooks including four language skills based on CLT.

Note

TAVI is the abbreviation of “Text As a Vehicle of Information” by Johns T and Davies, F (1984). This is strongly related to the idea of top-down processing in reading comprehension and listening comprehension.

References

- Anderson, A. & Lynch, T. (1988). *Listening*. Oxford: OUP
- Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: OUP.
- Ewer, J. & Latorre, G. (1969). *A Course in Basic Scientific English*. London: Longman.
- Foster, O. (1996). Doing the task better: how planning time influences students’ performance. Pp 126-135.
in Willis, J & Willis, d. (eds) *Challenge and Change in Language Teaching*. Cambridge: CUP.
- Gledinning, E.H, & Holmstrom, B, A.S. (2005). *English in Medicine*. Cambridge: CUP
- Higuchi, A. (1998). Active Listening for Japanese high school students. *KASELE Bulletin*, 26. pp.41-50
- Hutchingson & Waters. (1987). *English for Specific Purposes: Learning purpose and language use*.
Cambridge: CUP.
- Johns T & Davies, F. (1984). “Text as a Vehicle for information the classroom use of written texts in teaching reading in a foreign language” . *Reading in a Foreign language*.
1,1, p.1-19
- Kawagoe, E. (2009). English for Specific Purposes in Medical and Nursing Schools. *The Proceedings of the 49th JACET Annual Convention Programs*.
- Munby, J. (1981). *Communicative Syllabus Design*. Cambridge: CUP.
- Prabhu, N.S. (1987). *Second language pedagogy*. Oxford: OUP.
- Rumelhart, D.E. (1980). “Schemata: the building blocks of cognition, in R.J. Spiro, B.C. Bruce, and W.F. Brewer (eds.) *Theoretical Issues in Reading Comprehension*, Hillsdale, N.J.:

Erlbaum.

Skehan, P. (1996). *Second language acquisition research and task-based instruction*. pp 17-30 in Willis, J & Willis, D. (eds).

Swales, J. (1990). *Genre Analysis: English in academic and research settings*. Cambridge: CUP

Widdowson, H. (1983). *Learning purpose and language use*. Cambridge: CUP.

Willis, J. (1996). A flexible framework for task-based learning. Pp 52-62 in Willis, J. & Willis, D. (eds). *Challenge in Language Teaching*. Cambridge: CUP.

Appendix I

MENORRHARGIA

Mrs. Jones is a 37 year old housewife with 3 children. She's a little overweight, smokes, and has a part-time job. Normally Dr. Brown sees Mrs. Jones with one or more of her children. But today Mrs. Jones has come alone.

Dr. Brown: Hello Mrs. Jones. What can I do for you?

Mrs. Jones: Well, I don't know doctor. I feel so (**tired**). I think I need a tonic or something.

Dr. B: Mm. How have you been sleeping?

Mrs. J: Not well. And I still feel tired in the morning. I get out (**of**) (**breath**) just going up the stairs, and my (**heart**) (**pounds**) so much. Do you think there's something wrong with it?

Dr. B: When did you start feeling like this? Did it come on gradually or suddenly?

Mrs. J: It just (**crept**)(**up**) on me I think. And the children are such a handful. They seem to be growing up so quickly I can hardly keep up with it.

Dr. B: How are you (**coping**)?

Mrs. J: Well I have to cope, don't I, doctor?

Dr. B: Mm. Tell me about your (**appetite**).

Mrs. J: I'm eating enough but I just don't seem to enjoy my food any more.

Dr. B: Have you (**noticed**) anything else?

Mrs. J: No. Well not to do with this. But my (**ankles**) seem a bit (**swollen**).

Dr. B: And how are your (**bowels**) working?

Mrs. J: Oh, yes, they're all right, doctor.

Dr. B: Are your stools a normal color?

Mrs. J: Oh, yes.

Dr. B: Do you have piles?

Mrs. J: No.

Dr. B: Are your (**waterworks**) all right?

Mrs. J: Yes doctor. They're quite normal.

Dr. B: And how are your (**periods**)?

Mrs. J: Well it can be a (**nuisance**) and it can get embarrassing, especially if I'm out somewhere. And I've (**got**)(**to**) go to work. I'm working morning.

(Skip)

Dr. B: Are your periods regular?

Mrs. J: Yes I think so. Usually anyway.

(Skip)

Dr. B: Do you have any (**bleeding**) between periods, any "show" at all?

Mrs. J: No, not that I can think of.

Dr. B: But you do feel that the periods themselves are heavy.

Mrs. J: Well, it's getting me down.

Dr. B: Well, (**what**)(**I'm**) going to do is to take a (**blood**)(**sample**), (**examine**) you, and I'll just call the nurse.

(Two weeks later)

Dr. B: Hello Mrs. Jones. Well, as I thought, you are (**anaemic**) and this is what's making you tired. The smear is all right, and there's nothing to worry about there.

Mrs. J: Oh that's a relief.

Dr. B: I can treat your (**anaemia**) (**with**) (**iron**) but if we don't stop your heavy periods it will come back again. I would suggest that we might ask a specialist to see you and try and find out what's causing the heavy periods. How do you feel about that?

Mrs. J: Could it be (**cancer**) doctor?

Dr. B: That's very unlikely at your age, and we already know that your smear is normal. No, I think the most likely cause is (**fibroids**) or some (**hormone**) (**imbalance**).

Mrs. J: And what will the specialist do?

Dr. B: I expect he'll do a (**D & C**). Do you know what that is?

Mrs. J: Yes. I had one of those after Jamie was born. Can you make the appointment for me please doctor?

(Extract from the course handout in IALS, Aug. 3, 2009)

Anemia

Anemia (pronounced /ə·ni·miə/, also spelled **anaemia** or **anæmia**; from Ancient Greek *ἀναιμία* *anaimia*, meaning "lack of blood") is a decrease in normal number of red blood cells (RBCs) or less than the normal quantity of hemoglobin in the blood.^{[1][2]} However, it can include decreased oxygen-binding ability of each hemoglobin molecule due to deformity or lack in numerical development as in some other types of hemoglobin deficiency. Since hemoglobin (found inside RBCs) normally carries oxygen from the lungs to the tissues, anemia leads to hypoxia (lack of oxygen) in organs. Since all human cells depend on oxygen for survival, varying degrees of anemia can have a wide range of clinical consequences. The three main classes of anemia include excessive blood loss (acutely such as a hemorrhage or chronically through low-volume loss), excessive blood cell destruction (hemolysis) or deficient red blood cell production (ineffective hematopoiesis). Anemia is the most common disorder of the blood. There are several kinds of anemia, produced by a variety of underlying causes. Anemia can be classified in a variety of ways, based on the morphology of RBCs, underlying etiologic mechanisms, and discernible clinical spectra, to mention a few.

(Quoted from Wikipedia, August, 2009)

Acknowledgement

I would like to express my gratitude to my colleagues in the department of English, Faculty of Education, Kagoshima University. They are three professors, Sakamoto, Chiba, and Hamasaki for their kind assistance in financial aids. At the same time my special thanks will be dedicated to Dr. Pauline Gillies, program director in Teaching English for Medicine, IALS (Institute of Applied Language Studies), University of Edinburgh. Without their sincere help, this study could not have been accomplished. I really appreciate for their sincere assistance and warm encouragement.

