

**A CASE STUDY: A TECHNICAL ENGLISH SYLLABUS DESIGN
FOR AERONAUTICAL ENGINEERING STUDENTS OF THE AIR
TECHNICAL TRAINING SCHOOL**

FLIGHT LIEUTENANT SANEHA DEEKAWONG

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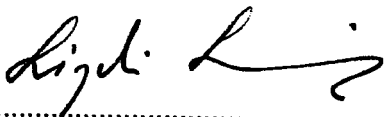
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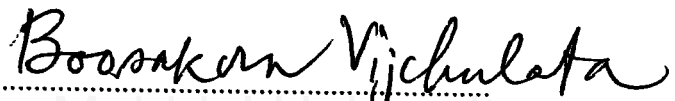
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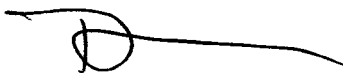
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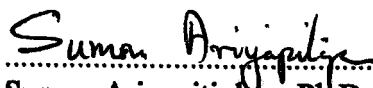
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KEY WORDS : LANGUAGE NEEDS/LEARNING NEEDS/ TARGET SITUATION / LEARNING SITUATION/ NEEDS ANALYSIS

FLIGHT LIEUTENANT SANEHA DEEKAWONG: A CASE STUDY: A TECHNICAL ENGLISH SYLLABUS DESIGN FOR AERONAUTICAL ENGINEERING STUDENTS OF THE AIR TECHNICAL TRAINING SCHOOL: THESIS ADVISORS: NIRAMOL PACHINBURAWAN, Ph.D., DAVID PROGOSH, M.A., 123 P. ISBN 974-665-093-9

This study was intended to design an English syllabus for the Aeronautical Engineering Students (AES) of the Air Technical Training School (ATTS). It was necessary to survey the circumstances and the extent of English use for the AES. Moreover, the study also focused on English learning situations that were analyzed to determine what the Aeronautical Engineering Students needed in order to learn the language.

The study used questionnaires as a major instrument for collecting data. These data were analyzed statistically using the Statistical Package for the Social Sciences (SPSS). The returned questionnaires were analyzed for their reliability by using the Cronbach Alpha coefficient. The reliability was .98. Additionally, there were 180 subjects in the study, consisting of 60 teachers and administrators who were working for the ATTS and 120 Aeronautical Engineering students studying in the Aeronautical Engineering Branch.

The results of the study were as follows:

1. The participants listed the need to utilize the English language for professional use as their highest priority. They also needed reading, listening, speaking, and writing skills in that order.

2. The technical English course goals and objectives emphasized English for professional use and provided the Aeronautical Engineering Students with all four macro skills. The goals and objectives were to foster interactive skills and communication. The teaching methodology for the syllabus was based on the communicative approach. The language of instruction was English, however, Thai could be used if necessary.

3. The proposed syllabus was an activity/task-based syllabus. The syllabus was organized around tasks or activities, which included the following contents: technical, aviation, and military terms and general vocabulary, simple sentences, compound/complex sentences, aircraft maintenance and service manuals/documents/magazines, aircraft maintenance work orders, time compliance technical orders, work unit code manuals and checklists, reports.

4. Realias, computer multimedia, and textbooks were needed for the instructional materials. Learner assessment and evaluation used achievement tests which were designed to assess the tasks and skills that the Aeronautical Engineering students had learned and developed. Moreover, the participants also indicated their preference for using reports, exercises, interviews, presentations, self-evaluations, and portfolios as part of learner assessment and evaluation.

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เรืออากาศเอก เสน่ห์ ฎีกาวงศ์: กรณีศึกษา: การสร้างโครงร่างการเรียนการสอนภาษาอังกฤษเทคนิค สำหรับนักเรียนจำอากาศ สาขาวิชาช่างอากาศ โรงเรียนจำอากาศ (A CASE STUDY: A TECHNICAL ENGLISH SYLLABUS DESIGN FOR AERONAUTICAL ENGINEERING STUDENTS OF THE AIR TECHNICAL TRAINING SCHOOL คณะกรรมการควบคุมวิทยานิพนธ์ : นิรมล ปาจีนบูรธรรม, Ph.D., DAVID PROGOSH, M.A., 123 หน้า. ISBN 974-665-093-9

งานวิจัยนี้จัดทำขึ้นเพื่อสร้างโครงร่างการจัดการเรียนการสอนภาษาอังกฤษเทคนิค สำหรับนักเรียนจำอากาศ สาขาวิชาช่างอากาศ โรงเรียนจำอากาศ ซึ่งจำเป็นต้องสำรวจความต้องการทางด้านการใช้ภาษาอังกฤษและความต้องการทางด้านจัดการเรียนการสอนภาษาอังกฤษของนักเรียนจำอากาศ สาขาวิชาช่างอากาศ และยังศึกษาว่านักเรียนจำอากาศต้องการใช้ภาษาอังกฤษในกรณีแวดล้อมด้าน วิชาชีพ การศึกษา หรือในชีวิตประจำวัน นอกจากนี้ยังศึกษาว่า นักเรียนจำอากาศมีความต้องการในด้านการจัดการเรียนการสอนอย่างไร

การศึกษานี้ใช้แบบสอบถาม เป็นเครื่องมือที่ใช้เก็บข้อมูลในการศึกษาวิจัย ข้อมูลเหล่านี้ถูกนำมาวิเคราะห์และตีค่าทางสถิติโดยใช้โปรแกรม the Statistical Package for the Social Sciences (SPSS) แบบสอบถามทั้งหมดถูกนำมาวิเคราะห์ความน่าเชื่อถือโดยใช้วิธี Cronbach Alpha Coefficient ซึ่งมีค่าความน่าเชื่อถือเท่ากับ .98 กลุ่มตัวอย่างที่ใช้ในการศึกษานี้มีทั้งสิ้น 180 คน ประกอบด้วย นักเรียนจำอากาศ สาขาวิชาช่างอากาศ จำนวน 120 นาย กับ ครู อาจารย์ และผู้บังคับบัญชาที่เกี่ยวข้องกับการจัดการเรียนการสอนจำนวน 60 ท่าน

ผลการศึกษายืนยันได้ดังนี้

1. กลุ่มตัวอย่างมีความคิดเห็นว่านักเรียนจำอากาศสาขาวิชาช่างอากาศต้องการใช้ภาษาอังกฤษในกรณีแวดล้อม ด้านวิชาชีพ และยังมีความคิดเห็นว่า นักเรียนจำอากาศสาขาวิชาช่างอากาศ ต้องการใช้ทักษะทางภาษาอังกฤษทั้งสี่ทักษะคือ ทักษะการอ่าน การฟัง การพูด และการเขียนตามลำดับ
2. เป้าประสงค์และวัตถุประสงค์ของโครงร่างการจัดการเรียนการสอนภาษาอังกฤษเทคนิค เน้นการใช้ภาษาอังกฤษในกรณีแวดล้อมด้านวิชาชีพรวมทั้งการใช้ทักษะทางภาษาทั้งสี่ด้านนอกจากนี้ยังเน้นการใช้ภาษาเพื่อการสื่อสารและการปฏิสัมพันธ์ระหว่างผู้เรียนเองและกับผู้สอน โดยใช้วิธีการสอนแบบ Communicative Approach ภาษาที่ใช้ในการเรียนการสอนคือภาษาอังกฤษและใช้ภาษาไทยเท่าที่จำเป็น
3. โครงร่างการจัดการเรียนการสอนภาษาอังกฤษเทคนิคใช้ Activity/task-based Syllabus การเสนอบทเรียนและการเรียนการสอนใช้งานและกิจกรรมที่เกี่ยวข้องกับเนื้อหาต่อไปนี้ ศัพท์เทคนิค ศัพท์ทางการบิน ศัพท์ทางทหารและ ศัพท์ทั่วไป ประโยคสั้นๆง่ายๆและประโยคซับซ้อนต่อเนื่อง คู่มือการซ่อมบำรุง และการใช้งาน คู่มือเข้าระหัสการซ่อมบำรุง วารสาร บทความทางอากาศยานและทางการบิน คำสั่งงานการซ่อมบำรุง อากาศยาน รายการตรวจสอบ เอกสารเทคนิคที่ต้องปฏิบัติตามเวลา เอกสารทางทหารและการรายงานผล
4. กลุ่มตัวอย่างต้องการอุปกรณ์จริง สื่อผสมทางคอมพิวเตอร์และตำราบทเรียนเพื่อใช้ประกอบการเรียนการสอน และใช้แบบทดสอบที่จัดทำขึ้นโดยวัดความสามารถการปฏิบัติงานได้จริงและวัดทักษะทางภาษา นอกจากนี้กลุ่มตัวอย่างยังต้องการใช้แบบฝึกหัด รายงาน สัมภาษณ์ ทำกิจกรรมกลุ่มย่อย อภิปรายหรือสัมมนา ประเมินผลตนเอง และเพิ่มบันทึกข้อมูลในการวัดผลและประเมินผลผู้เรียน

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CHAPTER I

INTRODUCTION

Every language is uniquely important to the native speakers of that language. But for international communication, English plays a major role. English is used for international publication. Moreover, it is used as a medium of communication for global broadcasting. Quirk and Stein (1983), and Brown (1987) point out since the end of the Second World War, an international language was needed to cope with the enormous and unprecedented expansion in scientific, technical and economic activities on an international scale. English, therefore, is the language used most widely for international communication today. In addition, English is taught as ESL and EFL in countries which use English as an official language, a second language, or a foreign language. Non-English speaking people realize that learning English is not only the study of English culture but also to perceive the international currencies of technology and commerce. Mackay and Manford (1978) argue that English is the key to development in a country because it is used as a medium of international communication. Therefore, many developing countries encourage its citizens to use English as a second language, including Thailand. After compulsory education was introduced in Thailand decades ago, English was made a required subject in all government secondary schools. The English curriculum was changed several times according to the national education policy; however, Thai students had the opportunity to use English only in English courses. In other words, they only used English in

school because English is not an official language (Ministry of Education, 1991:2). Therefore, in some groups of students, for example, the Aeronautical Engineering Students (AES) who require English for their professional use need the most suitable English course. The construction of English for Specific Purposes course (ESP) is the way to solve this problem. Strevens (1988:4) states that ESP is based on what the learners need to learn and for what purposes. Thus, ESP courses are aimed at teaching the learners to meet their language needs for a specific purpose.

The presentation of this study is divided into six chapters as follows:

1. Chapter I deals with the rationale and background of the study, the statement of the problems, its purposes, significance, limitations, basic assumptions, definitions of terms used in the study.
2. Chapter II reviews the literature and research relevant to this study.
3. Chapter III explains the research methodology including the design and administration of a data collecting, instrument, and the subsequent analysis and interpretation of data.
4. Chapter IV presents the findings obtained from the questionnaires.
5. Chapter V contains the discussions on the implementations of findings as well as proposes a syllabus for the AES.
6. Chapter VI presents a summarization and suggestions for further studies.

Rationale and Background of the Study

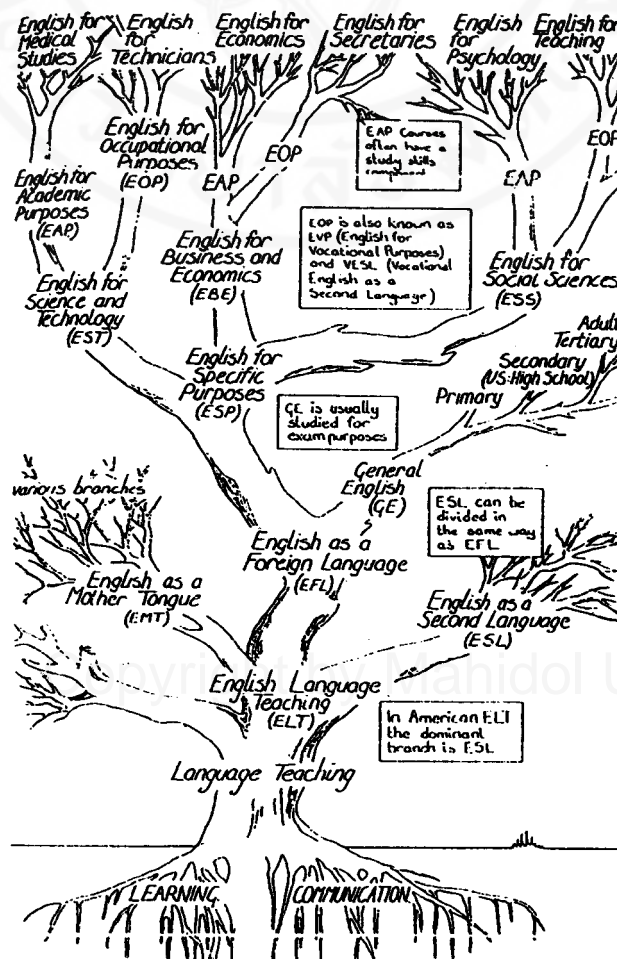
Widdowson (1988), and Dubin and Olshtain (1986) state that the field of language teaching in EFL and ESL provide different English courses to different learners. English courses were set up to meet the aims of English in general. These aims cover a wide range of language features and areas based on the rules of English usage and literature. However, among some groups of learners, for example, the students in vocational schools need language features which are actually used in their technical subjects and fields of work. As a consequence, the English teaching for specific purposes (ESP) was initiated. Brumfit (1986) and Hutchinson and Waters (1987) pointed out in the 1970s, a number of major projects in ESP have been initiated because of the development of science and technology. ESP provides education training and practice for learners. There are many types of ESP. The tree diagram (see Figure 1) explicitly classifies types of ESP in the book *English for Specific Purposes: A learning-Centered Approach* (Hutchinson and Waters (1987:17).

There are various aspects which must be considered for an ESP course. The syllabus design stage is a crucial part of the total process of ESP course design. Syllabus design must lead to developments in materials design and methodology, therefore the syllabus designer must deal with complexity in designing a syllabus. Mackay (1978:11) indicates that a syllabus provides a focus for what should be studied, along with a rationale for how content should be selected and ordered. Brown (1995) describes a method for the organization of the course and materials. The syllabus designer needs to plan and make decisions on what students should learn and the order in which materials should be presented.

Krahnke (1987), Nunan (1988), and Brown (1995) suggest analyzing data gathered in a fact-finding stage, or a needs analysis stage. Then, this information is used to compose goals and objectives for the course which will lead to establishing an appropriate syllabus for learners within a specific context. The syllabus plays a major role because it provides a practical foundation for materials development and scheduling evaluation. It also encourages the teacher and learner in making language teaching and learning as effective as possible. In addition, the course designer has to conceptualize content of the syllabus which would be most suitable for the implementation of the course.

Figure 1: The Classification of ESP

(Source: Hutchinson and Waters (1987:17))



Statement of Problems

The Air Technical Training School (ATTS) is one of principle schools of the Royal Thai Air Force (RTAF). This school produces warrant officers who are trained in various specific branches of technical subjects for the RTAF. The major branch is the Aeronautical Engineering Branch. The school's curriculum was revised many times in line with RTAF policy (ATTS, 1996). The school curriculum was changed in 1996. The new curriculum was set up under the cooperation of the Department of Vocational Education (DVE). The DVE and ATTS set up a Technical English curriculum for the school. The aims of the English curriculum is to train and teach English to students who will be technicians in the RTAF and have to do tasks involving high technology equipment or technical English and some of them may do special missions in which communicative skill is used (Educational Department, 1996). Unfortunately, there is no specific English course for Aeronautical Engineering Students (AES). This is because in the past the ATTS's curriculum consisted of the American Language Course (ALC), which was designed as a language teaching program performed at the school. The ALC provided students with sufficient skills in English to enable them to pursue further training at various technical schools within the US Department of Defense. The educational requirement of learners was that they graduated from Mattayom 6 (M.6) of secondary school in the public school system (equivalent to grade 12 in the United States system). Since then, the ATTS's curriculum was changed and the school accepted students who had only finished Mattayom 3 (M.3) of secondary school in public school system (equivalent to grade 8 in the United States system), therefore the ALC was no longer appropriate for students. The school has not

implemented an English course which focuses on goals appropriate to the change of the school's curriculum. Therefore, this study will explore the factors which will influence an appropriate English course for AES. To provide direction for the purposes of the study and for the researcher, these questions were produced:

1. What kind of content is needed for AES?
2. What are the objectives of the AES syllabus?
3. Which methodology should be utilized in the syllabus?
4. What are the factors related to the syllabus of an AES English course?
5. How should the syllabus be comprised and developed to achieve the goals of the curriculum?

Purposes of the Study

According to the statement of the problems, this study attempt to give some description of the English syllabus which will lead to meet AES's needs and ATTS' aims. Therefore, the purposes of the study are as follows :

1. Analyze the language needs and learning needs of students and use them to develop the objectives of the content.
2. Study the opinions of the syllabus design participants towards the identified components related to the syllabus being developed for the AES.
3. Discuss AES's English syllabus based on needs analysis and theoretical literature.

Significance of the Study

The study intends to conduct a needs analysis in order to establish a syllabus for AES which meets the aims of the curriculum. The implications of the needs analysis will help guide syllabus planing in the following areas:

1. The syllabus should be a model for the improvement of learning and teaching English for Aeronautical Engineering Students.
2. The syllabus should motivate AES to successfully learn technical English.
3. The finding of the study should lead to further study, such as for materials development in the ATTS.

Scope and Limitations of the Study

The population in this research are the teachers and administrators who have worked for ATTS and the AES who studied in ATTS. The limitations tending to influence this study are as follow:

1. The study is limited to answers to the questionnaires, school documents and the literature reviews.
2. The investigation of this study encompasses only Aeronautical Engineering Students.

Basic Assumptions

In this study, it can be assumed that:

1. Both groups of subjects would respond to all questionnaire items truthfully.
2. The information received from the needs analysis can aid in decision making for designing an English syllabus for AES.

Definition of Terms

1. **Curriculum** is a general philosophy of a course. Nunan (1988), Pratt (1980), and White (1988) define that curriculum is an educational program which states the purpose of the course, the means, the content, teaching procedures and learning experiences which are necessary to achieve the purpose. Testing and evaluation are also stated in the curriculum.
2. **Syllabus** is the identification of language features and learning activities which will be organized in a course. According to Nunan (1988) and Brown (1991), a syllabus is the way to organize the course and materials . In other words, it is a description of the contents of a course of instruction and the order in which they are to be taught.
3. **Needs analysis** is the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities. Richards (1992) stated that needs analysis is a part of curriculum development and is normally required before a syllabus can be developed for language teaching.

4. **Target situation** is what the learner needs to do or communicate in the target situation. Hutchinson and Waters (1987) state that the target situation is the linguistic features or language description which will be analyzed to meet the needs of learners.
5. **Learning situation** is what the learner needs to do in order to learn. Hutchinson and Waters (1987) state that the learning situation concerns the learning theories about acquisition and motivation as well as the English teaching approaches.
6. **Aeronautical Engineering Students (AES)** are the students who are studying in the Aeronautical Engineering Branch of ATTS
7. **Administrators and teachers** refer to administrators and teachers who work for ATTS in the position of the Commandant, the Deputy Commandant, the Chief of Staff, the Chief of Educational Department, the Deputy of Educational Department, the Head and Staff of General Subject Section, the Head and Staff of Educational Control Section, the Head and Staff of the Aeronautical Engineering Section, and English teacher of ATTS.
8. **Assessment** is the measurement of the ability of a person or the quality or success of a teaching course (Hughes, 1989).
9. **Evaluation** is the systematic gathering of information for purposes of decision making. In language teaching programs, evaluation is related to decisions to be made about the quality of the program itself, and decisions about individuals in the programs (Johnson, 1989).

CHAPTER II

LITERATURE REVIEW

This chapter intends to provide the background and definition of English for Specific Purposes (ESP). The aspects of ESP that influence ESP course contents will be discussed in this chapter as well as the theoretical framework for the syllabus design. Moreover, the most crucial parts, needs analysis and the syllabus design model, will also be discussed. Most of these aspects were surveyed from literature and researches in the field of ESP and ELT.

Definition and Background of ESP

In English language teaching recently, greater emphasis has been given to the teaching of English as a second language, in line with the increased use of English as an international language. English for specific purposes (ESP) program is a kind of English as a Second Language (ESL) course with the objective to teach English to a particular group of learners to meet their specific needs. The armed forces of alliance troops (during the Second World War) used this program to produce a great number of people with sufficient and appropriate command of particular languages to enable them to do a specific mission.

In the late 1960's and early 1970's there were a large number of research projects conducted into the nature of particular varieties of English. Most of the work at that time was in the field of English for Science and Technology (EST) (Selinker and

Trimble, 1976). This work revealed an interest in specific language forms and functions used differently in each field of study. Mackey and Mountford (1978) state that ESP at that time meant the English needed by a particular group of learners could be identified by analyzing the language of their specialist area of work or study. The growth of ESP continued as a result of three important factors: firstly, the increase in demand for English to suit particular needs; secondly, the developments in the field of linguistics and educational psychology and finally, the transmission of science and technology information.

ESP was developed differently in different countries. The beginning stage of its development emphasized sentence-level language and moved up to the discourse level. The leading educators are Henry Widdowson in Britain, Larry Selinker, Louis Trimble, John Lackstrom and Mary Todd-Trimble from Washington School in the United States (Hutchinson and Waters, 1987: 9-10).

Nowadays, the widespread popularity of ESP in the countries where English is taught as a second or foreign language, and a new development in educational psychology, have encouraged the rise of ESP. It is reported that there has been a new emphasis on the learners and their attitudes to learning. There is an underlying assumption that the English course should be relevant to learners' needs, that is, learners' different needs and interests have great influence on their motivation to learn and their success in learning. It has been claimed that the learners' needs and interests would help arouse their motivation and make learning better and faster (Hutchinson, 1987).

Widdowson answering Passa on the question, "What is the definition of ESP?", said:

I think I would define it as the design of language teaching programmes to suit or prepare students to take on a particular role in the professional community or vocational community which has its own conventions of communication which the learner has to learn. It happens incidentally that these conventions are expressed through English. So I would want to stress that ESP is a kind of initiation into ways of thinking or behaving which are appropriate to a particular group of people and the student is seeking membership of that group. One of the entry conditions for membership is the knowledge of English for those purposes. (Passa, 1994: vol.24:1)

Robinson (1991), pointed out the criteria for ESP. First, students study English not because they are interested in the English language or English language culture but because they need English for study or work purposes. This has implications for the kind of activities and topics in a course. However, students may wish to study general topics and activities which are relevant for their work or specialized study. Second, an ESP course is based on a need analysis, which aims to specify as closely as possible what exactly it is that students have to do through the medium of English. There are various approaches to needs analysis. The needs analysis commonly focuses on both target or end-of-course requirements and students' initial needs, including learning needs (Munby, 1978). Finally, students in a class of an ESP course are involved in the same kind of work or specialist studies. Schleppegrell (1991) defines that all ESP programs are designed for adults who have a common professional or job-related

reason for learning English, a common context in which to use English, a common content knowledge of their subject area, and well-developed learning strategies. In other words, an ESP course looks at the knowledge of the vocational or professional field and well-developed adult learning strategies. Gueye (1990) states that ESP tries to provide learners with skills to communicate in the work field. Teaching English is viewed merely as a tool to help learners cope with their working environment. Hutchinson and Waters (1987) define that ESP is an approach to language learning, which is based on learner needs. In other words, ESP is an approach to language teaching in which all decisions concerning content and method are based on the learner's reason for learning.

According to previously mentioned educators, ESP helps learner uses the language for practical purposes. In ESP, learners, according to their needs, are taught how to, for example, interact with colleagues, read instructions, write memos, handle telephones calls, welcome guests or customers.

There are many types of ESP. Hutchinson and Waters (1987) explicitly classify types of ESP as in the Tree of ELT (see Figure 1). Example of ESP are presented as follows:

- English for Science and Technology-EST, involving scientific subjects, applied science and technology. Odette (1979:15) states that this type of ESP is commonly used at the university level such as English for Medical Studies.
- English for Occupational Purposes-EOP, involving work-related needs and training. Hutchinson and Waters (1987) indicate that this type of English meets the

professional need of learners. For example, English for nurses, and English for secretaries.

- English for Academic Purposes-EAP. Robinson (1991) points out that EAP is commonly involved academic study needs. This program provides students with sufficient skill in English to enable them to pursue further specific subjects. In other words, EAP courses often have a study skills component. For example, in academic writing courses and reading courses.

Aspects of ESP

We can define ESP as training in English for what the learners need to use English. However, there are various aspects that must be considered for designing an ESP course. These aspects will support the designer in making decisions on syllabus design, methodology, and teaching activities as well.

Discovery Process and Authenticity. In learning and teaching English, especially in an ESP course, the approach called "discovery" learning is used more widely. Higgins (1990) presents in the article "Hard Facts Note in Teaching English to Science Students" that in writing an experimental report, students will develop their English with the discovery process of learning English by themselves. In addition, they will develop communicative competence in the classroom. For example, in terms of discourse, students will find out about coherence in order to make their reports clearer, and for cohesion they have to use language to join and link ideas together in the text. For Thai adults, English was learned by way of the discovery procedures. They learned how to use language in their job situation rather than learning in school. Trial and error

is a process of discovery that they used to learn language by trying various solutions and learning from their failures to find the correct language in books, or asking native speakers for help, especially for communication. Regarding to this point, ESP would be advantageous by putting precise input that will be used in learners' future area of job. In order to support the process of discovery, materials and resources are very important in an ESP course. Authentic materials in ESP are normally used in the students' study situation with regard to students' real-world roles. Moreover, the tasks and activities that take place in the learning situation should be authentic in order to support the discovery procedures. For instance, scripted language prepared for listening drills is not authentic while natural spoken language used in different situations is authentic and will promote students progress in communicative skills. Thus, we can conclude that ESP focuses more on authentic language use.

Form and Function. In the past, learning English focused on language skills : speaking, writing, reading, and listening, which emphasized language forms. Thus, students were programmed to learn the grammar and structure of language rather than the functions. Richards and Rodgers (1986) state that in language teaching there has been a big change from form which focuses on grammar, and structure of language to functions concerning how language is used in order to communicate and do something with the language. This change is important for an ESP course, which is the study of English in order to use it to communicate effectively in real situations. In the university, English is taught in an auxiliary role, which provides students with the basic ability to use the language to receive and to convey information associated with their specialist studies. Thus, the rhetorical functions in discourse has become a major role

in an ESP course instead of the grammatical forms. In science discourse, the language should be direct, clear, and not ambiguous to help students understand the language and its functions, therefore, they can complete an assignment effectively.

Register and Domain. Fasold (1984) points out that there are two things that make the language in science and technical subjects different from the language in other subjects: register and domain. Register is a number of distinctive words or phrases used by a particular group in a particular way. Register also deals with formal and informal situational language, for example, in doctors' register the word "cardio" is used for heart and "hypertensive" for high blood pressure. Domain is an area of activity and situation in which science discourse is used by a related group. For instance, situations in which the doctor is talking to patients, the discourse features may be comforting, reassuring, and informative. On the other hand, they used a different register with their colleagues. In an ESP course these aspects should be considered as dominant components to put particular vocabulary and activities parallel with students' real-world roles.

Area of Interest. Swales (1990) states that one rhetorical function of language used in presentation or communication with a particular group is the area of interest. For instance, in the presentation of new research in the medical field, the most interesting and useful parts are presented first. This idea could be implemented in an ESP course in order to select the most important and necessary setting for the course. Thus, in organizing the course, the language should relate to the majority of students' needs in order to communicate authentically. In other words, the selection of language features is based on usefulness to the students in real situations. In addition, the

sociolinguistic aspect of how to use language appropriately with the related group is a crucial thing which should be considered, for example, a sales person must be persuasive, informative, and attentive through language use.

Affective affinity. Dulay, Burt, and Krashen (1982) state that the learners' disposition or state of mind can influence the way in which language is learned. Therefore, an approach, or the way language is presented to learners should take place in a relaxed, enjoyable, activity-centered atmosphere. Well-motivated learners have positive attitudes towards language learning. This aspect is in affective affinity domain. With regards to this idea, carefully selected activities and materials should also be motivating and enjoyable for learning.

ESP Course Design Model

This section is concerned with the fundamentals of a course design model. It deals with the approaches in designing English courses that will be implemented for ESP course. Hutchinson and Waters provide the significance of ESP course design as follows:

ESP is based on designing courses to meet learners' needs. There are many factors involved with the design, such as what does course design involve?, how to use a course design?, and what is the role of the ESP teacher? ESP is an enterprise involving educational training and practice, and drawing upon various major realms of knowledge such as language, pedagogy and the students'/participants' specialist area of interest. (Hutchinson and Waters, 1987)

Brown (1995) suggests a very useful ideas for language course development. Even though his work is presented in the field of EFL, it can be implemented for ESP. He describes two activities needed for development of a language course: teaching activities and curriculum activities. The language teaching activities can be classified into four categories:

- 1) approaches: way of defining what and how the students need to learn
- 2) syllabuses: way of organizing the course and materials
- 3) teaching: way of presenting the materials and teaching
- 4) exercises: way of practicing what has been presented

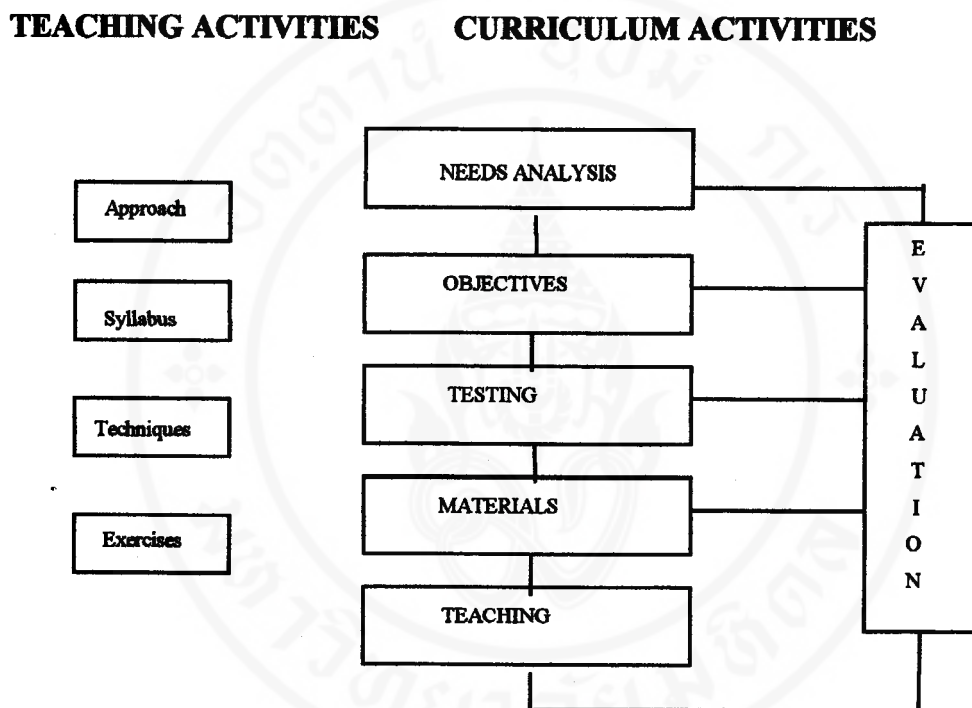
These categories will interact with the curriculum activities or the systematic design of ESP course, which involves a number of separate elements: needs analysis, goals and objectives, testing, materials, teaching, and program evaluation. The categories of teaching activities and the systematic framework for course development are useful in making choices and implementing an ESP course (see Figure 2).

Hutchinson and Waters (1987) suggest three components of designing ESP course: 1) needs analysis, 2) language descriptions and 3) learning theories should be investigated (see Figure 3). Needs analysis involves target needs and learning needs. This process intends to investigate the factors affecting an English course and specify the aims of the course as well. This stage is similar to the Brown's framework. The second component of ESP course design is language description. It is the way in which the language system is broken down and described for the purposes of learning. This stage refers to the term "syllabus". The last component is an approach or method

derived not from a view of language, but from a view of learning. It is the learning theory which provides the theoretical basis for the methodology.

Figure 2 : Interface of Teaching and Curriculum Activities

(Source: Brown, 1995:20)



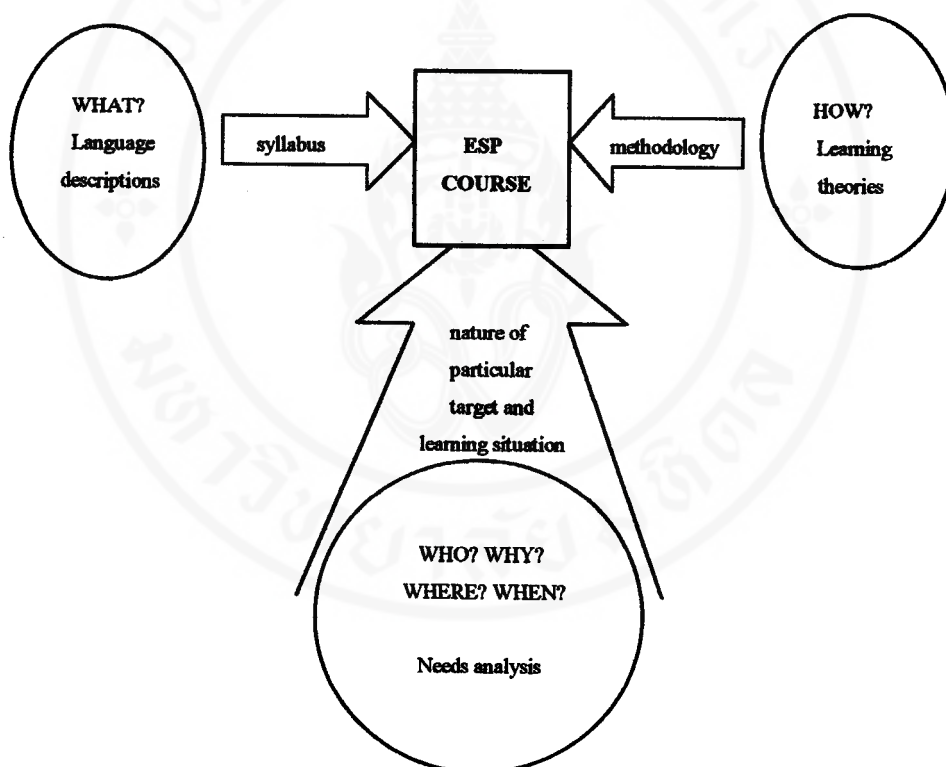
Hutchinson and Waters (1987) also illustrate the course design as follows:

Course design is the process by which the raw data about a learning need is interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge. In practical terms this entails the use of the theoretical and empirical information available to produce a syllabus, to select, adapt or write materials in accordance with the syllabus, to develop a methodology for teaching those materials and to establish evaluation procedures by which progress towards the specified goals will be measured.

There are many different approaches to ESP course design. The term approach in the work of Hutchinson and Waters could be misunderstood to readers because it is similar to the term approach: ways of defining what and how the students need to learn.

Figure 3 : Factors Effecting ESP Course Design

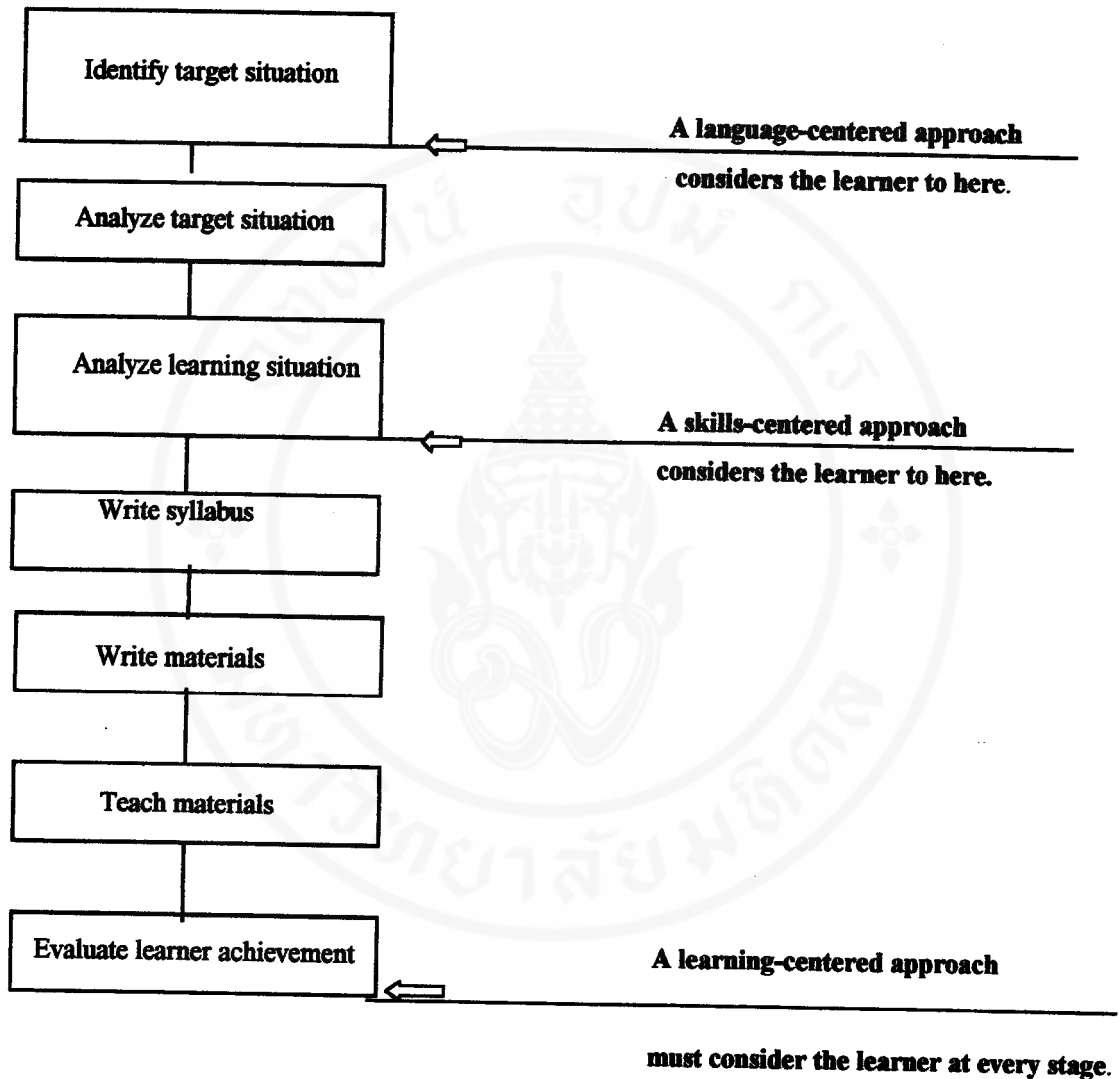
(Source : *Hutchinson and Waters, 1987: 22*)



Therefore, approach in this case refers to the types or ways in designing ESP course. Hutchinson and Waters can, however, identify three main types of course design: language-centered, skill-centered, and learning-centered. The first type, language-centered approach to course design is a process aimed to draw as direct a connection as possible between the analysis of the target situation and the ESP course. It starts with the learner, proceeds through various stages of analysis to a syllabus, thence to

materials in use in the classroom, and finally to evaluation of mastery of the syllabus item. The second type, the skill-centered approach to course design, is a number of ESP projects set up with the specific aim of developing the students' ability, such as reading skills. This model is a reaction both to the idea of specific register of English as a basis for ESP and to the practical constraints on learning. Its aim is not to provide specified features of linguistic knowledge, but to make the learner into a better processor of information. However, this approach takes into account that the language-centered approach but, the process it is concerned with are the process of language use not of language learning. The last approach is the learning-centered approach. This approach takes into account the learner at every stage of the design project. It views course design as a negotiated process and dynamic process. There are many factors which influence the content of the course. The learning situation and the target situation will both influence the nature of the syllabus, material, methodology and evaluation procedure. Moreover, each of these factors will be influenced by the others. Therefore, course design should incorporate the benefits from these types to develop an ESP course (See the process of these approaches to course design in Figure 4).

Course design is the process by which the raw data about language needs and learning needs is interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a desired state of knowledge.

Figure 4 : A comparison of approaches to course design*(Hutchinson and Waters, 1987: 73)*

There is no single model for setting up an ESP course because there is a wide range of choices to be considered. Moreover, the course needs to be recognized as an innovation, requiring appropriate managerial as well as pedagogical expertise. Therefore, the course design framework is needed for setting up an ESP course. This study adopts the framework from the work of Hutchinson and Waters, English for Specific Purposes, a learning-centered approach (see Figure 5). The framework shows

very clear steps for designing courses. Each stage provides separate ideas to study for course design; however, each stage is interrelated and interact to each other. The commencement of this model focuses on identifying learners needs. The learners are taken into account at every stage in order to promote their learning. This is a crucial reason in choosing this model because ESP courses are set up to meet the needs of learners. Therefore, learners should be viewed as a center of every stage. After that, the results from learners are considered in the analysis of learning in the target situation. The target situation focus on skills and knowledge needed to function in the authentic situation. All of these stages refer to the term “needs analysis” needed in the design stage of the syllabus.

Needs analysis

What is needs analysis? Hutchinson and Waters (1987) state that needs analysis is the process of determining the needs for which a learner or group of learners requires a language, and arranging the needs according to priorities. Moreover, we can use needs analysis as a basis for setting goals and objectives of the course. The term “needs analysis” or “needs assessment” is a part of curriculum development and is normally required before a syllabus can be designed for language teaching. The purpose of working through needs analysis is to establish precisely the application of language and learning to the ESP course or classroom. Mountford’s (1988) needs mean ‘ what the user-institution or society at large regards as necessary or desirable to be learnt from a program of language instruction’. Widdowson (1987) points out needs can refer to students’ study or job requirements, that is, what they have to be able to do at the end

of their language course. According to Widdowson, it is a goal-oriented definition of needs which can be described in terms of objectives. Brindley (1989) provides more details on need analysis: product-oriented and process-oriented. Product-oriented interpretation focuses on language which students have to use in a particular communication. This type of needs derive from different kinds of factual information about learners, their use of language in real-life communication situations as well as their current language proficiency and language difficulty. Process-oriented interpretation, this type is broader than the first one. The analysts have to deal with affective and cognitive variables which affect the language learning. This type of need derive from information about affective and cognitive factors such as personality, confidence, attitudes, learners' wants and expectations with regard to the learning of English and their individual cognitive style and learning strategies.

Generally, teachers are the persons who make the needs analysis for their students. Therefore, they have to identify learners' goals in term of language features and identify attitudes, what factors learners need to know in order to learn effectively and what skills they need to complete the goals (Brown, 1995).

Hutchinson and Waters (1987: 54) make a distinction between target needs and learning needs. They describe three terms of target needs: necessities, lacks, and wants. Necessities are what the learners need to know in order to function effectively in their field of work. Lacks involve the needs which are the proficiency gap between what the learners already know and the target language proficiency of learners. The last term is wants. Wants are the needs of learners that relate to the other factors, for example, course designers, sponsors or teachers, and institutional policy.

While, learning needs are focused on the needs of the learning situation, the needs for a task that is enjoyable, fulfilling, manageable, and generative. This type of needs concerns the learning items, learning skills and strategies, subject knowledge and activities as well as the affective affinity which was mentioned in the section Aspects of ESP on page 18.

Robinson (1991:8) illustrated the idea of target needs. He states that the needs analysis which focus on students' needs at the end of course can be called target situation analysis. Munby (1978) formulated the best-known framework for target analysis. He presents a communicative need processor, comprising a set of parameters within which information on the students' target situation can be plotted. The Munby model provided very useful implications for the syllabus design such as the checklist of micro skills and attitudes.

In conclusion, the needs analysis refers the procedures for identifying and validating needs, and establishing priorities among them (Pratt, 1980:79). The interpretation of the needs analysis serves the purposes of:

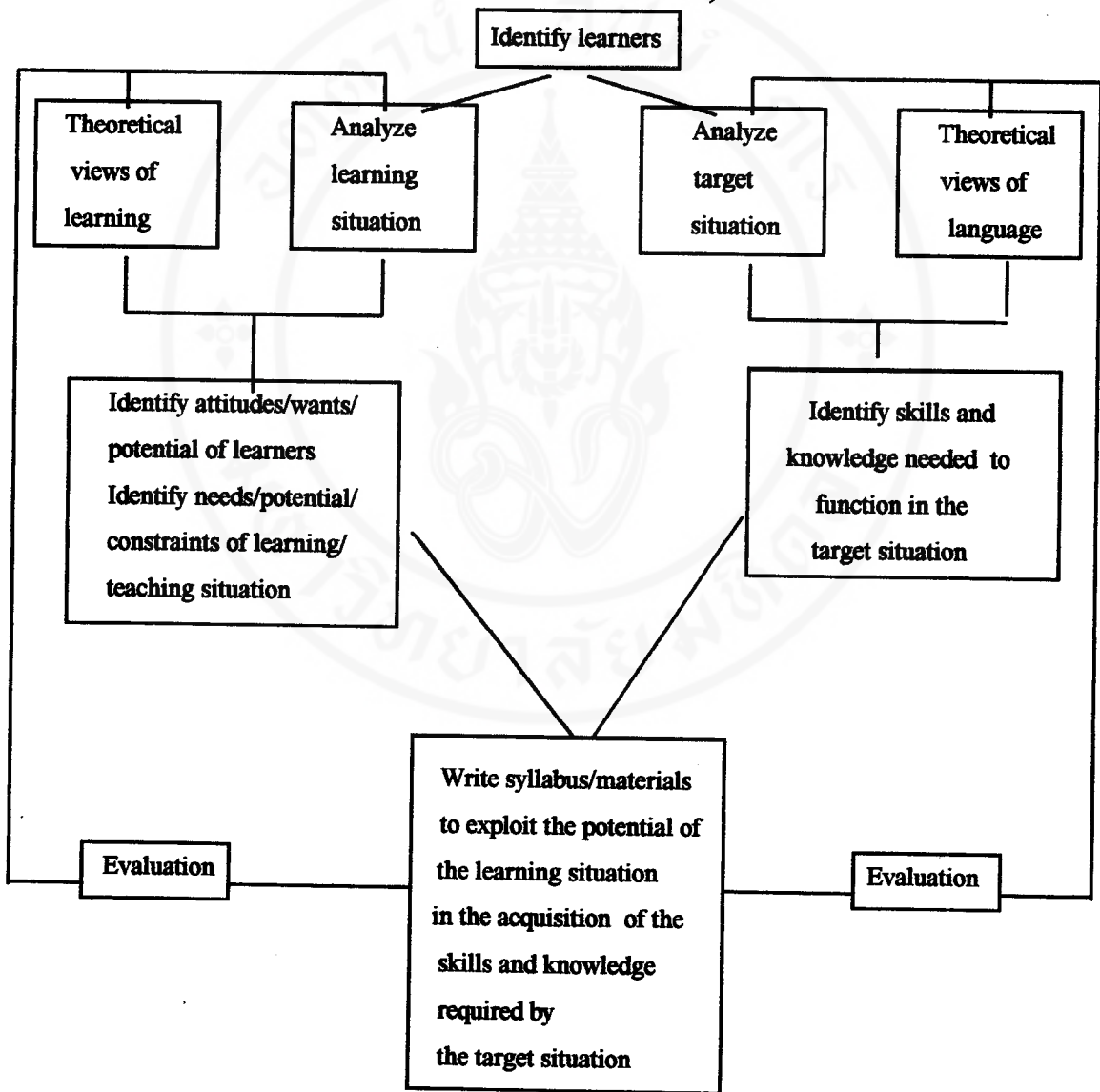
- a) providing a mechanism for obtaining a wider range of input into the content, design, and implementation of a language program
- b) identifying general or specific language needs that can be addressed in developing goals, objectives and content for a language program, and
- c) providing data that can serve as the basis for reviewing and evaluating an existing program

In this study, the researcher made efforts to perform needs analysis bearing in mind the works of educators whom were mentioned previously. The subject matter or

content, sample sampling (teachers, administrators, and students), methodology and statistical analysis were taken into consideration.

Figure 5 : A learning-Centered Approach to Course Design.

(Source : Hutchinson and Waters, 1987: 74)



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Syllabus design

There is a wide range of aspects for course development. We know the data of needs analysis can be used in designing an effective ESP course. The syllabus design

stage is also a part of the process of course design. On the one hand, course development involves the use of the theoretical and empirical information available to produce a syllabus, to select, adapt or write materials in accordance with the syllabus, to develop a methodology for teaching those materials and to establish evaluation procedures. The syllabus design stage is a crucial part of the total process of course design. Syllabus design must lead to developments in materials design and methodology.

Mackay (1978:11) indicates that a syllabus provide a focus for what should be studied, along with a rationale for how that content should be selected and sequenced. Currently, the literature reflects three majors types of syllabi: structural, situational, and notional. Brown (1991) expands the term syllabus as the ways of organizing courses and materials. He explains four more types of syllabi than the Mackay's syllabus types. Thus, there are seven types of syllabi: structural, situational, topical, functional, notional, skills and task based. Krahnke (1987) suggests 6 types of syllabi: structural, notional and functional, situational, skill-based, task-based, and content-based syllabus. However, sometimes two or more types of these syllabi may be mixed together, and other times there may be secondary or tertiary syllabi operating in larger underneath the primary syllabus as well. Brown (1995) states that mixed syllabi occur when authors choose to mix two or more types of syllabi together into what likes like a different type of syllabus. Other authors may choose to use layered syllabi, secondary or tertiary syllabus in layers that operate underneath the primary syllabus.

Robinson (1991:35) combines three accounts of approaches to the ELT syllabi from the work of Allen (1984), and White (1988) as in Figure 6. These approaches are

very useful as a strategy point for the consideration of ESP syllabus and they can be applied to ESP course. The three approaches are content-based syllabus, skill-based syllabus, and method-based syllabus.

The content-based syllabus was influenced by the role of culture in language learning. Culture provides a broader and deeper context for how learner knows or determines what is valued, appropriate, or even feasible. The learning of language through or in conjunction with subject matter can also be the focus of a language course. A content-based course may teach the subject matter directly or use subject matter as the basis for language-learning lesson.

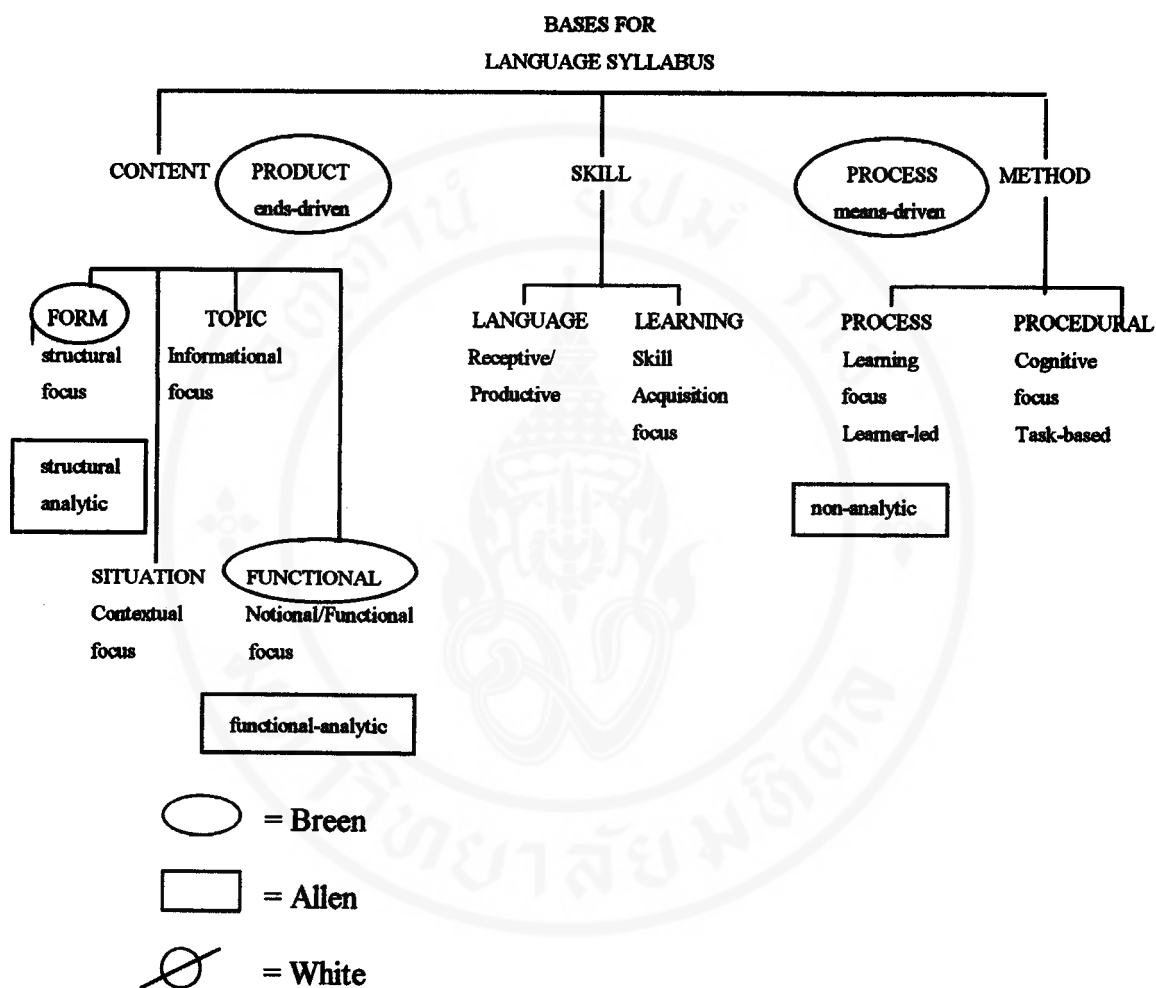
The skill-based syllabus is aim to develop language proficiency. The proficiency movement and the developing of proficiency trend have emphasized this syllabus. For some language courses, learner will be given all four skills. Thus, learners have to use some combination of speaking, listening, reading, and writing in class. However, because becoming proficient in each of these skills, syllabus will emphasize certain skills. For example, academic reading course provides learner focus on reading skills.

The method-based syllabus focuses not just on the language. This type of syllabus was influenced by the learner's affect, which include attitudes, self-confidence, and motivation. Moreover, the learner's approach to learning, which includes both understanding and developing learning skills are also included in this syllabus.

A basic distinction within these syllabi is between product syllabi and process syllabi. Product syllabi are those in which the focus is on the knowledge and skills which learners should gain as a result of instruction while process syllabi are those which focus on the learning experiences and learner's approach to learning themselves.

Figure 6: Bases for language syllabus design

(Sources : White,1988; Breen,1987; Alen,1984)



Six types of syllabi from Krahnke: *Approaches to Syllabus Design*, (1987) are constructive useful for syllabus designer. The six types of syllabi commencing with the one based most on language structure or form, and ending with the one based most on language use.

The first, a structural syllabus is a product syllabus with most emphasizes on form. The structure of language is the major item of learning. The content of this

syllabus focuses on the collection of forms and structures or grammatical of the language, for example, pronunciation or morphology, nouns, verbs, adjectives.

The second, a notional/functional syllabus is the product syllabus which the contents of language teaching is a collection of functions that are performed when language is used, or of the notions that language is used to express. For example, informing, agreeing, apologizing are the kinds of functions while size, age, color, comparison, and time are the kind of notions.

The third, a situational syllabus is also a product syllabus, the content is the collection of situations which takes students needs into account. A situation involves several participants who are engaged in some activities. The language within this syllabus is the combination of functions and plausible segment of discourse. The aim is to teach the language that occurs in the situations, for example, seeing doctor, asking directions.

The fourth, a skill-based syllabus is a product syllabus with little process, the content of the language teaching is a collection of specific abilities, skills, and competencies in language. The syllabus provides learner being competent in a language relatively independently of the situation or setting in which the language use can occur. The aims are to learn the specific language skill and develop more general competence in language learning while applying the language skills.

The fifth, a task-based syllabus is considered between a product and process syllabus that the goal of teaching students is to draw on resources to complete some pieces of work. Tasks are also what that learner will do in classroom as activities. Doing tasks will promote the learner in developing skills necessary to function in their

real world. This syllabus more often occurs in ESP courses. Krahnke (1981,1982), Candlin and Murphy (1986), and Johnson (1982) describe the characteristics of the activity/task-based syllabus as follows:

- Use activities that the learners have to do for their purposes outside of the classroom as opportunities for language learning
- Way of bringing the real world into the classroom
- Similar to situational learning, but content of situations is provided by the students themselves (needs analysis)
- Involve informational content that the learners do not have at the beginning of the task
- Require the student to apply cognitive processes of evaluation, selection, combination, modification, or supplementation to a combination of new and old information
- Communicative strategies are required through the need for understanding during the interaction, and required to accomplish the tasks.

Moreover, this syllabus is also supported by the acquisition theory that is, the ability to use a language is gained through exposure to and participation in using it, for example, tasks and experiences (Krashen, 1982).

The last, a content-based syllabus, the primary purposes of the instruction is to teach some content or information (the process) such as the science class taught in the language the student needs or wants to learn, possibly with linguistics adjustment to make the science more comprehensible. It is not really a language teaching syllabus.

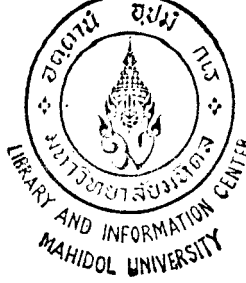
The instruction is to teach learner the content or information using the language that learner is also learning.

Shafigi (1991), Dubin and Olshtain (1986) argue two complementary ways to approach to overall organization of a syllabus, cycle and matrix. These approaches suggest a core of materials to be learned and activities to be conducted with in a predetermined time frame.

In the cycle approach, a regular cycle of activities follows a consistent sequence. Teachers and learners can work with same topic more than once, but it appears in a more difficult or complex level. For example, Fujiwara (1996) divides listening activity into three parts, the first for discussion of the homework assignment, the second for student presentations, and the third for watching and discussing a video.

In a matrix approach, the teachers and learners work with a set of possible activities for a given time frame. They can select which activities to work with as the course progress. Thus, this approach provides teachers and learners maximum flexibility to select topics from a set of contents in random order (Dubin and Olshtain, 1986). This case suggests the syllabus designer to comply a list of possible activities and materials and then decides which to use, depending on students' interests as well as the availability of the materials.

Larsen-Freeman (1986) state that for syllabus designer, the possibilities for what to include in a syllabus opened up with the advent of what has come to be called the communicative approach. We have to consider the nature of language. The communicative approach is based on ideas about language, on the one hand, and about the purposes of language learning, on the other. Language is used in a context, which



determines and constrains the choices that language learner make with respect to purpose, for example, style, register, and topic. The learner must use the language and have purpose for using it. The communicative approach added several dimensions of using the language. First, it added the dimension of language functions, such as to convey information. It also added the dimension of notions, which form a continuum from general concepts (time, space) and relationship to specific topic related notions (house and home, personal identification). Moreover, language was used for communicative purposes in participated circumstances and people. Learners need to use the content of the language and its appropriateness. Thus syllabus designer can add these categories to a syllabus.

In conclusion, there are several models and systems for designing an ESP course. However, the commencement of every model focus on needs analysis and then syllabus design. Designing an English course for AES will analyze both the learning situation and the target situation by following the framework presented in Figure 5 and the mentioned constructive advice. The finding out of the rationale facts based on AES's needs analysis, the school's curriculum as well as the theoretical literature will lead to the establishing syllabi which are feasible to complete the needs and goals of the course. A number of different types of syllabi might be best determined to use in an eclectic manner.

CHAPTER III

RESEARCH METHODOLOGY

This study proposes to investigate the language and learning needs of Aeronautical Engineering Students (AES). It is necessary to perceive to what extent English is actually used in the AES professions. Thus, it would be the key in focusing on English content and learning situation for AES, that is a syllabus design. This chapter describes the population, instruments used for investigation, data collection methods, and analysis of data.

Population

The population of this study was the students who were studying in the Aeronautical Engineering Branch. In addition, teachers and administrators who work for ATTS were included. Therefore, the subjects chosen for this study were divided into two groups:

- 1) Teachers and administrators who works for ATTS.
- 2) Aeronautical Engineering students (AES) who were studying in ATTS.

Sample

Teachers and administrators who work for ATTS were the staff who established the ATTS curriculum. They can provide useful data for analyzing needs. Therefore, all teachers and administrators were purposively selected as the sample of the study based

on their position; the Commandant, the Deputy Commandant, the Chief of Staff, the Chief of Educational Department, the Deputy of Educational Department, the Head and Staff of General Subject Section, the Head and Staff of Educational Control Section, the Head and Staff of the Aeronautical Engineering Section, the English teachers of ATTS. Altogether, there were 60 subjects. The AES were the second group of subjects chosen for the study. They were selected on the basis of English scores, the top 30 from each class. The students in each class were tested in order to put the homogeneous class by school's placement test and attitude test. Therefore, students in each class had the similar level of English proficiency. There were four classes of AES and each class contains 40 students, totaling 120 subjects. Altogether, there were 180 total subjects in this study.

Instruments Used for the Study

The designing of an English syllabus require interpretation of data, which could be collected by means of an interview, documents, observation, or the distribution of a questionnaire. This study used a questionnaire to obtain data regarding the needs of language use and the language learning of AES. The questionnaires were distributed to two groups of subjects selected for this study as previously mentioned. The construction of the questionnaires is discussed as follows.

Construction and Development of the Questionnaire

Questionnaires were constructed in order to collect the data. Researcher performed the following steps. Firstly, the literature in the field of ESP, the syllabus

design and the need analysis were examined. Next, a discussion with some AES and ATTS's teachers was crucial in constructing the questionnaire. Afterwards, the questionnaire was generated. It consisted of three parts. The Part one of each questionnaire contained different questions according to the differences in their personal data. The Part two and Part three were organized in relation to the proposal of the study and the method selected for analysis and interpretation. The questions used were both closed and open-ended. Question items were a six-point Likert Scale type. In addition, open-ended items were included for other suggestions.

The questionnaire used for both groups of subjects was translated into Thai in order to minimize problems of ambiguity and misinterpretation.

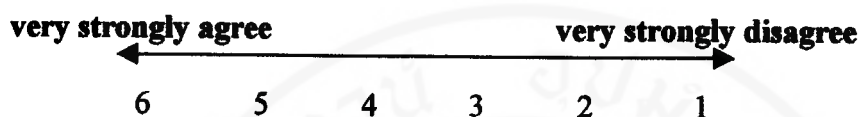
The first questionnaire was constructed for AES to survey the used of English in academic studies, professional use, and daily use. Moreover, the respondent's opinions toward the language learning were asked as well. It consisted of three parts.

Part one consisted of both a checklist, and fill-in-the blank items, in which the respondents were required to either fill in some personal information such as years of study, educational status, age, and length of time studying English. In addition, the study of any extra English and the reasons for studying were asked. In addition, self-evaluation was used for AES to indicate the appropriate level of their competence and ability in English as perceived by themselves.

Part two was comprised of checklist items using a six- point Likert Scale. In this part, the respondents were asked to rate their opinion towards language needs in using four English language macro skills (listening, speaking, reading, and writing) in three

different circumstances: in academic studies, in their professional use, and in their daily life use, according to the following criteria:

Opinion towards Language Needs



In addition, a list of the extent to which the language needs in each skill area were given to rate. The respondents expressed their opinion of English language needs in this part and also suggested other concerns by writing opinion. They gave their opinion about the language needs by rating some given language items, which matched their opinion most closely.

Part three was organized to collect information on the syllabus arrangement. It consisted of major questions on different aspects of syllabus design including objectives, methodologies, activities, and evaluation. A six-point Likert scale was also employed to investigate the respondents' opinion. The questions asked the respondents to rate the objectives they would like to emphasize in the use of English. Types of methodologies and activities were given to rate as well. The final question asked them to rate the method of evaluation they needed. A six-point Likert scale type was used in this section.

The other questionnaire designed was for ATTS's teachers and administrators. It was made up of 3 parts that were similar to the first questionnaire except for the first part. The first part for teachers and administrators asked gender, age, educational

background, and which branch of ATTS they worked for. In addition, information about English Language teacher training program was asked. The Likert scale used in this set was the same as the previous one.

Administration of the Questionnaires, Data collection and Analysis Procedures

The draft questionnaire was organized and modified with suggestions by the researcher's advisors. The final draft was distributed to the groups of subjects. The researcher reserved the school conference room for the pilot subjects to answer the questionnaires. After that, the weak or uncompleted items of questionnaires were improved. The completed questionnaires were given out to all subjects in the same room. The researcher instructed the respondents how to answer the questionnaires. They were informed of the significance of the study in order to motivate them to answer all questionnaires truthfully. The responded questionnaires were analyzed for their reliability by using Cronbach Alpha coefficient. The Statistical Package for the Social Sciences (SPSS) was for the analysis.

In conclusion, the research methodology of this study used the questionnaires and the research literature as the major tools. The 180 total subjects for the study consisted of AES, and teachers and administrators. The results of the study are presented in the next chapter.

CHAPTER IV

FINDINGS

Chapter Four reports the results of the study. The presentation within this chapter demonstrates the results obtained from the questionnaires distributed to 180 subjects. In addition, this chapter includes the interpretation of data of the respondents' needs and their attitudes towards the technical English syllabus designed for AES.

As previously mentioned, there are two groups of subjects: 120 AES, and 60 teachers and administrators. The number of returned questionnaires answered by AES was 120 out of 120 (100%), and 60 out of 60 (100%) for teachers and administrators. Therefore, the total number of respondents whose questionnaires were returned was 180 out of 180, representing 100 percent of the target population.

Two sets of questionnaires, before being issued to the subjects, were analyzed for their reliability by using Cronbach's alpha coefficient method. The questionnaires used with both the AES and the teachers and administrators are the same except for Part One. The findings for reliability between the two sets of questionnaires were pooled and analyzed ($r = .98$). The research tool was reliable.

Findings of Part 1 of the Questionnaire

Part 1 of the questionnaires asked the respondents to give their background information or personal data. The description of information of this part is presented in

Table 1 and Table 2. The details shown in Table 1 are about the AES group, while Table 2 presents the information about the teachers and administrators. The data were analyzed as frequencies (ordinal scaling).

Table 1
Description of AES Background Information and English Learning Experience

| General Background | n=120 | Percent (%) |
|--|--------------|--------------------|
| Academic year | | |
| 1 st year | 30 | 25.0 |
| 2 nd year | 30 | 25.0 |
| 3 rd year | 60 | 50.0 |
| Age | | |
| 14 - 17 years | 48 | 40.0 |
| 18 - 20 years | 72 | 60.0 |
| Highest level of education | | |
| Mattayom 3 | 102 | 85.5 |
| Mattayom 4 | 9 | 7.50 |
| Mattayom 5 | 5 | 4.16 |
| Mattayom 6 | 2 | 1.66 |
| Vocational certificate | 2 | 1.66 |
| Experience and length of time in extra English language study | | |
| Yes | 113 | |
| Less than 3 months. | 43 | 35.8 |
| 3 months- 6 months. | 70 | 58.3 |
| 6 months – 1 year | - | - |
| More than 1 year | - | - |
| No | 7 | 5.80 |
| Reasons for extra English language study | | |
| To understand the lesson taught in school | 20 | 16.6 |
| To pass the entrance exam | 95 | 79.1 |
| To study abroad | - | - |
| To communicate in English | 5 | 4.16 |
| Ability in English | | |
| Very good | - | - |
| Good | 15 | 12.5 |
| Fair | 65 | 54.1 |
| Poor | 40 | 33.3 |
| Very poor | - | - |

Regarding Table 1, the data compiled the background of the 120 AES who studied in different academic classes. The highest frequency showed that half the numbers of AES were third year students (50%), followed by first year students and second year students (25% in each class). The first year students were between 14 to 16 years old and the second year and third year were between 17 to 20 years old. They graduated with M 3 (secondary education) (85%), M 4 (7.5%), M 5 (4.2%), M 6 (1.7%), and others including vocational school (1.7%). Moreover, most of them have studied extra English (94.2%). The primary reasons for studying extra English was to pass the entrance exam (79.1%), then for understanding the lesson taught in school (16.6%), only 4.2 percent studied extra English for communication. The final part was a self-evaluation of their English competence and ability. The majority of them rate themselves as fair (54.1 %), poor (33.3%), and good (12.5%). No one considered themselves very good or very poor.

Table 2

**ATTS Teachers and Administrators Background Information
and English Teaching Experience Description**

| General Background | n=60 | Percent (%) |
|--|-------------|--------------------|
| Gender | | |
| male | 50 | 83.3 |
| female | 10 | 16.7 |
| Age | | |
| < 30 years | 7 | 11.6 |
| 31-35 years | 18 | 30.0 |
| 36-40 years | 16 | 26.6 |
| 41-45 years | 13 | 21.6 |
| 46-50 years | 13 | 21.6 |
| 51-60 years | - | - |
| Highest level of education | | |
| Certificate | - | - |
| Bachelor's degree | 48 | 80.0 |
| Master degree | 12 | 20.0 |
| Doctoral degree | - | - |
| Completed branch of ATTS | | |
| Aeronautical Engineering Branch (AEB) | 22 | 36.6 |
| General Branch (except AEB) | 20 | 33.4 |
| Others (college, university etc.) | 18 | 30.0 |
| Experience and length of time in extra English teacher training | | |
| Yes | 56 | 93.3 |
| Less than 3 months. | - | - |
| 3 months- 6 months. | 41 | 68.3 |
| 6 months – 1 year | 15 | 25.0 |
| More than 1 year | - | - |
| No | 4 | 6.70 |
| Length of time teaching and working at the ATTS | | |
| < 5 years | - | - |
| 6-10 years | 14 | 23.4 |
| 11-15 years | 36 | 60.0 |
| 16-20 years | 7 | 11.6 |
| 21-30 years | 3 | 5.00 |
| Experience and length of time in studying abroad | | |
| Yes | 34 | 56.7 |
| Less than 3 months. | - | - |
| 3 months - 6 months. | 14 | 23.4 |
| 6 months - 1 year | 17 | 28.3 |
| More than 1 year | 3 | 5.00 |
| No | 26 | 43.3 |

In table 2, male teachers and administrators outnumbered female by a ratio of 5:1. Thirty percent of the teachers were between 30 to 35 years old, 26.6 percent were 41 to 45 years old. They have completed different branches of study at ATTS and tertiary institutions. The teacher population consists of RTAF personnel who graduated with at least bachelor's degree (80%). Most of them have been trained in Instructor School at RTAF. Moreover, some of them have been trained in English language teacher training for different lengths of time (68%). Additionally, the highest frequency showed that they had approximately 11 to 15 years of working at ATTS, and 56.7 percent of them had studied abroad.

Findings of Part 2 of the Questionnaires

The Part 2 of the questionnaires intended to survey the subjects' opinions in using the English language in macro skills in three different circumstances (academic use, professional use, and daily life use). In this part, t-tests and an analysis of variance (ANOVA) were used to analyze the information gathered from the questionnaires, and the mean scores were compared to see whether there would be any statistically significant differences between the two groups of subjects. In addition, the mean indicated the tendency of needs in language skills and contexts of these subjects according to ranking means. The mean scores were also used to summarize the average level of agreement.

The criteria and mean score derived from the scale in the questionnaires were interpreted on the following ranges.

| scale | mean | level of agreement |
|-------|-------------|------------------------|
| 6 | 5.50 – 6.00 | very strongly agree |
| 5 | 4.50 - 5.49 | strongly agree |
| 4 | 3.50 – 4.49 | agree |
| 3 | 2.50 – 3.49 | disagree |
| 2 | 1.50 – 2.49 | strongly disagree |
| 1 | 1.00 – 1.49 | very strongly disagree |

Table 3

Mean Rating the Opinions towards the Necessity of English Language for the AES

| The necessity of English language for the AES | Mean | S.D. | T |
|---|------|------|-------|
| English for academic use | | | 1.01 |
| AES | 5.39 | .61 | |
| Teachers and Administrators | 5.30 | .56 | |
| Entire Population | 5.36 | .60 | |
| English for professional use | | | 1.63 |
| AES | 5.41 | .66 | |
| Teachers and Administrators | 5.31 | .53 | |
| Entire Population | 5.38 | .62 | |
| English for daily life use | | | -1.19 |
| AES | 5.17 | .68 | |
| Teachers and Administrators | 5.27 | .68 | |
| Entire Population | 5.21 | .68 | |

n = 180

S.D. = Standard deviation

As previously mentioned, this chapter presents only the findings, thus the discussion of the results are presented in the next chapter. In the overview (see Table 3), the results showed that English was essential for AES in all three circumstances. The subjects strongly agreed that English in the area of professional use and academic use are essential with the entire population's means of 5.38 and 5.36. English for daily life use was rated in about the same agreement with entire population mean of 5.21. There were no statistically significant differences between the means of these two groups of subjects.

Table 4

Mean Ratings of the Opinions towards Language in Macro Skills in Academic Use

| English for academic use | AES | | Tea. & Adm. | | Entire Pop. | | T |
|--------------------------|------|------|-------------|------|-------------|------|------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Listening | 5.43 | .73 | 5.23 | .76 | 5.36 | .74 | 1.70 |
| Speaking | 5.37 | .74 | 5.13 | .83 | 5.29 | .78 | 1.97 |
| Reading | 5.50 | .66 | 5.60 | .66 | 5.53 | .66 | -.95 |
| Writing | 5.27 | .88 | 5.23 | .91 | 5.26 | .89 | 0.29 |

n=180 S.D.= Standard deviation

In Table 4, the respondents' opinions towards the important of English language skills in academic use were reading, listening, speaking, and writing skills with the means of 5.53, 5.36, 5.29 and 5.26 respectively. In general, most subjects very strongly agree that reading was the required skill in academic use. They strongly agreed that listening, speaking and writing skills were also needed. The opinions of these two groups obviously were of no significant difference.

Table 5**Mean Ratings of the Opinions towards Language in Macro Skills in Professional Use**

| English for professional use | AES | | Tea. & Adm. | | Entire Pop. | | T |
|------------------------------|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Listening | 5.45 | .80 | 5.33 | .68 | 5.41 | .61 | 1.04 |
| Speaking | 5.38 | .81 | 5.06 | .75 | 5.27 | .80 | 2.52 |
| Reading | 5.61 | .66 | 5.73 | .51 | 5.65 | .61 | -1.19 |
| Writing | 5.21 | .94 | 4.90 | .91 | 5.11 | .94 | 2.14 |

n=180 S.D.= Standard deviation

The researcher found that the opinions towards the language needs in the professional use were in agreement as with the former case. Reading was rated by entire population at the level "very strongly agree" (mean=5.65). Then, listening, speaking and writing were rated at the level "strongly agree" with means of 5.41, 5.27 and 5.11 respectively (see Table 5).

Table 6**Mean Ratings of the Opinions towards Language in Macro Skills in Daily Life Use**

| English for daily life use | AES | | Tea. & Adm. | | Entire Pop. | | T |
|----------------------------|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Listening | 5.25 | .80 | 5.41 | .74 | 5.30 | .78 | -1.35 |
| Speaking | 5.17 | .90 | 5.21 | .80 | 5.18 | .87 | - .30 |
| Reading | 5.24 | .76 | 5.53 | .70 | 5.33 | .75 | -2.47 |
| Writing | 5.03 | .94 | 5.05 | 1.01 | 5.03 | .96 | -.11 |

n=180 S.D.= Standard deviation

In the area of English for daily-life use, the result showed that language skills in this circumstance were reading, listening, speaking, and writing skills (means=5.33, 5.30, 5.18, 5.03). The entire population rated that all four skills were strongly agreed to be taught for the AES in this circumstance as well. (see Table 6).

Table 7
Mean Ratings of the Opinions towards Language Needs in Listening Contexts

| Listening contexts should be focused on: | AES. | | Tea. & Adm. | | Entire Pop. | | T |
|--|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Technical terms | 5.71 | .61 | 5.83 | .45 | 5.75 | .56 | -1.31 |
| Aviation terms | 5.54 | .68 | 5.35 | .68 | 5.47 | .68 | 1.77 |
| Military terms | 5.08 | .97 | 4.78 | .80 | 4.98 | .93 | 2.06 |
| General vocabulary | 5.15 | .90 | 4.88 | .76 | 5.06 | .86 | 2.02 |
| Aircraft maintenance work orders | 5.55 | .67 | 5.76 | .46 | 5.62 | .61 | -2.24 |
| Military commands | 4.84 | .91 | 4.58 | .61 | 4.75 | .83 | 1.97 |
| Simple sentences | 5.00 | .92 | 5.03 | .68 | 5.01 | .84 | -.19 |
| Compound, complex sentences | 4.70 | 1.02 | 4.61 | .71 | 4.67 | .93 | .62 |
| Radios or tapes | 4.67 | .97 | 5.13 | .79 | 4.82 | .93 | -3.17 |
| Videos or movies | 4.65 | 1.04 | 4.98 | .81 | 4.76 | .98 | -2.10 |
| General conversations | 4.94 | .95 | 5.01 | .83 | 4.96 | .91 | -.52 |
| Lectures | 4.51 | .99 | 4.51 | .87 | 4.51 | .95 | .00 |
| Brief reports | 4.43 | 1.10 | 4.41 | .90 | 4.42 | 1.04 | .10 |
| Seminars | 4.42 | 1.16 | 4.28 | .86 | 4.37 | 1.07 | .83 |

n=180 S.D.= Standard deviation

Table 7 shows the needs in listening contexts. The subjects needed in listening to technical terms, aviation terms, general vocabulary and military terms. They also felt that

aircraft maintenance work orders (mean=5.71), military commands (mean=4.75), general conversation (mean=4.96), simple sentences (mean=5.01), compound and complex sentences (mean=4.67), lectures (mean=4.51) were needed for the AES. More over, the radios or tapes (mean=4.82), videos or movies (mean=4.76) were needed to be used as the listening material. Finally, they agreed in listening to brief reports and seminar with means of 4.43 and 4.42 respectively.

Table 8

**Mean Ratings of the Opinions towards Language Needs
in Speaking Contexts**

| Speaking contexts should be focused on: | AES | | Tea. & Adm. | | Entire Pop. | | T |
|---|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Technical terms | 5.54 | .77 | 5.63 | .63 | 5.57 | .73 | -.79 |
| Aviation terms | 5.47 | .75 | 5.16 | .76 | 5.37 | .76 | 2.57 |
| Military terms | 4.98 | .98 | 4.75 | .77 | 4.90 | .92 | 1.60 |
| General vocabulary | 5.13 | .89 | 4.96 | .75 | 5.07 | .85 | 1.23 |
| Aircraft maintenance work orders | 5.48 | .84 | 5.60 | .71 | 5.52 | .80 | -.92 |
| Military commands | 4.87 | .91 | 4.78 | .73 | 4.84 | .85 | .68 |
| Simple sentences | 4.96 | .96 | 5.03 | .71 | 4.98 | .89 | -.47 |
| Compound, complex sentences | 4.65 | 1.04 | 4.65 | .77 | 4.65 | .96 | .00 |
| General conversations | 4.55 | 1.02 | 4.45 | .72 | 4.50 | .96 | -2.02 |
| Brief reports | 4.60 | 1.01 | 4.91 | .84 | 4.71 | .97 | -.53 |
| Seminars | 4.72 | .92 | 4.80 | .81 | 4.75 | .88 | .28 |

n=180 S.D.= Standard deviation

In Table 8, the researcher found that in the speaking skill the subjects very strongly agreed that they needed to use technical terms (mean=5.57), and aircraft maintenance work orders (mean=5.52) when they speak. The speaking of aviation terms (mean=5.37),

general vocabulary (mean=5.07), simple sentences (mean=4.98), military terms (mean=4.90), military commands (mean=4.84), seminar (mean=4.75), brief reports (mean=4.71), and compound and complex sentences (mean=4.65), were rated at the level "strongly agree". Only one item the general conversation (mean=4.45) was rated at agree level.

Table 9
Mean Ratings of the Opinions towards Language Needs in Reading Contexts

| Reading contexts should be focused | AES | | Tea.&Adm. | | Entire Pop. | | T |
|------------------------------------|------|------|-----------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Technical terms | 5.64 | .68 | 5.81 | .46 | 5.70 | .62 | .56 |
| Maintenance manuals | 5.63 | .62 | 5.81 | .43 | 5.69 | .57 | -1.78 |
| Service manuals | 5.70 | .57 | 5.80 | .48 | 5.73 | .54 | -2.05 |
| Aircraft journals, magazines | 5.26 | .77 | 5.31 | .87 | 5.28 | .80 | -1.16 |
| Aviation journals, magazines | 5.23 | .80 | 5.06 | .88 | 5.17 | .83 | -.39 |
| Aviation terms | 5.43 | .86 | 5.16 | .84 | 5.34 | .86 | 1.27 |
| Military terms | 5.04 | .87 | 4.76 | .87 | 4.95 | .87 | 1.96 |
| General vocabulary | 5.20 | .94 | 4.91 | .88 | 5.10 | .93 | 1.99 |
| Aircraft maintenance work orders | 5.49 | .76 | 5.71 | .55 | 5.56 | .70 | 1.93 |
| Check lists | 5.35 | .74 | 5.63 | .66 | 5.44 | .72 | -2.02 |
| Work unit code manuals | 5.43 | .73 | 5.53 | .70 | 5.46 | .72 | -2.50 |
| Military documents | 4.99 | .93 | 5.00 | .92 | 4.99 | .92 | -.88 |
| Simple sentences | 4.90 | .96 | 4.95 | .85 | 4.92 | .92 | -.06 |
| Compound, complex sentences | 4.70 | 1.07 | 4.73 | .88 | 4.71 | 1.01 | -.28 |
| Reports | 4.73 | .98 | 4.70 | 1.00 | 4.72 | 1.00 | -.21 |
| Numbers, times | 4.94 | .99 | 5.28 | 1.01 | 5.05 | 1.01 | -2.16 |
| Time compliance technical orders | 5.34 | .78 | 5.40 | .94 | 5.36 | .83 | -.44 |

n=180 S.D.= Standard deviation

In Table 9, the AES very strongly agreed that reading context should cover the service manuals (mean=5.73), maintenance manuals (mean=5.69), and technical terms (mean=5.70). While teachers and administrators very strongly agreed that besides those three items, reading context should include aircraft maintenance work orders (mean=5.56), work unit code manuals (mean=5.46), and checklists (mean=5.44). Both groups of subjects were needed the rest items at the level "strongly agree". (time compliance technical orders (mean=5.36), aviation terms (mean=5.34), aircraft journals, magazines (mean=5.28), aviation journals, magazines (mean=5.17), general vocabulary (mean=5.10), numbers, times (mean=5.05), military documents (mean=4.99), military terms (mean=4.95) simple sentences (mean= 4.92), reports (mean=4.72), and compound, complex sentences (mean=4.71).

For writing contents (see Table 10), the subjects very strongly agreed to write technical terms with mean of 5.55. Then, they strongly agreed to write aircraft maintenance work orders (mean=5.44), aviation terms (mean=5.28), data input (mean=5.12), general vocabulary (mean=5.07), military terms (mean=4.99), simple sentences (4.92), military command (mean=4.84), general conversations (mean=4.84), short note (mean=4.76), brief report (mean=4.68), compound, complex sentences (mean=4.67), lectures (mean=4.55). Finally, they agreed that writing of seminars was needed with mean of 4.47. Most subjects positively rated all items. Therefore, all of items will be taken into the consideration of decision making about syllabus design.

Table 10

Mean Ratings of the Opinions towards Language Needs in Writing Contexts

| Writing contexts should be focused | AES | | Tea.& Adm. | | Entire Pop. | | T |
|------------------------------------|------|------|------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Technical terms | 5.50 | .68 | 5.65 | .65 | 5.55 | .67 | -1.40 |
| Aviation terms | 5.43 | .79 | 5.01 | .87 | 5.28 | .84 | 3.20 |
| Military terms | 5.12 | .94 | 4.73 | .88 | 4.99 | .94 | 2.67 |
| General vocabulary | 5.15 | .94 | 4.91 | .92 | 5.07 | .93 | 1.58 |
| Aircraft maintenance work orders | 5.41 | .77 | 5.50 | .77 | 5.44 | .77 | .68 |
| Military commands | 4.95 | .83 | 4.63 | .88 | 4.84 | .86 | 2.35 |
| Simple sentences | 4.99 | .89 | 4.80 | .87 | 4.92 | .89 | 1.36 |
| Compound, complex sentences | 4.71 | .99 | 4.60 | .92 | 4.67 | .97 | .76 |
| Short notes | 4.75 | .99 | 4.80 | .93 | 4.76 | .97 | -.32 |
| Data input | 5.07 | 1.02 | 5.21 | .80 | 5.12 | .95 | -.94 |
| General conversations | 4.92 | .94 | 4.68 | .89 | 4.84 | .93 | 1.65 |
| Lectures | 4.60 | 1.01 | 4.55 | .99 | 4.58 | 1.00 | .31 |
| Brief reports | 4.62 | .07 | 4.81 | .89 | 4.68 | 1.02 | -1.19 |
| Seminars | 4.50 | 1.10 | 4.41 | .99 | 4.47 | 1.06 | .49 |

n=180 S.D.= Standard deviation

Findings of the Part III of the Questionnaires

The Part 3 of questionnaires reveals information on the syllabus arrangement. The respondents' opinions towards the learning needs in English language including objectives, methodologies, activities, and evaluation.

In this part, an ANOVA was used to calculate the information gathered from the questionnaires, and the mean scores were compared to analyze whether there would be

any statistically significant difference between two groups of subjects. In addition, the means indicating the needs in language skills and contexts of these subjects were used to summarize the level of agreement.

The criteria and mean scores derived from the scale in questionnaires were interpreted as the same ranges as the part 2.

| scale | mean | level of agreement |
|-------|-------------|------------------------|
| 6 | 5.50 – 6.00 | very strongly agree |
| 5 | 4.50 - 5.49 | strongly agree |
| 4 | 3.50 – 4.49 | agree |
| 3 | 2.50 – 3.49 | disagree |
| 2 | 1.50 – 2.49 | strongly disagree |
| 1 | 1.00 – 1.49 | very strongly disagree |

Table 11

Mean Ratings of the Opinions towards Learning Needs and Administration through Objectives of AES

| The objectives should emphasize | AES | | Tea. & Adm. | | Entire Pop. | | T |
|---|-------|------|-------------|------|-------------|------|-------|
| | S.D. | Mean | Mean | S.D. | Mean | S.D. | |
| Professional use | 5.77 | .52 | 5.96 | .18 | 5.83 | .45 | -2.74 |
| Academic use | 5.31 | .82 | 5.55 | .62 | 5.39 | .77 | -1.92 |
| Use in daily life | 5.30. | .88 | 5.31 | .72 | 5.30 | .83 | -.13 |
| AES' communicative ability | 5.35 | .82 | 5.33 | .70 | 5.35 | .78 | .20 |
| AES' interaction between both teachers and themselves | 5.09 | .94 | 5.40 | .61 | 5.19 | .85 | -2.30 |
| Clearly learning objectives | 4.97 | .95 | 5.50 | .56 | 5.15 | .88 | -3.92 |

n=180

S.D.= Standard deviation

The AES very strongly agree that the objectives of English course should meet the objectives in using English in their profession (mean=5.83). Then, they strongly agree that the objectives in using English should emphasize academic use and then daily life use (mean=5.39 and mean=5.30). Moreover, the objectives in using English should focus on communicative ability, interaction between both teachers and themselves. Additionally, the course objectives should be presented clearly. For teachers and administrator, they had about the same agreement as the AES. They very strongly agreed that the objectives of English course should emphasize the English usage in the AES career. Moreover, they also needed to emphasize including English for academic usage. There were obviously positive agreements of these two groups of subjects on the needs in English for professional use (see Table 11).

Table 12

**Mean Rating the Learning Needs and Administration towards the Methodology
Used for the AES**

| Methodology used for AES | AES | | Tea.&Adm. | | Entire Pop. | | T |
|---|------|------|-----------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Teach everyday vocabulary, sentences, and grammar rules of English. | 5.49 | .72 | 4.93 | 1.08 | 5.30 | .89 | 4.10 |
| Read and translate to Thai. | 5.33 | .85 | 4.65 | 1.32 | 5.10 | 1.08 | 4.18 |
| Use the Thai language if necessary. | 4.38 | 1.40 | 3.81 | 1.39 | 4.19 | 1.42 | 2.56 |
| Teach spoken language in artificial situations. | 5.19 | .85 | 4.98 | .83 | 5.12 | .84 | 1.56 |
| Use only the English language. | 4.90 | 1.01 | 5.06 | .84 | 4.95 | .96 | -1.10 |
| New language points are taught and practiced in situation. | 5.18 | .95 | 4.91 | .69 | 5.09 | .88 | 1.93 |
| Grammar is taught from the simple to the complex. | 5.40 | .87 | 4.98 | .72 | 5.26 | .84 | 3.19 |
| Learners listen to the model dialog and repeat it. | 5.31 | .79 | 5.15 | .75 | 5.26 | .78 | 1.34 |
| Focus on pronunciation, intonation, and fluency. | 5.37 | .88 | 5.20 | .68 | 5.31 | .82 | 1.34 |
| Vocabulary, grammar, writing, and reading are taught based on the dialog. | 5.25 | .72 | 5.15 | .75 | 5.21 | .73 | .86 |
| Teach the learner how to use language appropriately. | 5.35 | .74 | 5.70 | .32 | 5.26 | .72 | .72 |
| Use communicative expression. | 5.28 | .76 | 5.48 | .56 | 5.35 | .71 | -1.79 |
| Focus on language function and situation. | 5.29 | .78 | 5.13 | .87 | 5.23 | .81 | 1.23 |
| Activities used are learner-centered. | 5.17 | .89 | 5.53 | .53 | 5.29 | .80 | -2.85 |

n=180

S.D.= Standard deviation

The results in Table 12 showed the needs of teaching approaches. The AES strongly agreed in teaching by teach everyday vocabulary, sentences, and grammar rules of English (mean=5.49). They needed to learn the grammar from the simple to the complex (mean=5.40). While, pronunciation, intonation, and fluency were also needed (mean=5.31). These items are in the field of the grammar translation and the audiolingual approaches.

For teachers and administrators teaching method in their opinions were focused on activities. They very strongly agreed to use learner-centered activities (mean=5.53). They needed the use of communicative expression (mean=5.48) and then the learner is taught how to use language appropriately (mean=5.26). The teaching English should focus on language functions (mean=5.13). They rated mostly items of the communicative approach at the level “very strongly agree” and “strongly agree”. They felt the teaching methods needed that will promote learners the communicative ability.

The researcher assumes that the different opinions may come from their experiences and education. The teachers and administrators viewed that the communicative approach is useful for AES. Further more, the traditional English course from secondary school might influence the AES opinions towards the teaching approaches. The AES were familiar with studying the rules of English. However, the subjects also needed vocabulary, grammar, writing and reading to be taught based on the dialog (mean=5.21). The spoken language is needed in artificial situations (mean=5.12). English is needed to be read and translated into Thai (mean=5.10), the new language points are taught and practiced in the situation (mean=5.09), and use only the English language in the

classroom (mean=4.95). While the use of Thai language for classroom instruction was also agreed to use with mean of 4.19.

Table 13

**Mean Rating the Learning Needs and Administration towards
the Language Use for Instruction for the AES**

| Language use for instruction | AES | | Tea. & Adm. | | Entire Pop. | | T |
|--------------------------------------|------|------|-------------|------|-------------|------|------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Only the English language | 4.51 | 1.18 | 4.38 | 1.23 | 4.47 | 1.20 | .70 |
| Mostly English and Thai as necessary | 5.14 | .95 | 4.93 | 1.45 | 5.07 | 1.14 | 1.15 |
| Use Thai more than English | 4.15 | 1.47 | 3.43 | 1.78 | 3.91 | 1.61 | 2.86 |

n=180

S.D.= Standard deviation

This section looks at the results of language use for instruction. The results noted that the subjects strongly agreed to use mostly English and Thai as necessary with mean of 5.07. They agreed to use of only the English language with mean of 4.47, and the use of Thai more than English with mean of 3.91(see Table 13).

Table 14

Mean Rating the Learning Needs and Administration towards the Activities for the AES

| Activities use for AES | AES | | Tea. & Adm. | | Entire Pop. | | T |
|---------------------------|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Individual activities | 3.96 | 1.51 | 4.30 | 1.30 | 4.07 | 1.4 | -1.46 |
| Pairs or group activities | 5.30 | .82 | 5.21 | .94 | 5.27 | .86 | .67 |
| Discussion | 5.15 | 1.03 | 5.43 | .78 | 5.25 | .96 | -1.81 |
| Role playing | 4.90 | 1.01 | 5.20 | .73 | 5.00 | .98 | -1.94 |
| Self study | 4.95 | 1.18 | 5.40 | .78 | 5.10 | 1.08 | -2.67 |

n=180 S.D.= Standard deviation

Table 15

Mean Rating the Learning Needs and Administration towards the Supplementary Activity and Material for the AES

| Supplementary activity and materials | AES | | Tea. & Adm. | | Entire Pop. | | T |
|--------------------------------------|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| English games | 4.80 | 1.12 | 5.31 | .59 | 4.97 | 1.00 | -3.27 |
| Practice in authentic situations | 5.17 | .96 | 5.33 | .85 | 5.22 | .93 | -1.07 |
| Outside study | 5.40 | .91 | 4.96 | .92 | 5.25 | .93 | 3.07 |
| Board displays | 4.86 | 1.08 | 5.30 | .69 | 5.01 | .99 | -2.82 |
| English exhibitions | 4.96 | 1.00 | 5.01 | .87 | 4.98 | .96 | -.33 |
| English journal | 4.85 | .99 | 4.86 | .81 | 4.85 | .93 | -.11 |
| English club | 4.73 | 1.07 | 4.98 | .77 | 4.81 | .98 | -1.35 |

n=180 S.D.= Standard deviation

In table 14 and 15, the entire population put almost all the items at the "strongly agree" level. Therefore, those items were positively rated to use as activities within the syllabus.

Table 16

Mean Rating the Learning Needs and Administration towards the Assessments for the AES

| Assessment | AES | | Tea. & Adm. | | Entire Pop. | | T |
|-----------------|------|------|-------------|------|-------------|------|-------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | |
| Exercises | 4.80 | 1.07 | 5.28 | .82 | 4.96 | 1.01 | -3.01 |
| Tests | 4.88 | 1.13 | 5.48 | .81 | 5.08 | 1.07 | -3.66 |
| Reports | 4.50 | 1.34 | 5.23 | .81 | 4.74 | 1.23 | -3.89 |
| Interviews | 4.59 | 1.38 | 5.16 | .80 | 4.78 | 1.25 | -2.97 |
| Group work | 4.77 | 1.12 | 5.16 | .71 | 4.90 | 1.02 | -2.45 |
| Presentations | 4.34 | 1.27 | 4.96 | .86 | 4.55 | 1.18 | -3.43 |
| Self-evaluation | 4.63 | 1.14 | 4.95 | 1.15 | 4.73 | 1.15 | -1.74 |
| Portfolio | 4.56 | 1.11 | 5.11 | 1.02 | 4.75 | 1.11 | -3.21 |

n=180

S.D.= Standard deviation

Table 17

Mean Rating the Learning Needs and Administration towards the Grading for the AES

| Grading | AES | | Tea. & Adm. | | Entire Pop. | | T | P |
|------------------------------------|------|------|-------------|------|-------------|------|-------|------|
| | Mean | S.D. | Mean | S.D. | Mean | S.D. | | |
| Only final test scores | 3.71 | 1.59 | 2.51 | 1.45 | 3.32 | 1.64 | 4.97 | .00* |
| Midterm test and final test scores | 4.68 | 1.22 | 4.28 | 1.26 | 4.55 | 1.25 | 2.04 | .04* |
| All methods are considered | 5.35 | .93 | 5.60 | .76 | 5.43 | .88 | -1.74 | .08 |

n=180

S.D.= Standard deviation

(* significance = P<.05)

As seen in Table 16 showed the opinions towards the assessment for AES. The subjects rated their needs of each assessment methods as follows: tests (mean=5.08), exercises (mean=4.96), group work (mean=4.90), interviews (mean=4.78), portfolio (mean=4.75), reports (mean=4.74), self-evaluation (mean=4.73), and presentations (mean=4.55). Thus, the AES assessment will use a variety of methods from Table 16.

Even though both groups of subjects needed to use all methods to assess the ability of learners. But there were statistically significant differences for grading. This is because the AES agreed to use only test scores as criteria for grading (mean=3.71). The researcher assumes that the AES were accustomed to instruments as tests which were given to them in secondary school therefore they provided opinions that tests were their preference (see Table 17). Teachers and administrators disagreed to use only test scores as criteria for grading (mean=2.51). They will consider from variety methods to give the AES grades. There were hard works in making decision about the assessment methods and grading. The discussion of this part presented in the next chapter.

CHAPTER V

DISCUSSION

Chapter V discusses the findings obtained from the preceding chapter. These data are useful for syllabus design in a technical English course for the AES that will be proposed to the Air Technical Training School (ATTS). Moreover, the research literature as well as the ATTS curriculum is also taken into the consideration for decision-making. Along with the discussion on the use of the data, the analysis of language needs and learning needs is presented in full.

Firstly, one hundred percent of the target population responded to the survey questionnaires (n=180). This could be explained because the situation is a military technical school, thus, these well-trained personnel are prepared to undertake any mission when asked. The researcher asked for permission to distribute the questionnaires to these personnel. Moreover, the researcher prepared the conference room for them to respond to the questionnaires. In other words, the researcher elicited everyone's cooperation.

Discussion of Finding One of the Study

As previously mentioned, the researcher adapted the syllabus design framework of Hutchinson and Waters for the AES syllabus design. Moreover, other well-known linguists' works were reviewed for their design. The works of these educators presented similar aspects and sequence for syllabus design. According to the

cumulative work of many educators, the researcher agreed that there are three main factors that affect the choice of syllabus and content in language teaching programs: program, teachers and administrators, and students. So, this discussion is focused on the Aeronautical Engineering Students (AES), teachers and administrators, and program.

Discussing Overall Background of the AES

Regarding Finding One on page 39, the AES was a group of students 14 to 20 years old. They graduated with at least M. 3 from public schools and a few hold certificates from vocational schools. They had studied in the public education system for three years (secondary education). In general, they have had English classes from their first year to their third year in secondary school. Further, most of them have studied extra English courses. They are considered bright enough to go on to the RTAF Technical School where they are trained to be RTAF technicians. Here they have to study both major technical subjects in the Aeronautical Engineering branch and English subjects. They are highly motivated in learning in this school because, after they graduate, they will obtain a life long job, an opportunity not available to everyone in Thailand.

As Widdowson (1987:2) explains, needs can refer to a student's study or job requirements, that is, what they have to do at the end of their course. This is called a "goals-definition" of needs, and it is easy to determine the goals the students themselves have for language study to match or fit the goals of the program. Therefore, the researcher will say that the goals of both the school and the students should be

considered. This definition of needs is still very general and not explicit for designing a syllabus, thus Findings Two and Three are helpful to the researcher.

Discussing Overall Background of the Teachers and Administrators

Next, the teacher and administrator population is also a significant factor in determining the success of a new syllabus. Yalden (1986) stated that the teachers are different in the first language and a foreign language setting. In a native language setting, teachers usually are native speakers or near native-speakers of the language, and can cope with various decision-making steps that deal with language use; on the other hand, in the foreign language setting, teachers are typically non-native speakers who may never have spent time in an English speaking country and therefore may find it much harder to make decisions of a native-like nature. The following factors need to be considered when evaluating the members of the teacher population: (a) the teacher's command of the target language (where it is not the native language), (b) the teacher's training, background, level of higher education, exposure to ideas concerning the nature of language and language learning, teaching experience, and (c) the teacher's attitude towards changes in the program (Yalden:1986).

The teacher and administrator population of the ATTS consists of RTAF personnel who graduated with at least a bachelor's degree. Most of them have been trained in the Instructor School of the RTAF. Moreover, some of them have participated in English language teacher training for different lengths of times. Additionally, they averaged approximately 11 to 15 years' experience working at ATTS. The teachers have enough



command of the English language because more than a half of them have studied abroad. They were trained to teach the English language while they were students in the university and they were also trained by the RTAF language center to teach in the military school, therefore, their English teaching experience is sufficient. Regarding attitudes, teachers and administrators were assigned to develop the English course. As the committee of syllabus design for the school, they have positive attitudes towards this change and each of them accept new strategies, new methodologies in teaching the English language, and the advancement of their professional competence. Cooperation was given as much as possible in order to complete the assignment of designing the syllabus of the English course.

In the area of the program, the AES English course will be held in the Air Technical Training School (ATTS) which is one of principle schools of the Royal Thai Air Force (RTAF). The school's curriculum was revised and changed in 1996. There is a very important difference in the incoming students. In previous years they had more years at school than they currently have. This is because the old curriculum required learners who graduated from Mattayom 6 of secondary school in the public school system (equivalent to grade 12 in the United States system), but the new curriculum accepts students who have finished Mattayom 3 (M.3) of secondary school in the public school system (equivalent to grade 8 in the United States system). The school curriculum focuses on goals for vocational purposes. This is because the AES will be trained in aviation and aircraft maintenance. They will be assigned to work for the RTAF as a technician. The school's aim is to train and teach English to students who will be technicians in the

RTAF. They have to do tasks involving high technology equipment and read technical English. Some of them may have to do special missions in which English communicative skills will be used. According to the goals and policy of the ATTS, specific decision making is to be made focusing on ESP settings.

Discussion of Finding Two of the Study

What kind of content is needed for AES?

This section discusses the above question. According to Finding Two on page 42, the researcher looked at the language needs of the AES. In overview, English was needed for AES in all three circumstances. Thus, the syllabus will provide the AES language contents not only professional use but may also have content for usage in academic and daily life. Even though academic use and daily life use were rated at the “strongly agree” level. It is not possible to teach a syllabus that explicitly encompasses all the circumstances suggested by the subjects of study in the limited time. In consequence, the researcher was involved in assessing needs. The researcher must decide which circumstances make sense to the AES syllabus. The researcher made decisions by using the results from the needs analysis, the specifications of program goals, and research literature as criteria. Therefore, not only the mean scores suggested that both groups of subjects very strongly agreed about the needs of language in professional usage, the school’s goals helped the researcher determine that English for professional use was needed for the AES and will meet the ATTS goals. However, these areas of language need for the AES may also overlap, both the usage of language in academic and in daily

life. For example, general conversation in daily life use can be linked to the specific authentic conversation in professional use.

Furthermore, both students and teachers rated the reading as the top mean scores, followed by listening, speaking, and writing. However, in comparing mean scores with the mentioned criteria, the teachers and administrators and the AES felt that reading skills were rated the highest (at the “very strongly agree” level). The other skills were rated at the “strongly agree” level. Therefore, all the four skills are needed to be taught in the AES syllabus. Thus, the development of proficiency will emphasize all four skills to be the content of the syllabus. These skills will be integrated, as students will use some combination of speaking, listening, reading, and writing in class. However, each of these skills will be chosen to emphasize proficiencies based on tasks given in the actual units of the syllabus. For example, to become proficient in the reading skill, the AES syllabus will be designed to include tasks or activities that provide the AES opportunities to learn technical terms and aviation terms frequently used in maintenance manuals.

In analyzing the language needs in listening skills, the subjects very strongly agree in putting listening to technical terms as a high priority. There were different mean scores in rating the importance of aircraft maintenance work orders between the AES, and teachers and administrators. This is perhaps because the AES rated listening to aircraft maintenance work orders the same as listening to aviation terms. However, the teachers rated the aviation terms lower than the aircraft maintenance work orders. Also, there were different mean scores for listening to radios or tapes, and videos or movies. This could be because the AES stated that listening to radios or tapes, and videos or movies are of the

same level of mean scores and they are lower than military commands. For teachers and administrators, listening to radios or tapes, and videos or movies were not rated equally. They rated listening to radios or tapes higher than listening to videos or movies, and both of these materials are lower than listening to military commands. The researcher assumed that teachers and administrators perceived the limitations of the school's resources and equipment. For this reason, they may have thought listening to radios and tapes was more feasible than listening to videos and movies. They will be included in the syllabus since the items are positively rated.

In looking at speaking contents, most of the subjects very strongly agreed on putting technical terms, aviation terms, general vocabulary, and aircraft maintenance work orders in the syllabus. However, there were different mean scores in rating for the speaking contexts of aviation terms and general conversation. The AES rated the aviation terms about the same as aircraft maintenance work orders, while teachers rated the aviation terms lower than aircraft maintenance work orders. This does not effect the contents for the syllabus because both of these items were rated at the "strongly agree" level. In addition, teachers and administrators rated general conversation lower than compound and complex sentences. The AES rated these two items as nearly the same. For syllabus design, compound and complex sentences can be taught and practiced in general conversations settings.

In developing a reading program for the AES, the researcher found that reading content and material selection were crucial considerations in the English course development. The subjects very strongly agreed that reading service manuals, technical

terms, maintenance manuals, aircraft maintenance work orders, work unit code manuals, and checklists were needed. They also needed to read time compliance technical orders, aviation terms, aircraft journals and magazines, aviation journals, general vocabulary, and numbers and times as well. Moreover, they positively rated the following items: military documents, military terms, simple sentences, reports, and compound and complex sentences. In looking at the mean score, the teachers and administrators rated the service manuals nearly the same as maintenance manuals and technical terms. The AES rated the maintenance manuals and technical terms lower than service manuals. For the work unit code manuals and checklists, the teachers and administrators rated checklists higher than work unit code manuals. The AES rated in them lower.

For writing content, the subjects rated they needed to write technical terms, aviation terms, general vocabulary, data input, and aircraft maintenance work orders highly. There were different mean scores rated by the AES and teachers and administrators for some items. However, most subjects positively rated all items. Therefore, most of the items are needed for the contents of the AES syllabus.

All categories in each skill context were suggested to be the AES syllabus contents; therefore, the researcher must determine which categories make sense to a specific skill. The researcher will organize the contents on the objectives of the syllabus mentioned in the following section. The categories of language content agreed upon by the subjects in this study will be the basis of the syllabus. These categories will emerge, link, and overlap each other, then will be compiled into a list of activities or tasks for actual units as themes.

Discussion of Finding Three of the Study

What are the objectives of the technical English syllabus?

The results of Finding Two as well as of Finding Three helped the researcher in making decisions about the objectives required for the syllabus. Thus, “What are the objectives of the technical English syllabus?” is a question that required answers. The entire population very strongly agreed that the objectives in using English for professional use was higher than the other areas of use. These agreements of objectives support the opinions towards the language needs of the subjects in the three circumstances: professional use, academic use, and daily life use.

The AES English course goals will emphasize English for professional use. Moreover, the subjects positively rated they need the objectives to focus on communicative ability. The objectives also provide interaction between both teachers and students.

In the area of language in the macro skill and contents within each skill, the subjects rated all items positively indicating the participants need all four skills. The contents will include all categories that can be related and make sense to each skill. Fortunately, the data from the subjects allowed the researcher to make choices for all categories. Moreover, the research literature and ATTS curriculum also provide the information to help the researcher set up the goals of the technical English course for the AES.

Following the need analysis, the program aims, as well as the research literature, the goals of the technical English course for the AES are as follows:

Goals of the AES Technical English Course

By the end of the course the AES will be able to:

- Read and understand service manuals, technical terms, maintenance manuals, and aircraft maintenance work orders.
- Read and understand work unit code manuals and checklists.
- Read and understand technical journals, documents in the professional area, and articles.
- Listen to oral technical terms, work orders and commands.
- Participate in career oriented conversations.
- Participate in general conversations related to the career topics.
- Do brief oral reports.
- Write technical data and input through the computer.
- Write brief messages.

Objectives of the AES Technical English Course

The goals of the course previously mentioned are too broad and general, thus the specific objectives of the syllabus are needed. The researcher set up the objectives for the syllabus as follows:

By the end of the course the AES will be able to:

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1. Follow the instructions on pre-flight inspections within a designated time based on the service manuals, maintenance manuals, aviation manuals, and checklists with 100 percent accuracy.
2. Follow the instructions on post-flight inspections within a designated time based on the service manuals, maintenance manuals, aviation manuals, and checklists with 100 percent accuracy.
3. Follow instructions for maintaining and repairing an aircraft within a designated time based on the service manuals, maintenance manuals, aviation manuals, and checklists with 100 percent accuracy.
4. Understand and follow jobs instructions based on aircraft maintenance works orders, work unit code manuals, time compliance technical orders within designated times at least 80 percent accuracy.
5. Read passages of an academic article within a designated time, then answer factual questions with 60 percent accuracy.
6. Read passages about technical journals within a designated time, then answer factual questions with 60 percent accuracy.
7. Read passages about documents in the professional area within a designated time, then answer factual questions with 60 percent accuracy.
8. Listen to oral work orders containing technical terms, then identify and answer oral questions about technical terms in written forms in the space given with 80 percent accuracy.

9. Listen to oral work orders containing aviation terms, then identify and answer an oral question about aviation terms in written form in the space given with 80 percent accuracy
10. Listen to command containing military terms, then identify and answer oral questions about technical terms in the written form in the space given with 80 percent accuracy.
11. Read technical terms and aviation terms given orally and give the definitions of the terms with 80 percent accuracy.
12. Converse with classmates about general topics (about time compliance technical orders, military operation, etc.) by using model dialogues with 60 percent accuracy.
13. Create and write dialogues using authentic situations (job orders, assigned missions) and do a role play with classmates speaking the dialogue created (without notes) with 60 percent accuracy.
14. Key data (from data given) into a computer with 100 percent accuracy.
15. Write brief reports following the job assignment forms with 80 percent accuracy.

Which methodology should be utilized in the syllabus?

In consideration of learning needs, the basic question, "Which methodology should be utilized in the syllabus?" is useful in looking for the various features that concern teaching methods. Teaching methods are very important within the English course. The researcher considered teaching methods as the definition of how the AES need to learn. The researcher broke down the teaching method characteristics into smaller components

to expedite the subjects rating them in the questionnaires. These characteristics of teaching methods were implied from the works of Brown (1991), and Richard and Rogers (1986). The researcher selected these characteristics from four approaches: grammar-translation, direct approach, audiolingual approach, and communicative approach.

According to the Table 12 on page 54, the subjects positively rated all teaching characteristics. The lowest mean score was 4.19. According to the criteria, it showed that all subjects put the items of teaching methods “agree”, “strongly agree”, and “very strongly agree” levels. Even though there were differences in some items mean scores, there were no statistically significant differences among the groups of subjects. According to the data, the subjects rated all items of teaching methods positively. Thus, the teaching methods suggested by all the subjects were all favorable.

However, the researcher will rely on the data rated by the teachers and administrators in this case. This is because teachers and administrators are assumed to know about teaching methods better than the AES. The mean scores rated by the teachers and administrators indicated that the subjects prefer to teach using characteristics of the communicative approach. This tendency can be used as criteria in determining teaching methods. Moreover, the language use for instruction is English, however they may use Thai if necessary, because both English and Thai was rated about the same.

The researcher, as syllabus designer, decided on the communicative approach as the backbone of the AES course. The rationale for this selection is based on the following factors: first, the data obtained from the study suggested that the subjects needed to communicate using English. Second, the goals of the program expect that the AES will

do tasks that require communicative competence. Third, the researcher's conception of the language obtained from the literature review accepts that the communicative approach will best meet the AES needs. Lastly, since the emphasis of the AES course is on professional use, that the AES will do authentic tasks in their careers as a communicative activity or task-based activity. Therefore, the teaching methodology for the AES syllabus will be based on the communicative approach. For example, deciding on how to sequence instruction based on the aircraft maintenance manuals, the AES will do activities that require them to read instructions given, then talk about what should be done first. This kind of task relates to their job or life-skill for doing preflight inspections.

What are the factors related to the design of an English course ?

An English program designer must consider the language needs and learning needs which influence the goals and objectives. Materials are important in the program and should include a systematic description of the techniques and exercises used in classroom teaching. The AES, teachers, and administrators had the same preferences in the area of materials. They put realia, computer multimedia and textbooks at the highest level for instructional materials. However, the subjects also need to use English games, exhibitions board displays and English club activities for supplementary activities. Additionally, they occasionally need to use newspapers, journals, pictures, transparencies, slides, and filmstrips.

The needs assessment showed that the materials to be used are realia, computers, and textbooks. These results were too general and not adequate for creating actual materials for the course. Hutchinson and Waters (1987) suggest that ESP materials design should define objectives that will guide materials writers in the actual writing of materials. They also provided a material design model that consists of four elements: input, contents focus, language focus, and tasks. Nunan (1988) suggests two general principles of organizing materials and activities; 1) building and 2) recycling. The literature should be reviewed and used as a frame work for developing materials. This study did not intend to develop and evaluate materials; thus, the materials design needs further study.

The assessment and grading are also crucial parts of the course. The researcher found the AES as well as teachers and administrators rated using tests very highly. This is perhaps because they were used to paper and pencil tests. Other methods of assessment were highly rated as well. All types of assessment methods in the survey were rated positively. However, there was a statistically significant difference for grading between the two groups of subjects. The AES agreed to use only final test scores for grading while teachers and administrators disagreed. Assessment is based upon the relationship of teaching methods, materials, and expected outcomes. Thus, we need to determine what kinds of assessment methods can optimally measure our goals and objectives. Therefore, it is necessary to make decisions in choosing particular assessment methods or instruments. There were difficulties in the decision making about the assessment methods. In consequence, evaluating assessment instruments and procedures is necessary.

As suggested by D. Progosh, et al, (2000:11), there are five stages contained in questions to help assessment users to consider the criteria for choosing assessment procedures/instruments. Concerning the assessment issue the researcher can take the advantage of these five stages and the data gathered from this study for making decision.

The technical English course requires some assessment of the AES progress. In assessing learners, it is important to distinguish between teaching and testing. Thus, testing is done after students have received input and practice. Course goals are task-related or task-oriented; thus, tests should be also. Just paper and pencil tests may not best assess the AES progress. Therefore, the researcher suggests achievement measures by designing tasks that reflect the performance and skills the AES have learnt and developed. For example, a course objective states that at the end of the course the AES can do a preflight inspection by following the instructions within predetermined time limitations based on the service manuals, and with 100 percent accuracy. This could be assessed by having the AES select the number of pre-flight inspection tasks given in written form then, put them in order from first to final steps. The objectives also provided the criteria of 100 percent accuracy. So, students must put the tasks given in order without mistakes.

According to the subjects' opinions toward assessment, they also rated other methods of assessment positively. In consequence, performance-based assessment should be done by reviewing the tasks students have completed or by asking for feedback that shows the achievement of the objectives. Furthermore, authentic situational role-playing

can demonstrate the AES knowledge and skills in using appropriate English to respond to their colleagues.

How should the syllabus be comprised and developed to achieve the goals and objectives of the curriculum?

A technical English course for the AES can be designed from the results of this study. The course uses all findings gathered from the needs analysis and then proceeds to set up the goals of the course. The goals were established using the data from the needs analysis. The AES English course goals will emphasize English for professional use. Moreover, the subjects positively rated they need the goals to focus on communicative ability. The objectives also provide interaction between both teachers and themselves as well as clearly present. These goals are closely linked to the characteristics of the activity/task-based syllabus. Krahnke (1981;1982), Candlin and Murphy (1986), and Johnson (1982), list the characteristics of the Tasked-Based Syllabus as follows:

- Use activities that the learners have to do for their purposes outside of the classroom as opportunities for language learning
- A way of bringing the real world into the classroom
- Similar to situational learning, but content of situations is provided by the students themselves (needs analysis)
- Involve informational content that the learners do not have at the beginning of the task

- Require the student to apply cognitive processes of evaluation, selection, combination, modification, or supplementation to a combination of new and old information
- Communicative strategies are required through the need for understanding during the interaction, and required to accomplish the tasks.

Apart from the goals of the course, the researcher established activity/task-based syllabus as the primary syllabus. The selected syllabus is also supported by the acquisition theory of Krashen (1982), that is, the ability to use a language is gained through exposure to and participation in using it (tasks and experiences). In consequence, this syllabus will be organized around tasks or activities, rather than in terms of grammar. However, grammar will be taught communicatively. The AES are expected to carry out a variety of different kinds of tasks in the target language, for example, following the instructions in service manuals, and maintenance manuals. Moreover, they are also expected to use English for communication in authentic situations.

The presentations provided by the syllabus will furnish the AES with focused progressive practice in the areas of reading, listening, speaking, and writing. Task-based reading activities will develop important reading strategies such as reading for specific information, focusing on reading for professional documents, for gist, and using context to guess the meaning of words in order to complete the task assigned. These reading activities will support the students in doing task-based activities. Task-based activities will provide the AES with opportunities to apply the technical knowledge and also develop important listening and speaking skills. The communicative and task-based

activities in the syllabus will make the AES think and talk about old and new language points while also preparing them for a short reading on the other activities. The syllabus will encourage the AES to internalize the new language points. The culminating activities including grammatical exercises in each lesson can also serve as a departure point for writing activities.

In the area of vocabulary, the syllabus will present high frequency technical terms, military-oriented terminology, and general terms useful to the target population. Two categories of vocabulary will be available. First, the objective vocabulary and the technical terms are the vocabulary the AES will use for reading activities and be required to produce and respond to in class and in their authentic situations. These terms will be tested on quizzes. The other component is the general or recognition vocabulary. The AES will need to be able to recognize, produce, and respond to these terms in class. These terms may be found on the quizzes, but they will not be specifically tested.

Organization of contents and activities in syllabus

In looking at specific considerations in sequencing contents and activities of the syllabus, the researcher decided to use two general principles of sequencing; building and recycling. Building sequencing arranges the contents/activities from the simple to the complex, from more closed to more open-ended. For example, Unit One prepares the AES for Unit Two. The AES will study the theories of aerodynamics and they will know how airplanes and helicopters fly in Unit One. After that they will learn the properties of airplanes and helicopters in Unit Two. The building blocks put the contents and activities

in a relationship where one activity feeds into another. The second activity could not be performed unless the first have already been completed. For instance, before the AES do the activity called "fixing an airplane" they must be familiar with job orders. In a reading passage, the AES have to read and understand the technical terms or aviation terms that will occur in the reading passage before actually reading the passage.

The cycling blocks means that the AES encounter previous content or activities in new ways or new skill areas and in more complex activities. For example, the military document forms in Unit Seven are presented in reading activities, then these reading passages will formed the basis of writing activities in Unit Eight. The AES will use military document forms in Unit Seven in their writing activities.

According to all these factors, the researcher decided that the required syllabus would focus on activity/task-based syllabus of technical English for the AES. The syllabus is derived from a detailed analysis of the language features of the target situation. In the beginning, the general syllabus outlining the theme areas and the communicative tasks of the target situation will be presented. Therefore, the researcher will propose the AES course overall plans and syllabus outline. The proposed syllabus is presented in full in the following section.

THE OVERALL PLAN OF THE AERONAUTICAL ENGINEERING STUDENTS TECHNICAL ENGLISH COURSE

INSTITUTION INFORMATION

| | |
|--|--|
| Institute | The technical English course for AES will be held in the Air Technical Training school, Directorate of Education, Educational Command, Royal Thai Air Force, Bangkok, Thailand. |
| Institution Goal | The school's aim is to train and teach English to students who will be technicians in the RTAF and have to do tasks involving high technology equipment or technical reading English and special missions in which English communicative skill is used. |
| Teachers and Administrators | <ul style="list-style-type: none"> ➤ All graduated with at least a bachelor's degree ➤ Some trained in Instructor School of RTAF ➤ Some trained in English language teacher training institute ➤ All have sufficient command of the English language ➤ All have sufficient experience in English teaching |
| Equipment and Facility availability | <ul style="list-style-type: none"> ➤ Realia: vocational manuals, airplane engines, work order form, tools, etc. ➤ Computers, multimedia, textbooks. ➤ 4 Laboratories with audio and video tapes, audio visual aids, and projector. ➤ Visual aids: picture, maps, charts, diagrams, etc. ➤ Library |

LEARNER INFORMATION

| | |
|-------------------------------|---|
| Age | 14-20 years |
| Nationality | Thai |
| Outcome Occupation | Aeronautical Engineering Technicians |
| Educational background | <ul style="list-style-type: none"> ➤ Mattayom 3 from public schools (almost all) ➤ Certificates from vocational schools (some) ➤ Have studied English in secondary school (all) ➤ Have studied extra English courses (some) ➤ Have been considered qualified to go on to the RTAF Technical School (all) |

SYLLABUS OUTLINE

| | |
|-----------------------------|--|
| Length of the course | Course length is 54 hours and lasts for 18 weeks with 3 periods a week |
| Time | Rely on the school schedule |
| Teaching Methodology | <ul style="list-style-type: none"> • Use communicative approach. • Focus on how to use language appropriately. • Focus on how to use language functions in situation. • Focus on fluency as well as how to use pronunciation and intonation. • Use learner-centered activities. • Teach vocabulary, sentences, and grammar rules of English communicatively. • Teach spoken language in situations. • Teach and practice new language points in situation. • Use the English language and some Thai if necessary. |
| Activities | <ul style="list-style-type: none"> • Individual activities • Pairs or group activities • Role playing • Information gap • Discussion • Self study |
| Materials | <ul style="list-style-type: none"> • Realia: vocational manuals, airplane engines, work order form, tools etc. • Task-Based materials • Computer multimedia • Textbooks |
| Assessments | <ul style="list-style-type: none"> • Multi-dimensional assessment • Performance-Based test • Reviewing the tasks by asking for feedback • Observation from activities performed |

A TECHNICAL ENGLISH SYLLABUS

| | |
|----------------------------|---|
| Unit One | Theme |
| | Aerodynamics |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Read and comprehend paragraphs about aviation documents journals, articles, and magazines. 2. Explain the aerodynamics of flight. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read technical and aviation terms and defines them. 2. Discuss aviation and the aerodynamics of flight. 3. Listen to paragraphs then answer questions. 4. Practice and create dialogs which describe how airplanes and helicopters fly (role-play). 5. Fill in the blanks with words given to classify principles of aerodynamics (information gap). |

| | |
|----------------------------|---|
| Unit Two | Theme |
| | Airplane and Helicopter |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Read paragraphs about aircraft, technical journals documents, articles, and magazines. 2. Explain the parts and instruments used for airplanes and helicopters. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read technical and aviation terms and define them. 2. Discuss about the properties of airplanes and helicopters. 3. Listen to paragraphs then selects the answer. 4. Say the dialogs created by the AES focus on airplanes and helicopters. 5. Write the definitions and describe airplanes and helicopters. |

| | |
|----------------------------|--|
| Unit Three | Theme |
| | Dealing with a Checklist |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Understand and follow job instruction based on checklists. 2. Sequence job priorities in checklists. |
| Contents/Activities | <ol style="list-style-type: none"> 1 Read general vocabulary in checklists and define them. 2 Read paragraphs in service manuals and then answers questions by write on the blank lines. 3 Read and sequence the job priorities given in boxes. 4 Practice and create dialogs which focus on checklists. 5 Write sentences with words given in boxes. |

| | |
|----------------------------|---|
| Unit Four | Theme |
| | Receiving Job Orders |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Understand and follow job orders. 2. Explain and list the instructions on job orders. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read technical and aviation terms and define them. 2. Read the job orders and classify by sequencing the numbers given. 3. Follow the instructions after hearing them. 4. Act out each instruction after saying it. 5. Write paragraphs about the job orders with words given. |

| | |
|----------------------------|--|
| Unit Five | Theme |
| Objectives | <p style="text-align: center;">Doing Pre-flight/Post-flight Inspections</p> <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Read paragraphs about the aircraft maintenance manuals or service manuals focus on preflight/post flight inspections. 2. Follow the instructions on preflight/post flight inspections. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read technical and aviation terms and define them. 2. Discuss and identify preflight/post flight inspections. 3. Read paragraphs in service manuals about preflight/post flight instructions and answer the questions by filling in the boxes. 4. Doing preflight/post flight inspections by sequencing tasks given in reading cards. 5. Listen to tasks and complete the information gaps. 6. Create dialogs about doing preflight/post flight inspections. |

| | |
|----------------------------|--|
| Unit Six | Theme |
| | Fixing an Airplane |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Read paragraphs about service and repair tasks from job orders and checklists. 2. Follow instructions for maintaining and repairing aircraft. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read technical and aviation terms and define them. 2. Describe services, repairs needed and write the definitions on the lines given. 3. Read and discuss paragraphs about aircraft, maintenance manuals or service manuals focused on warning, advice and safety rules. 3. Solving problem tasks by matching the solutions with problems given in reading cards. 4. Listen to problems and select the information that is heard. 5. Act as work order controller and ask classmates to do tasks. 6. Write the job performed with words given in boxes. |

| | |
|----------------------------|--|
| Unit Seven | Theme |
| | Reporting a Job Done |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Understand and use codes and classifications for the jobs. 2. Classify types and level of maintenance. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read military, technical, and aviation terms and define them. 2. Read and discuss military document forms. 3. Read the job reports and select the true statements. 4. Read / Listen to the military and aviation codes, military and aviation document. 5. Report the job performed orally. 6. Write short note about job reports with simple sentences. |

| | |
|----------------------------|--|
| Unit Eight | Theme |
| | Recording Data |
| Objectives | <p>The AES will be able to:</p> <ol style="list-style-type: none"> 1. Express quantities, shapes, measurements, and dimensions applied to aviation and military operations. 2. Write the reported data and input them into the computer. |
| Contents/Activities | <ol style="list-style-type: none"> 1. Read military, technical, and aviation terms and define them. 2. Read military document forms and discuss them. 3. Read paragraphs and express the quantities, shapes, measurements, and dimensions. 3. Create dialogs about shapes, quantities, measurements, and dimensions. 4. Write short notes using the data given with simple sentences. 5. Write paragraphs using the data given with simple sentences, compound and complex sentences. 6. Write data and input them into the computer. |

CHAPTER VI

CONCLUSION

This study was conducted in order to meet the requirements for an English course for the Aeronautical Engineering Students (AES) of the Air Technical Training School (ATTS). The ATTS needs a syllabus that meets the changes of the school curriculum. In order to survey the participants' opinions, questionnaires were used as a major tool of investigation as well as the research literature. The questionnaires were conducted and revised with the guidance of the researcher's advisors and members of the school such as teachers, students and the commandant. The questionnaires were divided into three parts. The first part asked the personal data of the respondents that involved the sex, age, education, and experience. The second part was designed to investigate the language needs of the AES. The last part was designed to find out the learning needs. This part concerned the objectives, methodology, activity, material, and assessment that could be put in a syllabus. The research tool was tried out and improved until it was reliable. Then, it was distributed to the research population that consisted of 120 AES and 60 teachers and administrators. In total there were 180 subjects. The quantifiable data obtained through the survey were analyzed by using the Statistical Package for Social Sciences.

This study explored the aspects that influence an English course for AES; thus, the study needed answers for the following questions:

First, what kind of content is needed for AES? The participants voiced positive opinions towards English language for the AES in professional use. They also needed all four skills (listening, speaking, reading, and writing). The researcher used mean scores, a literature review, and ATTS goals as criteria for decision making. All categories in each skill indicated inclusion in the AES syllabus. Therefore, the researcher determined which categories made sense to a specific skill. The researcher organized the contents relying on the objectives of the syllabus. The categories of language content suggested by the subjects in this study formed the contents of the syllabus. These categories were compiled into a list of activities and tasks for actual units as themes. The contents and activities were sequenced based on the building and recycling blocks of materials.

Second, what are the objectives of the AES syllabus? According to the language and learning needs assessment, the school curriculum aims, as well as the research literature, the researcher set the goals and objectives of the technical English course based on English for professional use. The AES English course goals and objectives emphasize English for professional use. Moreover, the objectives of the course focused on communicative ability and also provided interaction and clarity of presentation.

Third, which methodology should be utilized in the syllabus? All items for teaching methods were favorable for the subjects. The data obtained from the participants, the researcher's conception of the language obtained from the literature, and the goals of

the program were taken into consideration. As a consequence, the teaching methodology for AES syllabus is based on the communicative approach.

Fourth, what are the factors related to the syllabus of an AES English course? The materials were important in the study. They included a systematic description of the techniques and exercises used in classroom teaching. The AES and teachers and administrators had the same preferences in the area of materials. They needed realia, computer multimedia, and textbooks. The results in this study were too general and not adequate for creating actual materials for the course. Moreover, this study did not evaluate materials. Thus, the materials development is recommended for further study.

The assessment of the AES progress was also related to the technical English course. Course goals and objectives were task-related or task-oriented; thus, tests should be also. Only paper and pencil tests may not best assess the AES progress. Therefore, tasks that reflect the performance and skills the AES have learnt and developed are needed. Performance-based assessment is a kind of assessment method suggested for use. Furthermore, authentic situational role-playing that demonstrates the AES' knowledge and skills in using appropriate English to respond to their colleagues is used as well.

Last, how should the syllabus be comprised and developed to achieve the goals of the curriculum? The researcher proposed a syllabus called "activity/task-based syllabus" to be held in the ATTS as a primary syllabus. This is because the AES English course goals emphasized English for professional use. Moreover, the goals also focused on communicative ability. These goals were closely linked to the characteristics of the activity/task-based syllabus.

The syllabus is organized around tasks or activities, rather than in terms of grammar. The sequence of the contents and activities of the syllabus are based on building and recycling blocks. The contents and activities used focused on in the areas of reading, listening, speaking, and writing. Task-based activities provide the AES with opportunities to develop the four skills using their technical knowledge. The communicative task-based activities in the syllabus make the AES think and talk about old and new language aspects. The culminating activities including grammatical exercises in each lesson can also serve as a departure point for writing activities.

Recommendations

The aim of this study was to investigate the needs of the AES, teachers and administrators for the purpose of making decision about a syllabus design. The technical English syllabus was discussed and will be proposed for use by the ATTS. However, an evaluation of the materials accompanying the syllabus was not included in this study. Therefore, the materials used in the course should be piloted using the proposed syllabus derived from this study. The results should serve as the basis for the construction of materials. Hutchinson and Waters (1987) suggest that ESP materials design should define objectives that will guide materials writers in selecting texts that will motivate the students because they reflect the kinds of tasks the students need to be able to perform in the target language. However, the materials can be adopted and adapted from authentic sources. The adoption and adaptation process will take advantage of the results of this study as well.

A further study is also needed for learner assessment. This is because assessment is based upon the relationship of teaching methods, materials, and expected outcomes. Thus, we need to determine what kinds of assessment methods can optimally measure student achievement. Therefore, it is necessary to make decisions in choosing a particular assessment method or instruments. There were difficulties in choosing the assessment method. In consequence, evaluating assessment methods is necessary. The process of evaluating assessment methods can take advantage of data gathered from this study for making decisions.

It would be valuable to do a follow-up survey of the AES and the other participants' opinions towards the evaluation of the syllabus. This was not included in this study because it is in the development stage. In order to investigate the results of the syllabus, a further study should focus on the syllabus evaluation. A follow-up study should investigate the syllabus in terms of language content and skills in order to evaluate whether the designed syllabus really fulfils the goals and objectives as well as the AES' needs identified in this study.



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APPENDIX A

RESEARCH INSTRUMENTS

Questionnaire on

A Survey of English language needs and learning needs for a syllabus design of Aeronautical Engineering Students (AES)

This questionnaire aims to survey the English language needs and English language learning needs of administrators, teachers and AES. The analysis of this questionnaire will be effected by the respondent's answers. The findings of the survey will be utilized for establishing an English syllabus for AES. The questionnaire is organized based on the purposes of the study and the method of analysis and interpretation. The questions used in the questionnaire are both closed and open-ended. Question items will be given to the respondents to rate using a six-point Likert scale. In addition, the other suggestions can be fill in the blanks.

Introduction

The questionnaire is divided into 3 parts

Part 1: General Background of Respondents.

Part 2: Opinion toward the English Language Needs of AES.

Part 3: Opinion toward the English Language Learning Needs

and Administration of AES.

PART 1: General Background (personal data of AES)

Instructions: Please put a tick (✓) in the box (☐) or fill in the blanks.

1. Personal data

1.1 Academic year

- first year
- second year
- third year

1.2 Age

- 14 - 17 years
- 18 - 20 years

1.3 Highest level of education

- Mattayom 3
- Mattayom 4
- Mattayom 5
- Mattayom 6
- Vocational certificate
- Others.....

1.4 Experience and length of time in extra English study.

- Yes
 - Less than 3 months.
 - 3 months- 6 months.
 - 6 months – 1 year
 - More than 1 year

No

1.5 Reasons for extra English study.

- To understand the lesson taught in school
- To pass the entrance exam
- To study abroad
- To communicate in English
- Others

1.6 Ability in English

- Very good
- Good
- Fair
- Poor
- Very poor

PART 1: General Background (personal data of administrators and teachers)

Instructions: Please put a tick (✓) in the box (☐) or fill in the blanks.

1. Personal data

1.1 Gender

- Male Female

1.2 Age

- < 30 years 31-35 years
 36-40 years 41-45 years
 46-50 years 51-60 years

1.3. Highest education

- Certificate
 Bachelor's degree
 Master degree
 Doctoral degree
 Others.....

1.4 Completed branch of ATTS

- Aeronautical Engineering Branch (AEB)
 General Branch (except AEB)
 Others (college, university etc.)

1.5 Experience and length of time in extra English language teacher training

- Yes
 Less than 3 months.
 3 months- 6 months.
 6 months – 1 year
 More than 1 year

No

1.6 Length of time teaching and working at the ATTS

- < 5 years
 6-10 years
 11-15 years
 16-20 years
 21-30 years

1.7 Experience and length of time in studying abroad

- Yes
 Less than 3 months.
 3 months - 6 months.
 6 months - 1 year
 More than 1 year

No

PART 2: Opinion toward the English language needs of AES

Instruction: Please read each item carefully and put a (✓) tick in the box (□) which meets your needs and express your opinion of English language use in AES. You can also fill in the blanks for other specifications.

Language needs

| 2. English is necessary for AES in | very strongly agree ←→ very strongly disagree |
|---|---|
| 2.1 Academic use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 2.2 Professional use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 2.3 Daily life use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 3. The skills most necessary for academic use: | very strongly agree ←→ very strongly disagree |
|---|---|
| 3.1 Listening | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.2 Speaking | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.3 Reading | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.4 Writing . | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 4. The skills most necessary for professional use: | very strongly agree ←→ very strongly disagree |
|---|---|
| 4.1 Listening | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.2 Speaking | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.3 Reading | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.4 Writing . | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 5. The skills most necessary for daily life use: | very strongly agree ← → very strongly disagree |
|---|---|
| 5.1 Listening | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.2 Speaking | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.3 Reading | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.4 Writing . | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 6. Listening should be focused on in the following contexts: | very strongly agree ← → very strongly disagree |
|--|---|
| 6.1 Technical terms concerning aerodynamics, aircraft, helicopters, aircraft engines, electronics, and aircraft maintenance: | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.2 Aviation terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.3 Military terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.4 General vocabulary | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.5 Aircraft maintenance work orders | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.6 Military commands | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.7 Simple sentences | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.8 Compound, complex sentences | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.9 Radios or tapes | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.10 Videos or movies | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.11 General conversations | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.12 Lectures | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.13 Brief reports | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.14 Seminars | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 6.15 Others (please suggest) | |

| 7. Speaking should be focused on in the following contexts: | very strongly agree ← → very strongly disagree |
|--|---|
| 7.1 Technical terms concerning aerodynamics, aircraft, helicopters, aircraft engines, electronics, and aircraft maintenance. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.2 Aviation terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.3 Military terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.4 General vocabulary | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.5 Aircraft maintenance work orders | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.6 Military commands | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.7 Simple sentences | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.8 Compound, complex sentences | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.9 General conversations | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.10 Brief reports | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.11 Seminars | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.12 Others (please suggest) | |

| 8. Reading should be focused on in the following contexts: | very strongly agree ← → very strongly disagree |
|--|---|
| 8.1 Technical terms concerning aerodynamics, aircraft, helicopters, aircraft engines, electronics, and aircraft maintenance. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.2 Maintenance manuals | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.3 Service manuals | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.4 Aircraft journals, magazines | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.5 Aviation journals, magazines | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.6 Aviation terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.7 Military terms | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.8 General vocabulary | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| | | | | | | |
|--------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 8.9 Aircraft maintenance work orders | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.10 Check lists | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.11 Work unit code manual | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.12 Military Document | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.13 Simple sentences | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.14 Compound, complex sentences | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.15 Report | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.16 Numbers, times | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.17 Time compliance technical order | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 8.18 Others (please suggest) | | | | | | |
| | | | | | | |

| 9. Writing should be focused on in the following contexts: | very strongly agree ← → very strongly disagree | | | | | |
|--|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 9.1 Technical terms concerning aerodynamics, aircraft, helicopters, aircraft engines, electronics, and aircraft maintenance. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.2 Aviation terms | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.3 Military terms | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.4 General vocabulary | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.5 Aircraft maintenance work orders | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.6 Military commands | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.7 Simple sentences | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.8 Compound, complex sentences | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.9 Shot note | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.10 Data input | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.11 General conversations | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.12 Lectures | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.13 Brief reports | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 9.14 Seminars | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |

| |
|--|
| <p>9.15 Others (please suggest)</p> <p>.....</p> <p>.....</p> |
|--|

Part 3: Opinion toward the English learning needs and administration of AES

Instruction: Please read each item carefully and put a tick (√) in the box (□) which meets your needs and express your opinions of English learning needs and administration in AES. You can also fill in the blanks for other recommendations.

Learning needs and administration

| 10. The objectives of the English course should emphasize: | very strongly agree ← → very strongly disagree |
|--|---|
| 10.1 Professional use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.2 Academic use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.3 Daily life use | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.4 AES' communicative ability | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.5 AES' interaction between both teachers and themselves | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.6 Clearly learning objectives | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.7 Others (please recommend)... | |
| | |

| 11. The methodology used for AES should be: | very strongly agree ← → very strongly disagree |
|--|---|
| 11.1 Teach everyday vocabulary, sentences, and grammar rules of English. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.2 Read and translate to Thai. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.3 Use the Thai language for classroom instruction. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.4 Teach spoken language in artificial situations. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 11.5 Use only the English language in the classroom. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.6 New language points are taught and practiced in situations. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.7 Grammar is taught from the simple to the complex. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.8 Learners listen to the model dialog and repeat it. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.9 Focus on pronunciation, intonation, and fluency. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.10 Vocabulary, grammar, writing and reading are taught based on the dialog. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.11 Teach the learner how to use language appropriately. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.12 Use communicative expression in dialog. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.13 Focus on language functions and situations. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.14 Activities used are learner-centered. | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 11.15 Others (please suggest) | | | | | | |
| | | | | | | |

| 12. The language use for instruction should be | very strongly agree ←→ very strongly disagree |
|--|---|
| 12.1 Only the English language. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.2 Mostly English and Thai as necessary. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.3 Use Thai more than English. | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.4 Others (Please recommend) | |
| | |

| 13. Activities use for teaching and learning: | very strongly agree ←→ very strongly disagree |
|---|---|
| 13.1 Individual activities | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.2 Pairs or group activities | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.3 Discussion | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.4 Role playing | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.5 Self study | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

13.6 Others (Please recommend)

| 14. Supplementary activities and materials | very strongly agree ← → very strongly disagree |
|---|---|
| 14.1 English games | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.2 Practice in authentic situations | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.3 Outside study | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.4 Board displays | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.5 English exhibitions | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.6 English journal | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.7 English club | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.8 Others (Please recommend) | |

| 15. Material should be based on: | very strongly agree ← → very strongly disagree |
|--|---|
| 15.1 Students' books | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.2 Realia | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.3 Newspaper, journal | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.4 Pictures, transparencies, slides, film strips | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.5 Animation, movies, videos | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.6 Tapes, audio media | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.7 Computer multimedia | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.8 Others (Please recommend) | |

| 16. Assessment methods should be based on: | very strongly agree ← → very strongly disagree |
|---|---|
| 16.1 Exercises | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.2 Tests | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.3 Reports | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.4 Interviews | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.5 Group work | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| | | | | | | |
|--------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 16.6 Presentations | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 16.7 Self-evaluation | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 16.8 Portfolio | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 16.9 Others (please recommend) | | | | | | |

| | | | | | | |
|---|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 17. Grading | very strongly agree ←→ very strongly disagree | | | | | |
| 17.1 Only final test scores | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 17.2 Midterm test and final test scores | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 17.3 All tests scores are considered | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
| 17.9 Others (please recommend) | | | | | | |

| | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 18. Learners should be given a chance to plan for learning and evaluation | <input type="checkbox"/> 6 | <input type="checkbox"/> 5 | <input type="checkbox"/> 4 | <input type="checkbox"/> 3 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1 |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|

Thank you very much

APPENDIX B

แบบสอบถาม

การสำรวจความคิดเห็นของ ผู้บังคับบัญชา ครู อาจารย์และนักเรียนท่าอากาศยาน ที่มีต่อวิชาภาษาอังกฤษ ของสาขา
วิชา ช่างอากาศยาน โรงเรียนท่าอากาศยาน กรมยุทธศึกษาทหารอากาศ กองบัญชาการฝึกศึกษาทหารอากาศ

แบบสอบถามนี้จัดทำขึ้นเพื่อสำรวจความคิดเห็นที่มีต่อการศึกษาวិชาภาษาอังกฤษ ของ นจอ. สาขาวิชาช่าง
อากาศยาน ในด้านความต้องการในการใช้ภาษาอังกฤษและในด้านความต้องการในการจัดการเรียนการสอน คำ
ตอบอย่างจริงใจจากท่านจะเป็นประโยชน์อย่างยิ่งในการนำมาวิเคราะห์เพื่อสร้างโครงสร้างการเรียนการสอนวิชา
ภาษาอังกฤษเทคนิคสำหรับนักเรียนท่าอากาศยานสาขาวิชาช่างอากาศยาน เพื่อบรรลุวัตถุประสงค์ของผู้เรียนและหลักสูตร
ของโรงเรียนท่าอากาศยาน อย่างมีประสิทธิภาพ ความรู้ความสามารถทางด้านภาษาอังกฤษมิใช่สิ่งจำเป็นในการตอบ
แบบสอบถามครั้งนี้ ความต้องการ ความคิดเห็น ทัศนคติและข้อเสนอแนะต่างๆ ที่ท่านมีต่อวิชาภาษาอังกฤษของ
สาขาวิชาช่างอากาศยานท่านนั้นที่จำเป็นต่อการวิเคราะห์ข้อมูล โปรดกรุณาตอบแบบสอบถามตามความเป็นจริงและ
ความคิดเห็นที่แท้จริงของท่านซึ่งจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยครั้งนี้
หมายเหตุ คำตอบจากท่านถือเป็นความลับ การนำเสนอข้อมูลใดๆจะนำเสนอโดยรวมเท่านั้น

แบบสอบถามแบ่งออกเป็น 3 ตอน คือ

ตอนที่ 1 เกี่ยวกับสถานภาพของผู้ตอบแบบสอบถาม

ตอนที่ 2 เกี่ยวกับความคิดเห็นของผู้ตอบแบบสอบถามที่มีต่อวิชาภาษาอังกฤษ ของสาขาวิชาช่างอากาศยาน ในด้าน
ความต้องการ ในการใช้ภาษาอังกฤษ

ตอนที่ 3 เกี่ยวกับความคิดเห็นของผู้ตอบแบบสอบถามที่มีต่อวิชาภาษาอังกฤษ ของสาขาวิชาช่างอากาศยาน ในด้าน
ความต้องการ ในการจัดการเรียนการสอน

ตอนที่ 1: ข้อมูลเกี่ยวกับสถานะภาพของผู้ตอบแบบสอบถาม (สำหรับ นักเรียน)

คำชี้แจง โปรดทำเครื่องหมาย ลงในช่อง หรือเติมลงในช่องว่างตามความเป็นจริงเกี่ยวกับตัวท่าน

1. ข้อมูลส่วนตัวของผู้ตอบแบบสอบถาม

1.1 ท่านกำลังศึกษาอยู่

ชั้นปีที่ 1

ชั้นปีที่ 2

ชั้นปีที่ 3

1.2 อายุ

14 - 17 ปี

18 - 20 ปี

1.3 คุณวุฒิ การศึกษาสูงสุดก่อนเข้า รร.จอ.

ม. 3

ม. 4

ม. 5

ม. 6

ปวช.

อื่น ๆ (โปรดระบุ).....

1.4 ท่านเคยเข้าเรียนพิเศษภาษาอังกฤษเพิ่มเติมหรือไม่

เคย

< 3 เดือน

3 - 6 เดือน

6 เดือน - 1 ปี

มากกว่า 1 ปี

ไม่เคย

1.5 ท่านเข้าเรียนพิเศษภาษาอังกฤษเพิ่มเติมด้วยเหตุผลใด

เพิ่มพูนความเข้าใจในบทเรียน

เพื่อสอบแข่งขันเข้าศึกษาต่อ

ต้องการไปศึกษาต่อต่างประเทศ

ต้องการใช้ภาษาอังกฤษเพื่อการสื่อสารได้

อื่นๆ(โปรดระบุ).....

1.6 ท่านคิดว่าท่านสามารถใช้ภาษาอังกฤษได้ในระดับ

ดีมาก

ดี

พอใช้

น้อย

น้อยมาก

ตอนที่ 1: ข้อมูลเกี่ยวกับสถานภาพของผู้ตอบแบบสอบถาม (สำหรับผู้บังคับบัญชา ครู อาจารย์)

คำชี้แจง โปรดทำเครื่องหมาย ✓ ลงในช่อง หรือเติมลงในช่องว่างตามความเป็นจริงเกี่ยวกับตัวท่าน

1. ข้อมูลส่วนตัวของผู้ตอบแบบสอบถาม

1.1 เพศ

- ชาย หญิง

1.2 อายุ ...

- < 30 ปี 31-35 ปี
 36-40 ปี 41-45 ปี
 46-50 ปี 51-60 ปี

1.3 คุณวุฒิ สูงสุดที่สำเร็จการศึกษา

- ประกาศนียบัตร ป.ตรี
 ป.โท ป.เอก
 อื่น ๆ (โปรดระบุ).....

1.4 ท่านสำเร็จการศึกษาจากโรงเรียนจำอากาศในสาขาวิชา

- สาขาวิชาช่างอากาศ.....
 สาขาอื่นที่ไม่ใช่สาขาวิชาช่างอากาศ.....
 สถาบันอื่นๆ.....

1.5 ท่านเคยเข้าร่วมอบรมพิเศษเกี่ยวกับการสอนภาษาอังกฤษหรือไม่

- เคย
 < 3 เดือน 3 - 6 เดือน
 6 เดือน - 1 ปี มากกว่า 1 ปี
 ไม่เคย

1.6 ท่านทำงานหรือสอนในโรงเรียนจำอากาศเป็นเวลา

- < 5 ปี 6 - 10 ปี
 11 - 15 ปี 16 - 20 ปี
 21 - 30 ปี

1.7 ท่านเคยศึกษาหรือท่านเคยอยู่ในประเทศที่ใช้ภาษาอังกฤษเป็นภาษาราชการหรือไม่

- เคย
 < 3 เดือน 3 - 6 เดือน
 6 เดือน - 1 ปี มากกว่า 1 ปี
 ไม่เคย

ตอนที่ 2: เกี่ยวกับความคิดเห็นของท่านที่มีต่อวิชาภาษาอังกฤษของสาขาวิชาช่างอากาศยาน

ในด้านความต้องการในการใช้ภาษาอังกฤษ (Language Target)

คำชี้แจง โปรดพิจารณาข้อความในแต่ละข้อแล้วทำเครื่องหมาย ลงในช่องระดับความคิดเห็น ซึ่งตรงกับความคิดเห็นและความต้องการของท่านในด้านความต้องการในการใช้ภาษาอังกฤษของ นจอ.(ชอ.) หรือเติมลงในช่องว่างสำหรับข้อคิดเห็นที่ต้องการแนะนำ

ความต้องการในการใช้ภาษาอังกฤษ

| 2. ภาษาอังกฤษเป็นสิ่งจำเป็นต่อการ ศึกษาของ นจอ.ชอ. ทางด้าน | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---|---|
| 2.1 ทางด้านการศึกษา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 2.2 ทางด้านการทำงาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 2.3 ชีวิตประจำวัน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 3. ทางด้านการศึกษาควรเน้นทักษะ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--------------------------------|---|
| 3.1 การฟัง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.2 การพูด | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.3 การอ่าน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 3.4 การเขียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 4. ทางด้านการทำงานควรเน้นทักษะ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--------------------------------|---|
| 4.1 การฟัง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.2 การพูด | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.3 การอ่าน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 4.4 การเขียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 5. ในชีวิตประจำวัน ควรเน้นทักษะ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---------------------------------|---|
| 5.1 การฟัง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.2 การพูด | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.3 การอ่าน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 5.4 การเขียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| 6. การฟังภาษาอังกฤษควรมั่นในหัวข้อต่อไปนี้ | เห็นด้วยอย่างยิ่ง ← | ↔ | → | ไม่เห็นด้วยอย่างยิ่ง | | | | | | | | |
|--|--------------------------|---|--------------------------|----------------------|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|
| 6.1 ศัพท์เทคนิคเกี่ยวกับ อากาศพลศาสตร์ อากาศยาน เฮลิคอปเตอร์ เครื่องยนต์ ไฟฟ้า และการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.2 ศัพท์ทางการบิน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.3 ศัพท์ทางทหาร | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.4 ศัพท์ทั่วไป | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.5 คำสั่งงานการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.6 คำสั่งทางทหาร | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.7 ประโยคสั้นๆง่ายๆ | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.8 ประโยคซับซ้อนต่อเนื่อง | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.9 วิทยู เทปภาษาอังกฤษ | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.10 ภาพยนต์ วิดีโอภาษาอังกฤษ | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.11 การสนทนาโดยทั่วไป | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.12 บรรยาย | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.13 รายงาน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.14 สัมมนา | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 6.15 อื่นๆ (โปรดแนะนำ) | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| 7. การพูดภาษาอังกฤษ ควรมั่นในหัวข้อต่อไปนี้ | เห็นด้วยอย่างยิ่ง ← | ↔ | → | ไม่เห็นด้วยอย่างยิ่ง | | | | | | | | |
|--|--------------------------|---|--------------------------|----------------------|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|
| 7.1 ศัพท์เทคนิคเกี่ยวกับ อากาศพลศาสตร์ อากาศยาน เฮลิคอปเตอร์ เครื่องยนต์ ไฟฟ้า และการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.2 ศัพท์ทางการบิน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.3 ศัพท์ทางทหาร | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.4 ศัพท์ทั่วไป | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.5 คำสั่งงานการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.6 คำสั่งทางทหาร | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.7 ประโยคสั้นๆง่ายๆ | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |
| 7.8 ประโยคซับซ้อนต่อเนื่อง | <input type="checkbox"/> | 6 | <input type="checkbox"/> | 5 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 1 |

| | |
|------------------------|---|
| 7.9 การสนทนาโดยทั่วไป | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.10 รายงาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.11 สัมมนา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 7.12 อื่นๆ (โปรดแนะนำ) | |
| | |
| | |

| 8. การอ่านภาษาอังกฤษควรเน้นในหัวข้อต่อไปนี้ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--|---|
| 8.1 ศัพท์เทคนิคเกี่ยวกับ อากาศพลศาสตร์ อากาศยาน เฮลิคอปเตอร์ เครื่องยนต์ ไฟฟ้า และการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.2 คู่มือการซ่อมบำรุง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.3 คู่มือการใช้งาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.4 วารสาร บทความทางอากาศยาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.5 วารสาร บทความทางการบิน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.6 ศัพท์ทางการบิน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.7 ศัพท์ทางทหาร | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.8 ศัพท์ทั่วไป | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.9 คำสั่งงานการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.10 รายการตรวจสอบ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.11 คู่มือเข้ารหัสการซ่อมบำรุง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.12 เอกสารทางทหาร | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.13 ประโยคสั้นๆง่ายๆ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.14 ประโยคซับซ้อนต่อเนื่อง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.15 รายงาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.16 ตัวเลข เวลา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.17 เอกสารเทคนิคที่ต้องปฏิบัติตามเวลา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 8.18 อื่นๆ (โปรดแนะนำ) | |
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| 9. การเขียนภาษาอังกฤษ ความนับในหัวข้อต่อไปนี้ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--|---|
| 9.1 ศัพท์เทคนิคเกี่ยวกับ อากาศพลศาสตร์ อากาศยาน เอลิคอปเตอร์ เครื่องยนต์ ไฟ และการซ่อมบำรุง อากาศยาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.2 ศัพท์ทางการบิน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.3 ศัพท์ทางทหาร | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.4 ศัพท์ทั่วไป | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.5 คำสั่งงานการซ่อมบำรุงอากาศยาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.6 คำสั่งทางทหาร | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.7 ประโยคสั้นๆง่าย ๆ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.8 ประโยคซับซ้อนต่อเนื่อง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.9 การสนทนาโดยทั่วไป | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.10 บรรยาย | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.11 บันทึกสั้น ๆ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.12 บันทึกข้อมูลลงคอมพิวเตอร์ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.13 รายงาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.14 สัมมนา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 9.15 อื่นๆ (โปรดแนะนำ) | <p>.....</p> <p>.....</p> |

ตอนที่ 3: ความต้องการทางการจัดการเรียนการสอน

คำชี้แจง โปรดพิจารณาข้อความในแต่ละข้อแล้วทำเครื่องหมาย ลงในช่องระดับความคิดเห็น ซึ่งตรงกับความคิดเห็นหรือความต้องการของท่านในด้านความต้องการทางการจัดการเรียนการสอนสำหรับ นจอ.(ขอ.) หรือเติมลงในช่องว่างสำหรับข้อคิดเห็นที่ต้องการแนะนำ

ความต้องการทางการจัดการเรียนการสอน

| 10. วัตถุประสงค์การเรียนการสอนควรมัน | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--|---|
| 10.1 การนำไปใช้ได้จริงตามสาขาวิชาชีพ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.2 การเรียนการศึกษาในสถานศึกษา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.3 การนำไปใช้ในชีวิตประจำวัน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.4 ความสามารถในการใช้ภาษาอังกฤษเพื่อการสื่อสาร | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.5 การปฏิสัมพันธ์ระหว่างครูกับนักเรียนและระหว่างนักเรียนเอง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.6 การแจ้งวัตถุประสงค์ประจำบทเรียนให้ผู้เรียนทราบอย่างชัดเจน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 10.7 อื่นๆ (กรุณาระบุ) | |
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| 11. การสอนควรสอนโดยใช้วิธีสอนแบบ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---|---|
| 11.1 สอนคำศัพท์ ประโยคและอธิบายกฎไวยากรณ์เพื่อการอ่านและเขียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.2 อ่านแล้วแปลเป็นภาษาไทย | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.3 ใช้ภาษาไทยในการสอน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.4 สอนการพูดในสถานการณ์สมมุติ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.5 ใช้ภาษาอังกฤษในการสอน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.6 ฝึกการใช้เนื้อหาใหม่ทางภาษาโดยกำหนดสถานการณ์ให้นักเรียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.7 สอนอธิบายไวยากรณ์จากง่ายไปหายาก | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.8 ฝึกการออกเสียงให้ถูกต้องโดยพูดตาม ด้นแบบ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.9 เน้นการออกเสียง นำหนักเสียง ความคล่อง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

| | |
|--|---|
| 11.10 ใช้บทสนทนาสมมุติเป็นหลักในการสอน ศัพท์ ไวยากรณ์การเขียนและการอ่าน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.11 สอนเน้นในด้านความเข้าใจความหมายและ การใช้ภาษาอย่างเหมาะสม | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.13 ใช้ประโยค ส่วนวนในการสื่อสารจริงในบท สนทนา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.14 เน้นหน้าที่ของภาษาและและความเหมาะสมใน การใช้ภาษา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.15 ใช้กิจกรรมและสื่อเหมือนจริงโดยให้นัก เรียนเป็นศูนย์กลาง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 11.16 อื่นๆ (กรุณาระบุ) | |

| 12. ในการเรียนการสอนใช้ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---|---|
| 12.1 ภาษาอังกฤษทั้งชั่วโมง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.2 ภาษาอังกฤษส่วนใหญ่ และใช้ภาษาไทยเท่าที่จำเป็น | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.3 ใช้ภาษาไทยมากกว่าภาษาอังกฤษ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 12.4 อื่นๆ (กรุณาระบุ) | |

| 13. ในการเรียนการสอนผู้สอนจัดกิจกรรมโดย | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--|---|
| 13.1 ให้ นจอ. ทำงานเดี่ยว | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.2 ให้ นจอ. ทำงานเป็นคู่ และเป็นกลุ่ม | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.3 ให้ นจอ. แสดงความคิดเห็น | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.4 ให้ นจอ. แสดงบทบาทสมมุติ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 13.5 ให้ นจอ. หาความรู้เพิ่มเติม โดยการค้นคว้าด้วยตนเอง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |

13.6 อื่นๆ (กรุณาระบุ)

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| 14. ผู้สอนควรจัดกิจกรรมเสริมหลักสูตรโดย | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---|---|
| 14.1 จัดแข่งขันการใช้ภาษาอังกฤษระหว่างห้องเรียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.2 จัดให้ นจอ. ได้ออกฝึกงาน ในหน่วยงานที่ใช้ภาษาอังกฤษจริง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.3 คูงานนอกสถานที่ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.4 จัดบอร์ดิวิชาการเป็นภาษาอังกฤษ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.5 จัดนิทรรศการ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.6 ออกวารสารทางภาษาอังกฤษ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.7 ตั้งคลินิก ทางภาษา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 14.8 อื่นๆ (กรุณาระบุ) | |
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| 15. ผู้สอนควรใช้สื่อการสอนประเภทใดต่อไปนี้ | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|--|---|
| 15.1 ตำราเรียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.2 ของจริง (เช่น ใบสั่งงาน) | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.3 วารสาร แผ่นปลิว หนังสือพิมพ์ อื่น ๆ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.4 ภาพนิ่ง แผ่นใส สไลด์ วีดิทัศน์ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.5 ภาพเคลื่อนไหว ภาพยนต์ แถบบันทึกภาพ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.6 เทปบันทึกเสียง แผ่นเสียง เสียงประกอบต่างๆ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.7 สื่อผสมทางคอมพิวเตอร์ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 15.8 อื่นๆ (กรุณาระบุ) | |
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| | |

| 16. การวัดผลผู้เรียนโดย | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|-------------------------|---|
| 16.1 ทำแบบฝึกหัด | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.2 ทำแบบทดสอบข้อเขียน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.3 ทำรายงาน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.4 สัมภาษณ์ | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.5 ทำกิจกรรมกลุ่มย่อย | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.6 อภิปรายหรือสัมมนา | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.7 ประเมินผลตนเอง | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.8 เพิ่มบันทึกข้อมูล | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 16.9 อื่นๆ (กรุณาระบุ) | |
| | |
| | |

| 17. การคิดวิเคราะห์: | เห็นด้วยอย่างยิ่ง ← → ไม่เห็นด้วยอย่างยิ่ง |
|---|---|
| 17.1 คะแนนสอบปลายภาคอย่างเดี่ยว | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 17.2 คะแนนสอบกลางภาคและปลายภาค | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 17.3 คะแนนเก็บตลอดภาครวมคะแนนสอบกลางภาคและปลายภาค | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
| 17.4 อื่นๆ (กรุณาระบุ) | |
| | |
| | |

| | |
|--|---|
| 18. นอจ. ควรมีโอกาสวางแผนการเรียนและการประเมินผลร่วมกับอาจารย์ผู้สอน | <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 |
|--|---|

ขอขอบคุณที่กรุณาตอบแบบสอบถามด้วยความจริงใจ

APPENDIX C

SAMPLE OF AMERICAN LANGUAGE COURSE SYLLABUS

(source : the Defense Language Institute English Language School, 1967)

The American Language Course is design for an intensive full-time language-training program to provide non-English-speaking military personnel with sufficient skill in English to enable them to pursue further training in various schools of the Department of Defense of the United State of America.

OUTLINE AND STUDY OBJECTIVES

| UNIT 1201 | |
|---|--|
| Structures | Sound and Intonation |
| <p>Special Expressions:</p> <ul style="list-style-type: none"> ➤ Get on ➤ Get off ➤ May-Might ➤ Expect to ➤ Plan to ➤ Hope to ➤ Want to | <p>Intonation Pattern Used in Addressing Another Person</p> <p>Voiced and Voiceless</p> <p><u>th</u> (/θ/ and /ð/)</p> |
| <p>Progressive Verbs Forms</p> <ul style="list-style-type: none"> ➤ Present tense ➤ Past tense <p>Future Tense</p> <ul style="list-style-type: none"> ➤ Use of Contractions ➤ Formation of Questions ➤ Formation of Negative Sentences | |

| UNIT 1202 | |
|--|--|
| Structures | Sound and Intonation |
| <p>Special Expressions:</p> <ul style="list-style-type: none"> ➤ By bus ➤ By car ➤ By plane ➤ By taxi ➤ Shall I ➤ Shall we | <p>Stress on Adverbs /i/</p> |
| <p style="text-align: center;">Adverbs Of Frequency often, usually, always, ever, never Uses of never, ever Uses of still, already, yet</p> | |
| UNIT 1203 | |
| Structures | Sound and Intonation |
| <p>Special Expressions:</p> <ul style="list-style-type: none"> ➤ Look for ➤ As.....as ➤ Try on ➤ Take off ➤ Put on ➤ Take a look at ➤ Anything else ➤ Pick up ➤ Have in mind ➤ Some – any ➤ No – not <p>Adjectives: Comparison of equals Comparison of unequals</p> | <p>Reduced Vowels: As . . . as /əz...əz/ to /tə/ /r/</p> |
| UNIT 1210 | |
| Structures | Sound and Intonation |
| <p>Indirect Object Count Nouns Mass Nouns Verb Tenses Modal Auxiliaries</p> | <p>Stress patterns within sentences</p> |



BIOGRAPHY

| | |
|------------------------------|--|
| NAME | Flt. Lt. Saneha Deekawong |
| DATE OF BIRTH | 11 February 1967 |
| PLACE OF BIRTH | Sukhothai, Thailand |
| INSTITUTIONS ATTENDED | Rajabhat Institute Pranakhon, 1987-1992: Bachelor of Arts (English) Mahidol University, 1997-2000: Master of Arts (Applied Linguistics) |
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