

## INTEGRATION OF ESP SYLLABUS CONTENT FOR AVIATION STUDENTS: A NEED ANALYSIS

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**Abstract:** English was taught in the field of English for Specific Purposes (ESP) to prepare students for a more specialized linguistic environment. Therefore, the ESP course design in the syllabus should be based on the student's need analysis. In fact, based on the available syllabus in the Air Navigation Study Program at one of the aviation polytechnics in Indonesia, less exposure to aviation terms was presented to the students in the ESP classroom. Consequently, the ESP teacher needed more effort to integrate the syllabus with the appropriate ESP material. Therefore, the study aimed to identify the student's needs in learning aviation material through ESP courses to promote syllabus development. The study was a mixed method research applying constant comparative analysis in analyzing the data. The subjects were twenty-four students in the first semester of the Air Navigation Study Program and an English teacher chosen through convenient sampling. The quantitative data were collected using a questionnaire distributed through Google Forms which consisted of seventeen questions about students' perspectives in the ESP course and four questions about students' perspectives on their English proficiency level. The qualitative data were gathered via semi-structured in-depth interviews with the teacher. The results revealed that the students perceived their productive skills need to be improved through contextualizing the material with future professional needs. In addition, the teacher was required to design their own module based on the syllabus given which was limited to the aviation materials. Hence, designing the appropriate ESP syllabus integrated into the material is crucial.

**Keywords:** Need Analysis, ESP, Syllabus, Aviation Polytechnic

### INTRODUCTION

English is taught in the field of English for Specific Purposes (ESP) to prepare students for a more specialized linguistic environment. (Enesi et al., 2021) stated that "ESP as a branch of Applied Linguistics is concerned with teaching, testing methods, analysis of students' demands an inquiry into the linguistic and discourse structures of specific texts". The achievement of the ESP students is based on how well the teaching and learning material and also the course are compatible with their needs. Needs are divided into three categories by Hutchinson and Waters (1993): essentials, wants and lacks. The demands of the target scenarios, or what the learner needs to know in order to perform effectively in the target situation, are what they refer to as necessities or target needs. According to (Suprayogi & Pranoto, 2020), the selection of goals or objectives, materials, information, and teaching methods are also based on the needs of the target learners.

The learning material and learning objectives are included in the umbrella of the syllabus. A well-written syllabus, which is a description of what should be included in the course

to meet the learning objectives, could open a window into the pedagogical beliefs of the teacher (Bazyar et al., 2015); (Murphy, 2018). An effective syllabus can also provide students with English language knowledge that will benefit them in both their academic and professional lives. It can be concluded that the product syllabus focuses mostly on what language learners learn as a result of instruction (Nunan, 2005). The process syllabus, on the other hand, is primarily concerned with the teaching procedures that show how the ultimate goals of learning and education can be accomplished (Sabbah, 2018). However, if proper oversight is not provided, views on the syllabus could lead to fossilization. As a result, it may provide difficulties for beginning and low-level adult students (Bastidas & Araujo, 1984); on the other hand, there have been negative responses to the syllabus since it appears "centralized, management-oriented, and predictive" (Candlin, 1984, p.32). Therefore, ESP courses or syllabuses should be designed to support learners in developing specific vocational, academic, or professional abilities in order to suit the specific needs of learners. The creation of an ESP syllabus typically results from a study of the needs of the learners in light of their intended contexts (Huang, 2019).

In regard to a Need Analysis could be defined as the measurement to know the student's need to improve their professional ability in ESP courses. The process of gathering data regarding learners' requirements is known as a needs analysis (NA) (Richards, 2001). In English for Specific Purpose (Hutchinson & Waters, 1987), the significance of NA is highlighted. (Huang, 2019) stated that "the value of NA in the ESP process resides in both its function as the first and most crucial step and its outcomes, which can be utilized to guide the creation of the ESP syllabus". NA in the ESP process initially focuses on the learning needs of the learners, which are subsequently turned into learning objectives, which in turn provide as the basis for subsequent phases. In the tree of ESP (Hutchinson & Waters, 1987) there is EOP which is defined as "the area of the curriculum that prepares students for careers ranging from low-skilled to complex jobs in technical sectors" (Anthony, 2007, p. 56) included a specific field, such as aviation, business, or tourism. Developing communicative competence in those fields is very crucial, especially in air navigation engineering. This statement was reinforced by (Maria Vieira et al., 2014) who conveyed that the aviation sector depends on a system where communication connects all the components. The development of aviation students could be achieved from a good, precise, and effective syllabus that can only be designed based on students' needs.

The less exposure to aviation terms based on the students' need in the syllabus, the higher percentage of general English than ESP for aviation students in the syllabus, and the lack of English proficiency among the aviation students are the obstacles for classroom activities and job seekers which always followed by the change of globalization. According to (ICAO, 2010) to transmit standard messages Radiotelephony phraseology is used by pilots, air traffic controllers, and ground engineers to communicate in a clear, succinct, and unambiguous manner. This statement argued that productive skill is very crucial for aviation students which is included in a good syllabus based on the student's need. Nevertheless, it is crucial to identify the students' needs to be able to modify the present syllabus in light of the needs of aviation students in order to facilitate and support the students in developing their productive skills and preparing for the working world.

Some previous studies such as Septiana et al. (2020) conducted a Need Analysis of the syllabus based on the computer science student and showed that the target needs are speaking and writing skills. The study also showed that students need a learning process to focus more on practice than theory. The learning process also needs to be integrated with technology to make classroom activities more interesting. Ibrahim's (Ibrahim, 2020) study showed that after a Need Analysis the students' absence of several fundamental abilities, particularly speaking and listening abilities, was evident in the faculty. As a result of recommendations, the existing

syllabus may be modified to better suit the needs of medical students. According to a study by Hadianto et al. (2019), one of the key priorities for school service changes that aviation students expect is based on service attributes like enhancing supervision and assessing if the syllabus complies with the Training Procedure Manual. In order to tailor the syllabus content to the needs of the students and advance syllabus development, it was still confined to a Need Analysis of ESP syllabus content for aviation students. Hence, the current study aims to identify the student's needs in learning aviation material through ESP courses to promote syllabus development in order to make a good syllabus that supports the student's needs both in general English and English for aviation. According to Jumiaty (2018) "a thorough analysis of the target situation, discourse, and students' needs, as well as the course development that directly results from it, are necessary for teaching English for specific purposes even though there are many similarities with general English teaching".

## METHODS

The objective needs of the students were defined as the language-related tasks, activities, and the language skill needed to be able to perform sufficient English-speaking skills to be integrated into their work in order to be successful in the aviation industry later on once they graduate from the air navigation engineering program. Twenty-four air navigation engineering students and a lecturer of the program were consulted. The data was collected through online questionnaires given to the students in the form of Google Forms, and an in-depth interview was conducted with the lecturer. The questionnaires given consisted of several questions which focused on the student's language skill needed, their satisfaction with the existing English for air navigation program, and English language problems they might face. An air navigation engineering lecturer was also interviewed to gain a deep understanding and information about the air navigation engineering program there. The lecturer's perception was inquired regarding the students' language proficiency, language problems, and the most skill needed for the students. Then, the results of the questionnaire and interview were analyzed using constant-comparative analysis where the data gathered were compared and interpreted into some themes to be analyzed.

## FINDINGS AND DISCUSSION

Based on the results of the data collection and analysis, it was found several main focuses of this study which were divided into several subtopics, as follows:

**Table 1. The Student's Language Problem**

No	Questions	SA		A		D		SD	
		F	%	F	%	F	%	F	%
6	I am ready to use English in my future job	12	50	10	41.7	2	8.3	0	0

**SA: Strongly Agree; A: Agree; D: Disagree; SD: Strongly Disagree**

Referring to the questionnaire given on the 6th item of the questionnaire, half of the students perceived that they were ready to use English in their future job. That meant that not all the students perceived that they had an English language problem. However, based on the interview result conducted to the lecturer, it was found that the lecturer perceived that the students had an English language problem, especially in terms of the productive skill. In addition, based on the lecturer's response to the interview, he perceived that the students still lacked vocabulary to produce a good English sentence, therefore the lecturer needed to

provide more technical vocabulary that was relevant to the air navigation industry. Since, the book and the syllabus provided were quite relevant to the general English. Similarly, from both the students and the lecturer's perceptions, they perceived that most of the students were still in the basic level or beginner for all the four English language skills, namely listening, reading, speaking and writing. It was proven by the students' responses on the questionnaire as what it was shown by the table below:

**Table 2. Students' English Proficiency Skill**

No	Skills	Beginner		Pre-Inter		Intermediate		Advanced	
		F	%	F	%	F	%	F	%
1	Listening	17	70.8	5	20.8	2	8.3	0	0
2	Reading	13	54.2	10	41.7	1	4.1	0	0
3	Speaking	15	62.5	6	25	2	8.3	1	4.1
4	Writing	15	62.5	7	29.2	1	4.1	1	4.1

It could be seen that almost more than half students perceived their English level were in beginner for all the English language skills, such as on listening skill, 17 students agreed their level were in beginner, on reading skill, 13 students agreed that their proficiency were in beginner, on speaking skill, 15 of the students perceived their skill as beginner and on writing skill, 15 students agreed that their level were in beginner.

**Table 3. The Students' Satisfaction On The Current English Course**

No	Questions	SA		A		D		SD	
		F	%	F	%	F	%	F	%
5	I am satisfied with the current English course	15	62.5	9	33.4	1	4.1	0	0

**SA: Strongly Agree; A: Agree; D: Disagree; SD: Strongly Disagree**

Referring to the students' answers on the questionnaire and the result of the interview conducted to the lecturer, both of them perceived the current English course had been conducted using an appropriate method which was code-switching and code-mixing. It was proven from the lecturer's statement that he said "I use Bahasa Indonesia and English to deliver the material", then it was supported by the students' answer that 15 students perceived that the current English course had been conducted using an appropriate method.

**Table 4. The Language Skills Mostly Needed By The Students**

No	Questions	SA		A		D		SD	
		F	%	F	%	F	%	F	%
1	In my opinion, speaking skill in English is the most important in my current study program.	19	79.2	5	20.8	0	0	0	0

2	In my opinion, writing skill in English is the most important in my current study program.	19	79.2	5	20.8	0	0	0	0
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**SA: Strongly Agree; A: Agree; D: Disagree; SD: Strongly Disagree**

It could be seen that more than half of the students agreed that the most important skills that they needed in their future job were the productive skills namely speaking and writing. For the speaking skill, there were 19 students who agreed that they needed to improve such skill, and for the writing skill there were 19 students who perceived this skill was one of the most important skills for them. Additionally, from the lecturer's statement that the students highly needed speaking and writing skills. It was proven from his statement that:

*Question: What is the most important skill that is needed in your students' major?*

*Answer: Speaking and writing.*

### Discussion

Essentials wants, and lacks are terms used in conducting need analysis (Hutchinson and Waters, 1993). These terms aim to reveal the information related to the demands of the target situation. In this research, the demands of the target situation were categorized according to students' language problems, students' satisfaction with their current English course, and students' most needed language skills. The data were obtained through the questionnaires distributed to the students.

Based on the questionnaire, it found that students struggled with their productive skills, whereas communicative competence in the field of air navigation programs is crucial (Maria Vieira et al., 2014). Moreover, in the field of aviation programs, only fifty percent of the students are prepared to use English in their future careers. These students are also seen mostly at the beginner level for all the English language skills. From the notion that the majority of students are at the beginner level, they become accustomed to receiving instruction in both English and Bahasa Indonesia. The lecture usually employs code-switching and code-mixing as an appropriate method that 62.5 % of students are satisfied with. Those students also learn mostly General English rather than English for Aviation. Acquiring knowledge as a result of instruction (Nunan, 2005) however, does not always give a positive response by the students. In addition, a centralized, management-oriented, and predictive kind of syllabus appears not relevant to what students expect. Therefore, we agree with the statement by Huang (2019) that the creation of syllabi typically in light of students' needs is important.

Regarding the result of the need analysis, 79.2 % of the students concur that both speaking and writing skills are their primary needs to enhance their professional ability in the aviation area. This need analysis (Richards, 2001 and Huang, 2019) focuses initially on students' need for learning, which is subsequently transformed into learning objectives as outlined in the syllabus, which serves as the foundation for subsequent phases. To provide a balanced English for aviation and general English, we agree along with Anthony (2007) that the syllabus should be designed to prepare students for aviation careers as well as to develop students' communicative competence in the aviation sector (Maria Vieira et al., 2014).

### CONCLUSIONS

The present study provides evidence about the identification of aviation students' needs in learning aviation material through ESP courses to promote syllabus development from the result of a Need Analysis. Based on the findings and discussion above, the conclusion that can be derived is that aviation students need more aviation learning materials focused on productive skills, speaking, and writing skills from the questionnaire. The teacher also mentioned that the students need more exposure to aviation terms to improve their productive

skills in the interview because the current syllabus contains 70% of General English materials and 30% of Aviation materials. Then, the learning material should contain 50% of General English and 50% of Aviation materials. This finding aims to give a balanced exposure between both of the materials because the students are still in the first semester, which means they need both of the materials to be able to improve their productive skills and also receptive skills. Furthermore, the findings and the discussion have some advantages not only beneficial to the lecturer/practitioner but also to further researchers. The lecturers/practitioners should understand the student's English proficiency in designing the teaching materials. The students' lacks should be discovered and the student's strengths should be improved by using appropriate materials. The students should get more speaking and writing materials to improve their productive skills and readiness to face real work life. For future study, the finding and discussion can be taken as the data to modify or develop a good syllabus based on the aviation students' needs in order to provide good materials as well. However, this study still lacks the participants. Therefore, it is suggested that future research should be conducted under the broader participants.

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