

STUDENT NEEDS ANALYSIS FOR ESP: X SCIENCE MA ASH-SALIHIN

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Abstract

This study aimed to analyze the English for Specific Purposes (ESP) needs of X Science students at MA Ash-Shalihin. The research employed a qualitative case study design to explore students' learning needs, preferences, and expectations in learning English. The participants consisted of one English teacher and twelve students from the science major. Data were collected through questionnaires and interviews and were analyzed descriptively by identifying recurring themes related to students' learning objectives, preferred learning styles, difficulties, and future academic needs. The findings revealed that students considered English important for academic purposes, future careers, communication, and access to scientific information. Most students preferred auditory-audiovisual learning styles and self-directed learning activities. The interview results showed that both students and teachers viewed English as an essential tool for operating technology, pursuing higher education, and engaging in international communication. Based on the needs analysis, an ESP course design was developed focusing on grammar, writing, and speaking skills that are relevant to students' academic and professional goals. The study concludes that conducting needs analysis is essential in designing effective ESP instruction because it enables teachers to develop learning materials and activities that are aligned with students' specific needs and future aspirations. The findings are expected to provide valuable insights for ESP curriculum development, particularly for science students at the secondary school level.

Keywords: *English for Specific Purposes, Needs Analysis, Science Students, Course Design, Qualitative Study*

INTRODUCTION

English plays an important role in global communication, education, science, and professional development. In many non-English-speaking countries, including Indonesia, English is taught as a foreign language to help students access international knowledge and information. For students in the science stream, English proficiency is particularly important because many scientific textbooks, journals, articles, and online resources are written in English.

Despite its importance, English instruction in many schools still focuses primarily on General English. As a result, the materials taught may not adequately address students' academic and professional needs, especially those related to specific fields of study. This condition highlights the importance of English for Specific Purposes (ESP), an approach that emphasizes teaching English based on learners' specific academic, occupational, and professional needs.

A fundamental component of ESP is needs analysis. Needs analysis is a systematic process used to identify learners' goals, necessities, lacks, and preferences. Through needs analysis, educators can develop appropriate learning materials, teaching strategies, and course objectives that are relevant to learners' future academic and professional contexts. Without a clear understanding of students' needs, ESP programs may fail to provide meaningful learning experiences and practical language skills.

Science students require English not only for classroom learning but also for accessing scientific information, understanding technical terminology, and preparing for future careers in science-related fields. Therefore, identifying their specific English language needs is essential for designing effective ESP instruction.

Based on these considerations, this study aims to analyze the English language needs of X Science students at MA Ash-Shalihin. The findings are expected to provide valuable information for developing an ESP-based course design that is relevant to students' academic backgrounds, learning preferences, and future aspirations.

METHOD

Research Design

In this study, the researcher applied qualitative design in which the researcher employed case study research to explore more students' needs and wants of X science at MA Ash-Shalihin students. Furthermore, qualitative research is a type of research in which the findings are not obtained through quantitative procedures or statistical forms. Therefore, this research focused on students' needs and wants.

Furthermore, in this section, the researchers look for data related to the research topic that the researchers take, namely in the form of a review of several journals and articles related to study English language in ESP (English for specific purpose), factors the background factors, and skills and sub-skills in English from previous related studies.

The Research Site and Participants

The time of the study was carried out in May 2022. The subjects in this study were taken from MA Ash-Shalihin which is located on Jl. Mustafa Daeng Bunga No.2, Paccinongang, Kec. Somba Opu, Gowa Regency, South Sulawesi 90235. In the current study, participants in this research were thirteen participants, with details: 1 female teacher and her 12 students from the Science major in MA Ash-Shalihin (they were made up 7 male and 5 female students). Participants were selected purposively because they represented the target learners of the ESP program. This study was conducted by the questioner by using google form which they received via the WhatsApp application.

Data Collecting Methods

In collecting data, the researchers communicated with the English teacher and students from the X grade of the Science major in MA Ash-Shalihin to ask their willingness to be a research sample. Then after getting their willingness, the researchers conducted questionnaires with the students and direct interviews with the teacher and three students from questionnaire analysis. The researchers ask several questions related to study English in the class and what are the reasons behind the constraints in English acquisition to students of science major. When conducting the question-and-answer process, the researchers used a voice recorder and a notebook to write down important points and all

these activities the researchers did in the class of the MA Ash-Shalihin as the location that the researchers chose.

Techniques of Data Analysis

In the data analysis stage, the researchers examine and identify all the data that has been collected at the time of questionnaires and the interview by transcribing the recordings in advance to facilitate the analysis stage. Then the results of the transcripts are analyzed and correlated based on the theories that the researchers include in the literature review.

RESULTS AND DISCUSSION

Needs Analysis of a Questionnaire

The English learning objective of students especially for ESP objective is formulated by considering several factors such as students' main goal in learning English, types of English skills and knowledge that students will use often while they are working later in their job field, and also the most difficult skills and knowledge of English for students to master. Researchers have explained and summarized the results of the questionnaire related to the considered factors in the form of a graph for easier understanding as follows.

Figure 1: The learning style of X Science student at MA Ash-Shalihin

Based on the data above the first question shows that 33.3% of the participants answered "Learning by hearing (auditory)" This finding supports Fleming's VARK learning style theory, which suggests that learners often achieve better outcomes when instruction matches their preferred learning styles, and 33.3% of the participants answered "Learning by hearing and sight (audiovisual)" while 16.7% of the participants answered "Learning by experience (kinesthetic)". Therefore, the figure above explains that most of all participants have auditory learning style and audiovisual learning style in language learning while some of the participants have visual learning style and other have kinesthetic learning style in language learning. It means that the students have differences learning style in language learning

Figure 2: The learning model of X Science Students at MA Ash-Shalihin

The figure above shows the learning model of X science students at MA Ash-Shalihin. 41.7% of students said self-learning in learning English, 16.7% said small group-learning in learning English. Therefore, the diagram above explains that most of all participants feel self-learning more focused in learning English than big group-learning in learning English. It means that the student more focused to learning English by self-learning than learn with a group or many people.

Need Analysis of Interviews

After concluding the stage through the questionnaire, the researcher continued to the interview. The researchers choose 3 samples from 12 respondents on Google Form and 1 teacher in class. The interview was carried out directly by the researchers. Although interviews by teachers and students were carried out on different days.

Therefore, based on the interview from the teacher, it was revealed that to be important for them to learn and master English. This is because, in this period, all people including students used technology that used English language in instruction to operating. So that, the students are really necessary to learning English.

"I think English is very important because modern technology such as smartphones and laptops mostly uses English." (Teacher)

"...When students graduate and enter society, especially if they cannot continue to higher education such as university, they should already have the skills needed for everyday life. For example, most technology today uses English, so being able to understand and operate it would be a great advantage." (Teacher added)

From the teacher's statement, learning English is indeed very important. In reality to join in times (up to date) that do need people who are able to develop in English. Then, the use of some electronic devices (technology) is designed in English. So that, it is related with teacher statement.

Surely, that was also related with student statements that consider learning English as a tool for communication when visiting other countries. In addition, learning English is important as a tool to communicate with native or non-native speakers. And there are also those who think that it is important to acquire English in order to gain broad insight.

"English is very important because it is an international language used in many countries. I believe that learning English can help me build a better future and make it easier for me to achieve my goals." (Student)

"English is very important because it is an international language used in many countries, and it will support me in pursuing my future career as a doctor." (Student)

On the whole, it can be concluded that learning English is a tool for join the time (up to date). For them English will be very helpful to communicate with native speaker or non-native. Even when they want to continue their education including doctor/ medical sector for example, literature in English will be very useful to add information. In addition, to go abroad the language will become a communication tool as international language that made this language is essential to master.

Course Design

In the process of designing a syllabus, the choice of a syllabus was a major decision in language teaching, and it should be made consciously and with as much information as possible. To do this, the trust of teachers and syllabus designers in language learning theory played an important role in determining the type of syllabus to be adopted. The following was a course design based on syllabus that was related to the needs and lacks of students.

Week	Skill Focus	Materials	Learning Activities	Learning Objectives
1	Grammar	Parts of Speech and English Tenses	Lectures, grammar explanations, discussions, and practice exercises	Students understand the basic rules of English grammar and tenses as a foundation for language learning.
2	Writing	Formal and Informal Letters; Evaluation Sheets	Guided writing practice and evaluation activities	Students are able to write formal and informal letters and evaluate written work effectively.
3	Writing	Job Application Letters and Short Stories	Writing exercises and guided practice	Students develop professional writing skills and improve creativity in written communication.
4	Writing	Memo Writing and Essay Writing	Writing tasks, classroom discussions, and feedback sessions	Students improve their ability to organize and express ideas in written form.
5	Writing	Precis Writing (Summary Writing) and Revision	Text summarization and review activities	Students are able to summarize texts concisely and review previously learned writing skills
6	Speaking	Language Expressions, Dialogues, and Personal Experiences	Conversation practice, dialogue activities, newspaper-based tasks, and presentations	Students develop speaking fluency, pronunciation, and confidence in expressing personal experiences and opinions.

7	Speaking	Storytelling and Short Debates	Story retelling and pair debates	Students enhance pronunciation, critical thinking, confidence, and speaking fluency
8	Speaking	Role Plays and Picture Comparison Activities	Pair and group communication activities	Students develop interactive communication skills and speak more naturally in English.
9	Speaking	Talk Shows and Holiday Adventure Discussions	Question-and-answer sessions and group discussions	Students improve spontaneous speaking, teamwork, and confidence in expressing ideas.
10	Speaking	Revision and Speaking Practice	Review sessions and partner speaking practice	Students strengthen overall speaking fluency and communication competence.

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