

## NEEDS ANALYSIS ON DEVELOPING ENGLISH LEARNING MATERIALS FOR INTERNATIONAL CLASS PROGRAM (ICP)

<sup>1</sup>\*Abd Halim, <sup>1</sup>Syarifuddin Dollah, <sup>2</sup>Andi Alam

<sup>1</sup>English Literature, Faculty of Languages and Arts, State University of Makassar

<sup>2</sup>Magister Program of English Education, State University of Makassar

\*Corresponding Author Email: [abd.halim@unm.ac.id](mailto:abd.halim@unm.ac.id)

Article Info	Abstract
<b>Article History</b> Received: May 2024 Revised: July 2024 Published: October 2024	<i>When it comes to efficiently developing and implementing a language program, doing a needs analysis is necessary. Thus, to fulfill students' English language demands in the International Class Program (ICP) of the Biology Department at Universitas Negeri Makassar, it is important to ascertain the learning requirements of students. This study aimed to find out students' expectations about English learning materials, and to assess their efforts to achieve it. This study employed a mixed-method approach to assess the needs of the students, integrating both qualitative and quantitative research approaches. The research included a total of 34 participants, comprising 31 second-year students enrolled in ICP of the Biology Department, 1 English lecturer, and 2 alums of the same program. The questionnaire and the interview were the instruments used to gather information. The study's results showed that students need English learning materials that are related to what they are studying. To improve their English, it was very important for the students to have access to the right English materials. Researchers looked at the learning needs of the students and found that they all had different levels of English ability. The students thought that reading and speaking were the most important skills to learn in order to be fluent in English. The most common problem the students had was incorrect grammar use. The students who took part in the ICP had different ways of learning, as shown by the analysis of goal needs. Some of these ways were reading English-language books and watching videos or movies. The most important ones were to improve their self-esteem and get ready for future job prospects. Reading English-language books, watching movies, and listening to music were the main things that students did to improve their English language skills.</i>
<b>Keywords</b> Learning Needs; Target Needs; Need Analysis; Materials developments;	
<b>How to cite:</b> Halim, A., Dollah, S., & Alam, A. (2024). Needs Analysis on Developing English Learning Materials for International Class Program (ICP). <i>JOLLT Journal of Languages and Language Teaching</i> , 12(4), 1755-1769. DOI: <a href="https://doi.org/10.33394/joltt.v12i4.11528">https://doi.org/10.33394/joltt.v12i4.11528</a>	

### INTRODUCTION

As an endeavor to augment the caliber of their alums, a considerable number of universities situated in the principal urban centers of Indonesia are instituting bilingual programs in English and Indonesian (Long, 2005). The phrase 'bilingual' pertains to the employment of two separate languages, specifically English as an additional language, within the realm of communication. Students in Indonesia occasionally struggle with studying English because they need to speak the language better ((Kaharuddin & Arafah, 2019)). The first thing to think about is how troublesome the course plan and content are. The second is that Indonesian classrooms are still typically boisterous and packed. The third factor is the fact that many educators need to be fluent in English, and therefore, more training in language pedagogy is necessary. Because of the first factor, in order to ensure that the course material and students' skills are well-matched, students

should assess the material in the context of their individual needs (Bocanegra-Valle, 2016; Flowerdew, 2012; West, 1994).

Among the universities whose International Class Program (ICP) provides multilingual instruction is the one at Universitas Negeri Makassar. The Department of Biology Education provides a program for international classes. Students are required to use English as the primary language of instruction in the classroom for this program. Given that English serves as the primary language of teaching in this program, it is crucial for students to feel at ease utilizing it within the classroom setting. The purpose of this language requirement is to facilitate students' active involvement with the course content and enhance their ability to interact with both their classmates and teachers. Consistent use of English enables students to enhance their language proficiency and cultivate self-assurance in their capacity to articulate ideas within an academic context. To complete the mission of the ICP class, it is necessary to create materials based on their needs.

In the process of developing ESP materials, need analysis is the initial stage. The method of needs analysis is utilized to ascertain the English language proficiency that is necessary for a variety of foreign occupations, disciplines, and circumstances (Calvo-Benzies, 2017; Nababan, 1993; Vičič, 2011). According to Richard (2001), the term 'need' is not as straightforward as it appears and is occasionally applied to concepts such as desire, demand, expectation, motivation, deficiency, restraint, and obligation. When developing any program, but especially one related to the English language, it is critical to conduct a requirements analysis. Furthermore, this analysis demonstrates that when developing language programs, it is impossible to disregard the needs, desires, and interests of students. We will fail to achieve the intended goals of education and learning should we opt to ignore it. Overall, need analysis pertains to the process of gathering information regarding particular client segments within the realms of education or business (Zohoorian, 2015). Moreover, a needs analysis is conducted to ascertain and categorize the requirements of students according to their order of importance (Tsao, 2008; Wello & Dollah, 2008; Yassi, 2018).

According to Tomlinson (2011), materials should be immersive, educational, eliciting, exploratory, and informational. This study examined the demands of students in the international biology class program for English learning resources. Students in this program frequently encounter scientific words that require English, and they also receive language education in English for specific subjects. In order to assess the requirements of students, it is necessary to consider two distinct categories of needs: target situation analysis (TSA) and present situation analysis (PSA) (Hutchinson & Waters, 1987). Target situation analysis, which is a component of needs analysis and identifies the language requirement of the learner in academic or professional contexts, is the first variety. The second variety, present situation analysis, pertains to the English proficiency of the learners as well as their current language requirements within the language program. The objective of addressing these two categories of requirements is to furnish students with appropriate English course design materials so that they may adequately accomplish their learning objectives as human resources proficient in English communication within the designated domain.

According to Basturkmen (2014), doing a needs analysis is crucial for effectively planning and implementing a language program. This study guarantees that the course is relevant and advantageous for the learners. The careful consideration of evaluation methodologies is a crucial prerequisite. Refrain from discarding them heightens the risk of delivering a course that does not align with the student's preferences (Songhori, 2008). Analysis of needs is a crucial aspect in enhancing the caliber of education and learning resources within foreign class programs offered by

institutions. A needs analysis is conducted to comprehend the individual requirements of students in acquiring English language skills (Albassri, 2016). This analysis aids in the development of English language learning materials that are tailored to their needs, hence enhancing learning efficacy and attaining optimal learning outcomes. In order to accomplish the goals of English learning materials in ICP, it is crucial to have accessible English learning and teaching materials tailored to the specific needs of the students. These materials play a vital role in the teaching and learning process, enabling students to acquire knowledge in their respective subjects effectively.

A range of studies have explored the needs of students in English learning materials. Destianingsih (2017) found that students at the State Polytechnic of Bengkalis preferred web-based materials and desired a variety of topics. Similarly, Nurpahmi (2020) discovered that students at UIN Alauddin Makassar needed English for math instructional materials, particularly in reading and vocabulary, and preferred auditory and visual learning. Kasyulita, et al (2022) identified specific topics that management students at the University of Pasir Pengaraian required in their English learning materials. Basri (2016) emphasized the importance of considering students' needs and proficiency in designing instructional materials, particularly for speaking skills. Sumarsono (2017) discovered a need for picture-enriched materials, academic writing, and cooperative learning in English writing instruction at the Faculty of Education for Language and Arts, IKIP Mataram. Lastly, Lestari (2020) highlighted the need for English teaching materials for non-English subject teachers, with a focus on the present and target situations, and the principles of material design. These studies collectively underscore the importance of tailoring English learning materials to students' specific needs and preferences.

Although a number of studies above clearly have provided positive shreds of evidence on the students' needs, studies on how students' expectations for their materials still need to be represented. This work is purported to address the aforementioned gap. In addition, this study explores students' thoughts on ICP in the Department of Biology at Universitas Negeri Makassar. There must be a specific difference when creating materials between international and regular classes. Researchers claim that understanding students' expectations is essential for constructing instructional content, as it plays a significant role in language teaching and learning. English educators should meticulously strategize and structure the teaching and learning process to ensure optimal student engagement and comprehension. Having stated the background previously, the recent study aims to answer the following questions:

1. What are students' learning needs in ICP of the Biology Department in Universitas Negeri Makassar?
2. What are students' target needs in ICP of the Biology Department in Universitas Negeri Makassar?
3. How do students meet their learning needs?

## **RESEARCH METHOD**

### **Research Design**

The researchers employed a mixed-methods approach, integrating qualitative and quantitative methodologies, in this study. Mixed methods research combines qualitative and quantitative approaches within a single study in order to obtain a more comprehensive and nuanced comprehension of the phenomena being studied (Doyle et al., 2009). The primary objective of this research is to find out what the students of ICP of the Biology Department in Universitas Negeri Makassar need in their English learning material. The subjects of this research were the second-year students in the

academic year 2023/2024, lecturers, and alums. There were 34 subjects in total, and they were divided into three groups. First is 31 students of the second year who have finished studying English, second is 1 lecturer who teaches English in ICP, and the last is 2 alums of ICP.

### **Research Instruments**

The researchers used two instruments to obtain the data: a questionnaire and an interview. A list of close-ended questions was used to determine the content of the materials. The questionnaires were used to identify present situation analysis (TSA), target situation analysis (TSA) and also to know the student efforts in achieving their learning need. Present Situation Analysis (PSA) covered learning ability, English skills, learning problems, and topic. Target Situation Analysis (TSA) covered learning style and learning purpose. The result from this instrument supported the data to complete the student needs of the research. It is expected to gain comprehensive information on students' needs in learning English besides the data from interviews.

The researchers conducted an interview as an instrument and adopted a structural interview. The interview guidelines include five questions about the student's needs in English learning. The interview was used to obtain significant data from the questionnaires, which were obtained by asking questions in order to conduct a need analysis, where the researchers interviewed the students, English lecturers, and alumni to gain the data.

### **Data Analysis Technique**

The researchers analyzed the data by using mix method. Mixed methods research is a new approach in which both the qualitative and quantitative research designs are mixed (Tashakkori & Creswell, 2007). The researchers used the data from questionnaires as quantitative analysis, while the data of interviews from the respondents as qualitative analysis. To find out the final value of various questions, questionnaire data analysis was conducted by finding the average score of each question by calculating the total value of all aspects divided by the number of questions or indicators given to the respondents. The proficiency score, the important score, and the frequency score of the student's needs were derived by giving each category score from one to four (poor, fair, good, and excellent).

The interview was conducted after the questionnaires to gather additional insights from the respondents. The researchers followed the interview guidelines, posing various questions to collect relevant data. Once the interview data was collected, it was analyzed and transcribed using Mills & Gay's (2019) framework, which includes the processes of pre-coding, coding, and summarizing. In the pre-coding phase, the researchers reviewed the transcripts to identify general information, interpret key ideas, and determine issues related to the research questions. During coding, the data was categorized, relevant information was reviewed, and irrelevant data was omitted. Finally, the summarizing process involved synthesizing the information from the previous stages to draw conclusions and answer the research questions.

## **RESEARCH FINDINGS AND DISCUSSION**

### **Research Findings**

The findings of this research are based on the results of the data analysis to determine the students' English needs. To answer the research questions, the results are divided into three parts: students' learning needs, students' target needs, and students' efforts. The details of the student's needs are presented in the descriptions of the figures, tables, and interview transcripts.

### ***Students' Learning Needs***

The analysis of the student's learning needs presented involves a detailed examination of respondent performance within ICP. The student's learning needs in this research were based on Present Situation Analysis (PSA), which covers learning ability, English skills, learning problems, and topics related to learning English for Specific Purposes in a classroom setting.

#### **Learning Ability**

The questionnaires contained five questions that were used to collect data on learning ability. The first question concerns the students' proficiency in learning English. The results of the analysis of students' ability levels show that the students of the International Class Program of Biology have a good ability level in English, especially in reading skills. The result can be seen in the following figure.

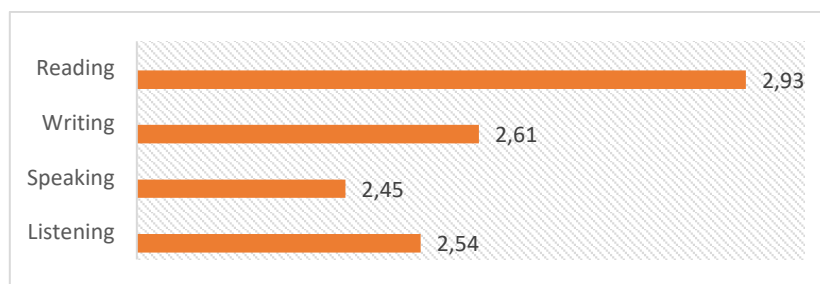


Figure 1. The student's ability level in learning English

The next question is about the importance level of the students' ability in writing. The analysis showed that the students of the International Class Program of Biology need more academic vocabulary when writing the learning report. The figure below shows the results of the questions.

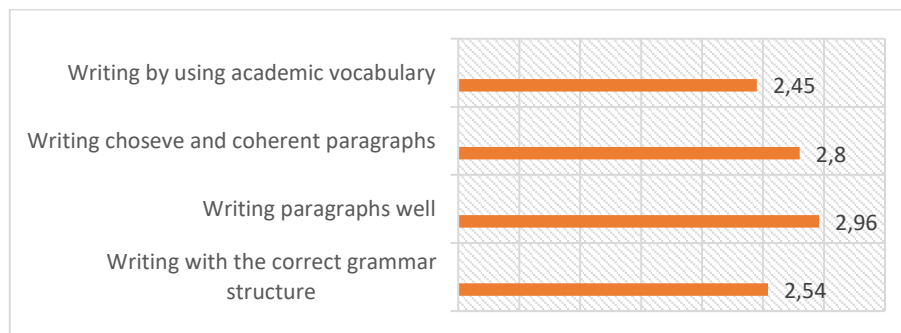


Figure 2. The Students' ability in writing

The next question is about the importance level of the student's ability to speak. Based on these data, the students of the International Class Program think that all items are important in speaking skills, and they prefer to speak according to the correct grammar. The figure below shows the results of the questions:

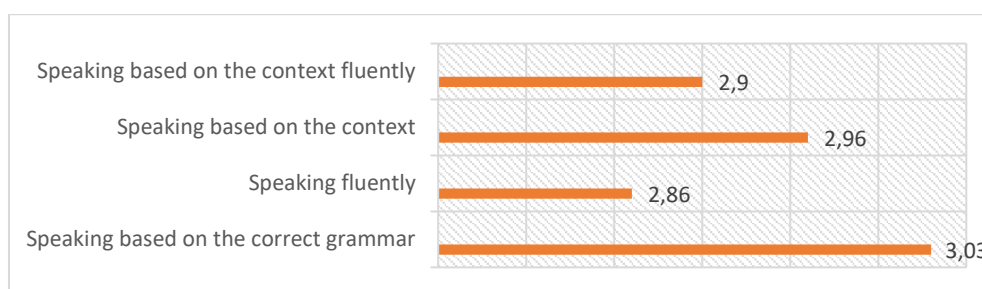


Figure 3. The Students' ability to speak

The next question is about the importance level of the students' ability in listening. The findings showed that many students of the International Class Program of Biology choose to be able to understand listening material. The figure below shows the results of the questions:

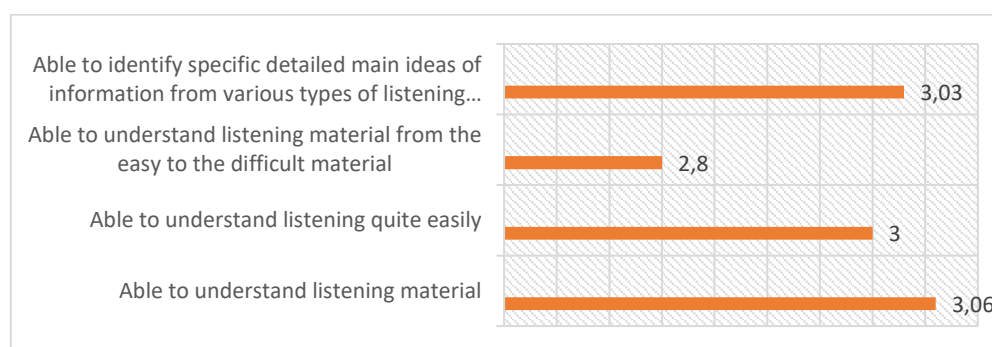


Figure 4. The Students' ability to listen

The next question is about the importance level of the students' ability in reading. The analysis of the data means that the students of the International Class Program of Biology think that all of the items of reading skills are important. The figure below shows the results of the questions:

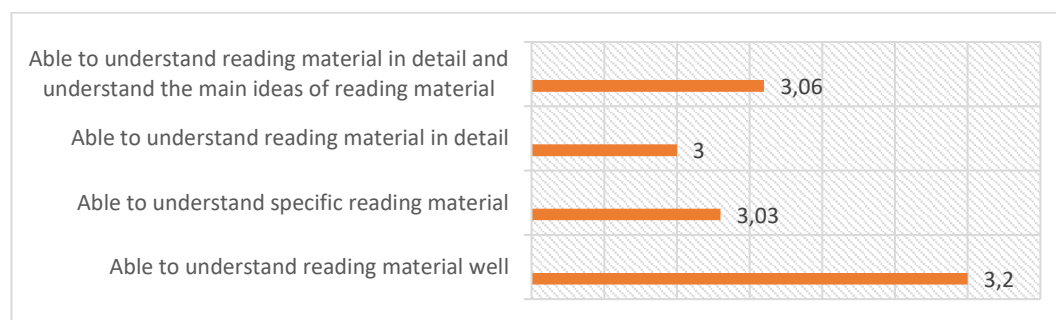


Figure 5. The Students' ability to read

### English Skill

The analysis is about the importance of the student's English skills in learning English for the International Class Program of Biology. The findings showed that while the students prefer reading, it is important to note that listening, speaking, and writing are also crucial aspects of English proficiency. The results of the analysis can be recognized as follows:

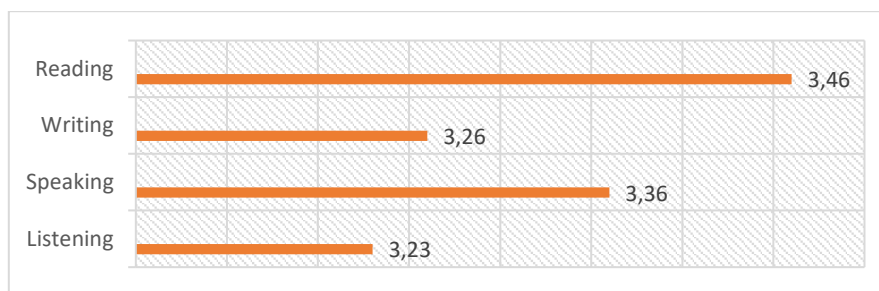


Figure 6. Students' English skill

English plays a very important role in this major so that the students are able to improve their competence as the students in the International Class Program, making them easier both in terms of understanding scientific words and reading international journals. Besides that, English can help the students of the International Class Program to find a job, especially in the International workplace. The following statement from the students approves this reason:

*“English is not an important thing anymore, but rather something that must be mastered apart from being an international language and remembering that I am majoring in International Class Program of Biology Education or an international class. Therefore, English plays a very important role in making me being able to increase competence and adapt to international”* (Respondent 2, January 11<sup>th</sup> 2024)

### Learning Problem

The next analysis is about the students' learning problems in English. The lowest average score is lack of motivation, which means that the students of the International Class Program of Biology rarely experience a lack of motivation in their English language learning process. The results of the analysis can be recognized as follows:

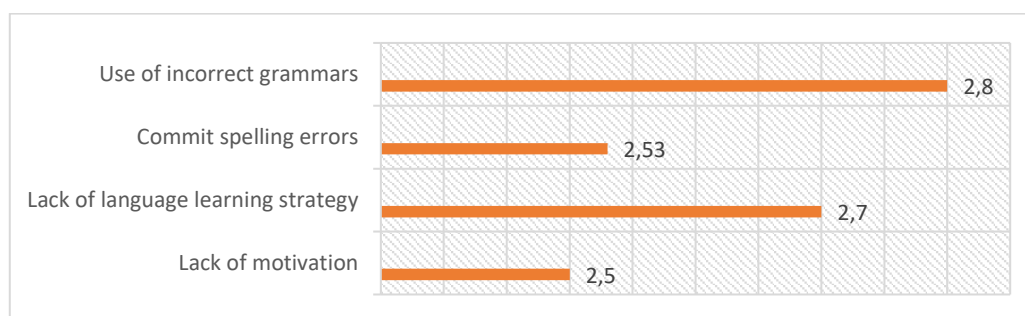


Figure 7. Students' Learning Problem

Additionally, Some of the problems they face include pronunciation errors in English, lack of mastery of vocabulary, and the use of incorrect grammar, in accordance with the following responses:

*“The problem that I face in English is one in several aspects, of course, such as listening; I am not really able to differentiate between what is being said and what the sentence is; it is like I still hear it wrong a lot, I still have difficulty with grammar structure”* (Respondent 3, January 11<sup>th</sup>, 2024)

### Topic

The next question concerns the suggested topics in English. This analysis suggests that the students of the International Class Program of Biology perceived all suggested topics as significant to their learning. The researcher selected fifteen topics, the priority levels of which can be seen in the following table.

Table 1  
The Result of the Topics in English

No	Topics	Average Score	Category
1	Introduction	3.26	Very Important
2	Ask and give an answer	3.46	Very Important
3	Grammar	3.50	Very Important
4	Write daily activity	3.40	Very Important
5	How to write a CV	3.30	Very Important
6	Time Signal	3.46	Very Important
7	Morphology Plant	3.20	Important
8	Animal Structures	3.20	Important
9	Biochemistry	3.20	Important
10	Zoology Invertebrates	3.20	Important
11	Anatomy Plant	3.20	Important
12	Botany Plant	3.20	Important
13	Vertebrate Zoology	3.10	Important
14	Physiology Plant	3.16	Important
15	Physiology Animal	3.06	Important

Students in the International Class Program of Biology realize that the suitability of English learning materials is very helpful for them, especially in terms of reviewing international journals and writing their practical reports, which are required to use English. The following statement approves this reason;

*“The English material that I studied in the 2nd semester was more about tenses, like tenses, the 16 tenses that were studied, the lecturer emphasized things like tenses and tenses, and in my opinion, it was in English, in my opinion, it was not appropriate because it is more about tenses”* (Respondent 3, January 11<sup>th</sup>, 2024)

Besides, the students feel that their English material is not suitable enough. The following statement states that the English learning material in the International Class program is suitable.

*“From many classes that I attended on campus areas, yes, the English material was in accordance with the field that I was studying because there were also programs implemented by the faculty that studied English in the context of my study”* (Respondent 1, January 8<sup>th</sup>, 2024).

### Students Target Needs

The analysis of students' target needs was conducted to determine what students need to do in the target situation. Hutchinson and Waters (1987) regarded target needs as an umbrella term that, in practice, hides a number of important distinctions. In this research, students' target needs refer to Target Situation Analysis (TSA), which covers learning style and learning purpose.



### Learning Style

In this analysis, learning style becomes a part of target needs. The data shows that the students of the International Class Program of Biology are more interested in learning English through video; the result can be seen in the following figure:

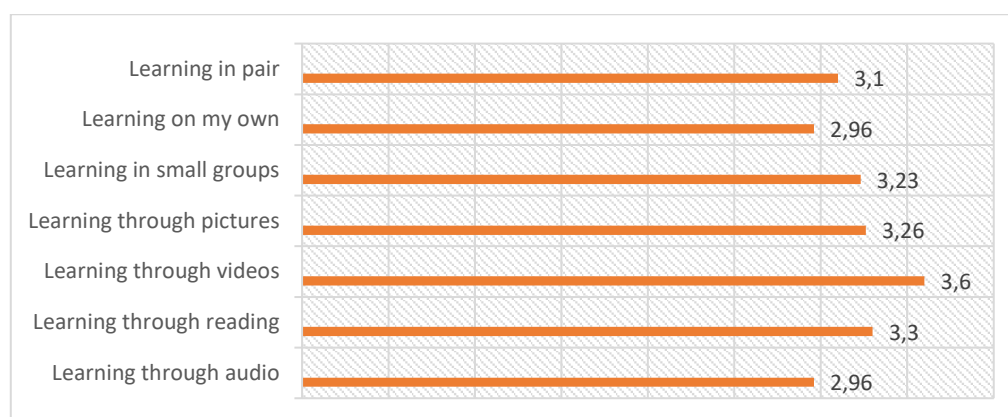


Figure 8. The student's learning style

### Learning Purposes

The next question of the target needs section concerns learning purpose. According to the data analysis, most students chose the purpose of securing a future career, which secured the highest position among the listed objectives. The data analysis of the learning purpose can be seen in the following figure and interview transcripts.

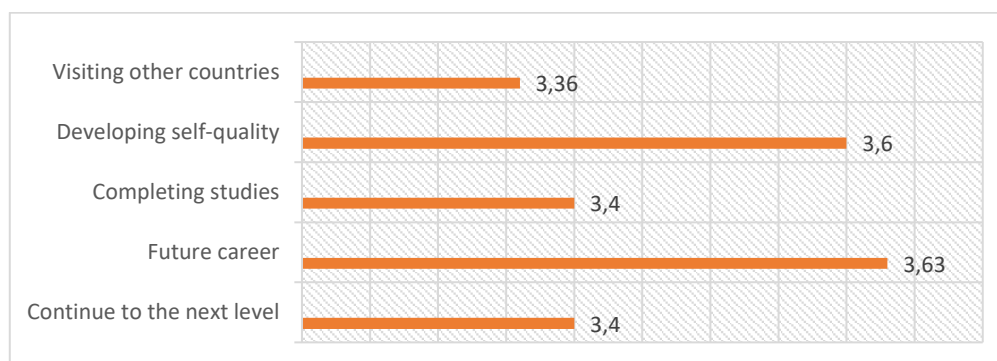


Figure 9. The students' learning purpose

Learning English is important because there are several goals for future planning. The students of the International Class Program of Biology have their own goals. The politicians below provide evidence of this.

*“My main goal in learning English is first, if I have the fortune, I want to continue my Master degree then there are lots of opportunities that require English”*  
(Respondent 3, January 11<sup>th</sup>, 2024)

### Students' Efforts

Learning effort is considered a key element in education for teachers, students, academic researchers, and even parents because it is an internal factor that can be controlled among a number of factors believed to improve educational outcomes (Selda, 2020).

Students' efforts can be reflected through a variety of different methods, experiences, and resources, reflecting their circumstances and background knowledge. In this research, the students' efforts were analyzed to determine their efforts or strategies in achieving their English needs. From the data, the students of the International Class Program of Biology think that reading English texts is the most important effort they can make to improve their English skills. The following figure and interview transcripts present the findings of the student's efforts.

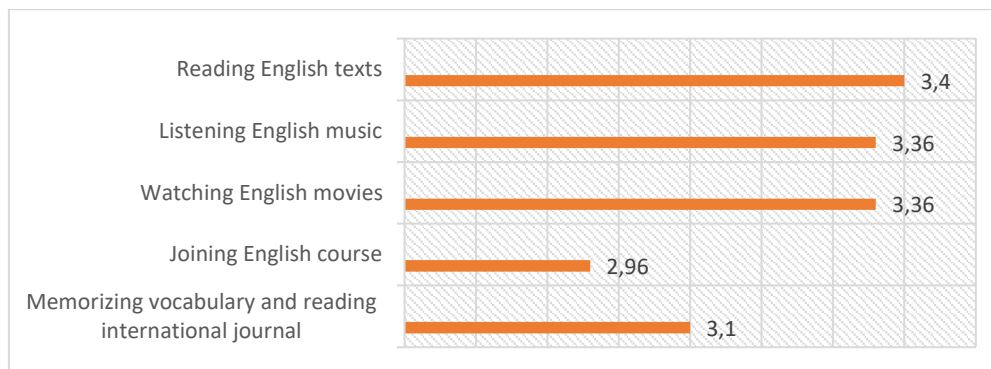


Figure 10. The students' efforts

To master English, effort is needed. The students have made some efforts for that purpose, including watching English movies, listening to English music, reading English books, working in pairs, and also using an English application, specifically Duolingo.

*"As an effort for now, I upgrade my skills by using the Duolingo application. Apart from that, to improve my listening, I also often watch movies which are Hollywood movies whose subtitles are in English so that I can learn better English with that"* (Respondent 5, January 11th, 2024)

## Discussion

This research aims to discover what students really need in English learning material by investigating learning needs, target needs, and students' efforts. Based on the analysis framework, the researchers used the need analysis theory of Hutchinson & Water (1987) and Nurpahmi et al. (2020), which divided need analysis into Present Situation Analysis (PSA) and Target Situation Analysis (TSA). In this research, present situation analysis covers learning needs, while target situation analysis covers target needs and students' efforts.

## Students' Learning Needs

Based on Hutchinson & Water (1987), learning needs to cover the process of how the students study, which includes the student's ability, skill, strategy, and motivation in learning a language. Hutchinson and Water further explained that learning needs cover the need for enjoyable, manageable, fulfilling, and generative tasks in learning situations.

The students of the ICP of Biology Department exhibit varying levels of English proficiency. The data indicates that a significant number of students succeed in reading compared to other talents. The significance of each facet of English language proficiency is distinct for kids. When it comes to writing, students realize the significance of effectively constructing paragraphs. Conversely, in verbal communication, proficiency in speaking that is grounded in accurate grammar is seen as the fundamental aspect of speaking.

Similarly, in the context of listening, the capacity to comprehend auditory information is regarded as crucial. In addition to this, proficiency in comprehending written text is widely regarded as a crucial aptitude in the realm of reading. Proficiency in English, encompassing writing, speaking, listening, and reading, holds significant value throughout several domains of life. Writing facilitates the straightforward communication of ideas, speaking with accurate grammar can create a professional impression, listening aids in the recovery of information, and reading aids in the expansion of knowledge. In general, these skills are essential not just for acquiring knowledge but also for engaging in everyday relationships, both inside the academic and professional spheres.

Cultivating proficiency in the English language is a crucial requirement for students, irrespective of their status as either English language learners or non-English language learners. The reason for this is that English has emerged as the prevailing global language in diverse domains, such as education, communication, and professional pursuits. Consequently, the enhancement of English language proficiency holds significant importance for students, encompassing those doing the ICP of Biology Department. The students in the ICP of Biology Department acknowledge the significant role that English plays in their present educational journey as well as in shaping their prospects. English is seen as an essential instrument for accessing up-to-date educational materials, facilitating communication with colleagues from diverse nations, and broadening job prospects on a global scale. The results of student questionnaires and interviews further demonstrate the significance of English language proficiency for students in the ICP of Biology Department. The findings of this study indicate that students possess an awareness of the significance of English language proficiency in acquiring a comprehensive comprehension of biological sciences on a worldwide scale, engaging in effective collaboration with colleagues from diverse cultural backgrounds, and attaining success in their prospective professional endeavors.

It is undeniable that students encounter challenges throughout the learning process, which might impede their progress, especially when it comes to learning English. Students in the ICP of Biology Department sometimes need help with learning English due to factors such as a lack of interest, an inadequate study plan, careless spelling and grammar usage, and other similar issues. According to the data, the usage of poor grammar ranks highest (in the often category), while a lack of motivation ranks lowest (in the seldom category). The students also reported nearly experiencing grammar-related difficulties while learning English, according to the interview data. Students in the ICP of Biology Department should, therefore, focus on improving their grammar or learning how to use correct grammar more; this is because grammar is an important factor to consider when learning English and is related to all of the English skills. As a result, the students' biggest problem with learning English is related to grammar.

In the ICP of Biology Department, nearly all students understand the significance of studying English. It is also crucial to think about whether or not the course materials are appropriate. From what we can tell from the interview data, the vast majority of students feel that their English learning materials do not meet their needs. In contrast, a small number of students hold the opinion that the materials are suitable. This falls under the category of "appropriate" and "inappropriate" learning materials, respectively. In addition, according to ESP, students can choose from a variety of study topics to enhance their English proficiency. The Biology Department students in the ICP understand the significance of studying English, especially grammar. The significance of accommodating varied learning preferences is underscored by the fact that there are differing views on the appropriateness of particular subjects.

### Students Target Needs

This section is utilized to answer the second research question, which is to find out the students' target needs in the ICP of Biology Department. The target needs is what the students need to do effectively in the target situation.

According to the study's findings, students understand the significance of their learning style in the information processing and comprehension processes. Students often find that watching English-language films or videos is the most effective way to learn the language, and it's also the most popular choice. It is widely recognized that students in the ICP of Biology Department have a variety of learning styles when it comes to comprehending English-language learning materials. Therefore, it is crucial to acknowledge and accommodate these different learning styles in order to enhance the learning experience for all students.

Perception data analysis shows that ICP students value self-improvement and future careers. What this means is that studying English is being prioritized over establishing self-quality and potential careers. The majority of students rank the pursuit of future employment opportunities as the top motivation for studying English, according to the statistics. All students are highly motivated and committed, which indicates that they have a shared awareness of the many ways in which improving their English skills may help them in their academic, personal, and professional lives.

The exertion of students is pivotal in improving their English proficiency according to their requirements. The motivational process of students involves engaging in activities and pursuing objectives in order to meet their requirements. The students possess a strong desire to achieve a high level of proficiency in English communication, leading them to dedicate substantial efforts toward enhancing their oral language skills. Some individuals place high importance on improving their English listening abilities, deriving pleasure and ease from activities such as listening to music and viewing movies. On the other hand, some individuals choose to enhance their English skills by improving their written communication and reading understanding. The significance of providing a comprehensive language education program that caters to the varying learning methods and preferences of students is highlighted by the presence of various learning preferences.

In Indonesia, there has been a growing needs for English language instructors in both formal and private settings, including state and private universities (Poedjiastutie & Oliver, 2017; Zein et al., 2020). According to Genessee (2006) and Damari, et al. (2017), the demand of English has been sparked by developments in commerce and industry that necessitate individuals to possess a sufficient level of proficiency in both written and spoken language. The ESP curriculum bears numerous similarities to the English language curriculum as a whole, notwithstanding the presence of characteristics that are characteristic of specialized subjects. Haryono (2020) studied needs analysis for Civil Engineering Students. Based on his research, there exists a highly interconnected and interdependent correlation between ESP and requirements analysis. The researcher aims to investigate the connection between requirements analysis and English for Specific Purposes (ESP), particularly in the context of Civil Engineering students. According to him, all parts of ESP learning should foster a conducive environment for students to acquire knowledge. In order to create an effective learning environment, the learner must be conscious of their requirements, interests, and motivations for learning English. Consequently, learners would be driven and derive pleasure from the learning process, as facilitating elements in acquiring knowledge of the target language.

Another study that focuses on needs analysis was by Chiu, et al (2023). They investigated the design principles derived from requirements analysis that govern the development of a context-aware English learning system in Taiwan. Their paper presents the results of a requirements analysis that was undertaken as part of a Design-

Based Research project to provide guidance for the development of the system, materials, and activities associated with English for Fitness Purposes (EFP) and context-aware ubiquitous language learning (CAULL) in a fitness center. In addition to a questionnaire, the data collection methodologies included on-site observations and semi-structured interviews. A total of 82 undergraduate students, seven physical education (PE) lecturers, and six non-PE faculty members who utilized the fitness center frequently comprised the participants. The findings indicate that all three groups agreed unanimously that fitness requires both receptive and specific language abilities. They noted the need for vocabulary pertaining to a variety of subjects, including warm-up and cool-down calisthenics, cardiovascular exercises, and weight training. In addition, as indicated by the participants, the CAULL system ought to be built upon hypermedia elements, incorporate a portfolio, and feature an intuitive interface. On the basis of the discovered principles, a blueprint for a CAULL system was formulated. Context-aware language learning researchers, instructional designers, and the field of English for Specific Purposes would find the results noteworthy.

Two studies above showed how needs analysis is worthy to do for all kind of educational background. It shows how important to do needs analysis for non-native English students, as similar to the current study. Needs analysis is a crucial process in understanding the specific requirements and challenges faced by non-native English students. By conducting a needs analysis, educators can tailor their instruction to meet the individual and collective needs of these students, ensuring that they receive the support and resources necessary for their success in English language learning. Furthermore, needs analysis allows educators to identify specific areas of difficulty for non-native English students, such as distinguishing between spoken and written English, outlining before writing a draft, and identifying the necessary skills for successful writing.

## CONCLUSION

The analysis of the students' learning demands reveals that they possess a wide range of requirements in acquiring English language skills and encounter various challenges in their learning process. The reading skills of students in the ICP of the Biology Department exhibit a higher level of proficiency in comparison to their proficiency in other areas. Conversely, the predominant issue encountered by students is the utilization of erroneous grammar. The students of ICP value language in terms of their material preferences. Based on the examination of the target environment, it can be observed that students in ICP exhibit a range of learning styles when it comes to acquiring English language skills. They acknowledge the significance of learning styles in the cognitive processing and comprehension of information, exhibiting a predominant inclination towards acquiring knowledge through visual media such as videos and films. Furthermore, the students possess diverse learning objectives when engaging in the study of English, with a primary focus on their future professional aspirations and personal growth.

The students attempted to enhance their English proficiency by engaging in activities such as reading English texts, viewing films/movies, and listening to music. To cater to these students' different requirements, educational interventions can be customized to enhance the English learning experience for students, making it more effective and inclusive. In conclusion, needs analysis encompasses not only the students' perspectives but also those of all stakeholders in the educational system and important user entities that eventually hire students. The contents, methods, and approaches of needs analysis should be evaluated and chosen based on the specific teaching and learning settings and conditions in Indonesia.

## REFERENCES

- Albassri, I. A. (2016). *Needs-analysis-informed teaching for English for Specific Purposes*.
- Basri, M., Jannah, H., & Ampa, A. T. (2016). An Analysis of the Students' Needs and their Speaking Proficiency in Designing Instructional Materials. *Mediterranean Journal Os Social Sciences*, 7.
- Basturkmen, H. (2014). *Ideas and options in English for specific purposes*. Routledge.
- Bocanegra-Valle, A. (2016). Needs analysis for curriculum design. In *The Routledge handbook of English for academic purposes* (pp. 560–576). Routledge.
- Calvo-Benzies, Y. J. (2017). *English as a Lingua Franca (ELF) in ESP contexts. Students' attitudes towards non-native speech and analysis of teaching materials*.
- Chiu, W.-Y., Liu, G.-Z., Barrett, N. E., Liaw, M.-L., Hwang, G.-J., & Lin, C.-C. (2023). Needs analysis-based design principles for constructing a context-aware English learning system. *Computer Assisted Language Learning*, 36(1–2), 176–204. <https://doi.org/10.1080/09588221.2021.1905666>
- Damari, R. R., Rivers, W. P., Brecht, R. D., Gardner, P., Pulupa, C., & Robinson, J. (2017). The demand for multilingual human capital in the US labor market. *Foreign Language Annals*, 50(1), 13–37.
- Destianingsih, A., & Satria, A. (2017). A Study On Students'need Analysis On Web-Based English Learning Materials. *Inovish Journal*, 2(1), 48–57.
- Doyle, L., Brady, A.-M., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, 14(2), 175–185.
- Flowerdew, L. (2012). Needs analysis and curriculum development in ESP. *The Handbook of English for Specific Purposes*, 325–346.
- Genesee, F. (2006). What do we know about bilingual education for majority-language students? *The Handbook of Bilingualism*, 547–576.
- Haryono, E. P. (2020). Needs Analysis in ESP and their Relationship with English for Civil Engineering Students. *Jurnal Teknik Sipil Terapan*, 2(1), 1–8.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge university press.
- Kaharuddin, H., & Arafah, B. (2019). Needs Analysis on English for Vocational Purpose for Students of Hospitality. *AICLL 2019 - The Second Annual International Conference on Language and Literature*.
- Kasyulita, E., Donal, A., Antoni, R., Niati, B., & Eripuddin, E. (2022). Need analysis of management students towards the English learning material. *Academy of Education Journal*, 13(2), 359–368.
- Lestari, S. (2020). Needs analysis to design a set of English teaching materials for non-English subject teachers. *EduLink: Education and Linguistics Knowledge Journal*, 2(1), 67.
- Long, M. H. (2005). Overview: A rationale for needs analysis and needs analysis research. *Second Language Needs Analysis*, 1, 16.
- Mills, G. E., & Gay, L. R. (2019). *Educational research: Competencies for analysis and applications*. ERIC.
- Nababan, P. W. J. (1993). *ESP Materials Preparation in a Foreign Language Situation*.
- Nurpahmi, S., Kamsinah, N. N., & Ningsih, N. (2020). Need analysis of English for math instructional material. *ICLLT 2019: Proceedings of the 1st International*

- Conference on Language and Language Teaching, ICLLT 2019, 12 October, Magelang, Central Java, Indonesia*, 82.
- Poedjiastutie, D., & Oliver, R. (2017). English Learning Needs of ESP Learners: Exploring Stakeholder Perceptions at an Indonesian University. *TEFLIN Journal: A Publication on the Teaching & Learning of English*, 28(1).
- Richards, J. C. (2001). *Curriculum development in language teaching*. Cambridge university press.
- Selda, Ö. (2020). Foreign language learning effort levels of students in English for Specific Purposes. *Journal of Language and Linguistic Studies*, 16(3), 1352–1367.
- Songhori, M. H. (2008). Introduction to needs analysis. *English for Specific Purposes World*, 4(20), 1–25.
- Sumarsono, D., Bagis, A. K., & Arrafii, M. A. (2017). Students' needs to develop English writing materials. *Lingua Cultura*, 11(2), 67–71.
- Tashakkori, A., & Creswell, J. W. (2007). The new era of mixed methods. In *Journal of mixed methods research* (Vol. 1, Issue 1, pp. 3–7). Sage Publications.
- Tomlinson, B. (2011). *Materials development in language teaching*. Cambridge University Press.
- Tsao, C.-H. (2008). English-learning motivation and needs analysis: a case study of technological university students in Taiwan. *Basic Research Conference of Chinese Military Academy on Its 84th School Anniversary*.
- Vičič, P. (2011). Preparing materials for ESP teaching. *Inter Alia*, 2, 107–120.
- Wello, B., & Dollah, S. (2008). Fundamental Aspect of English for Specific Purposes. *Badan Penerbit UNM*.
- West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27(1), 1–19.
- Yassi, A. H. (2018). *Syllabus Design of English Language Teaching*. Prenada Media.
- Zein, S., Sukyadi, D., Hamied, F. A., & Lengkanawati, N. S. (2020). English language education in Indonesia: A review of research (2011–2019). *Language Teaching*, 53(4), 491–523.
- Zohoorian, Z. (2015). A needs analysis approach: An investigation of needs in an EAP context. *Theory and Practice in Language Studies*, 5(1), 58.