Analysis of the Students' Needs in General English Course at the Civil Engineering Study Program of a Higher Education in Papua

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ABSTRACT

The goal of this study is to identify the requirements of students enrolled in the Civil Engineering Study Programme at a Papua university’s General English Course during the second semester. A quantitative approach was taken for this investigation. Up to 200 students will participate in this survey. Questionnaire surveys were used to compile the data. Using a quantitative approach, the collected data is poured into a tabular data and matrix format for analysis. The findings show that raising students’ consciousness of the importance of self-discipline in the classroom is a top priority. They must also participate actively in class in order to succeed. Students require content integration, English skills, and language aspects pertinent to course themes. In order to successfully complete the General English Course, students must have a firm grasp of all facets of the English language. In the framework of a General English Course, students will find the most success with the Student-Centred Learning Approach. Strategies like this include autonomy, curiosity, and self-control. Students have access to a wide variety of resources, including but not limited to those relating to civil engineering, general context, science and technology, and topics related to students’ daily lives.

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1. INTRODUCTION

The activities for learning a language can have an effect if the teacher knows what the student needs (Allo, Rahman, and Sultan, 2020; Khandaghi Khameneh and Hashamdar, 2021). Their needs and choices are important for making students more independent and for planning a student-centred plan. That means it should also be taken into account when judging issues. Calhoun (2022) said that when the educational programme is being planned, the students’ needs and choices should be considered. Needs analysis is a group of ways to figure out what courses to offer. These include models or accounts of finding
students, deciding on and ordering materials, and figuring out the approach, power, and time needed. Rosen (1922) said that the progression of needs analysis could tell the course author how to explain the content of the Course in a way that makes sense and is accurate for a certain group of learners.

Needs analysis is the plan’s beginning stage (Chamorro, del Carmen Garrido-Hornos, & Vázquez-Amador, 2021; Farah & Rumalessin, 2021). In this review, a requirements examination was led on General English course. This course is taught to the Second Semester students of the Civil Engineering Study Program, a Higher Education in Papua who took General English subject. General English courses aim to improve English language skills in general, emphasising reading, listening, reading, speaking, writing skills and language areas. To achieve that general goal, of course, some aspects of the learning process must be considered by the teacher. These things are the elaboration and achievement of the specific goals of each material sub-topic, teaching and learning activities (teaching and student activities), selection of media and teaching tools, teaching strategies, and learning evaluation.

Todea and Demarcscek (2017) state that despite students’ necessities being hypothetical of prime significance in current student-focused approaches, needs examination is seldom completed in the General English study hall. It is contended that this is incompletely a result of an incorrect conviction that it is preposterous to expect to indicate the requirements of General English students, and mostly due to an absence of writing on the items of common sense of examining needs information with regards to General English. An illustration of the examination of mental and social requirements in a single specific General English homeroom is managed exhaustively. The reason for this is to show that it is feasible to indicate General English requirements, even in the theoretical area of psychosocial needs; to exhibit that needs investigation can be helpful in the General English study hall concerning critical thinking and as a reason for planning points, courses, and materials; and to give a substantial delineation of how examination of information can be performed, and the way in which a tight and coordinate connection can be kept up with between necessities, points, and materials, and what really happens in the homeroom.

According to Setiyadi (2020), the first step in developing a curriculum is conducting a needs assessment. All subsequent course plan exercises are given credibility and relevance by Abdullaev (2021). According to Mahbub (2021), this information should feature things like the desired outcomes or assumptions for a top-notch programme, the task of evaluation, the current state of student achievement, and the actual substance of the programme itself. Clement and Murugavel (2015) suggest that the information should also take into account the concerns and viewpoints of teachers, board members, parents, and students. At the same time, the data should include instances of evaluations, examples from teachers, tasks, results on state government-sanctioned tests, reading material currently used, student insight, and parental feedback (Mastoi, Shah, & Lohar, 2019).

There are multiple types of needs analysis (NA). Learner analysis is a type of NA that focuses on the learner’s needs. Task analysis is more focused on the types of activities that might be successful in the classroom (Arias-Contreras & Moore, 2022). Another two types of needs analysis were expressed (Okatarina, Inderawati, & Petrus, 2022). Objectives, plans, and intentions of language use are all considered in subjective needs analysis. Based on facts such as first language, age, and country of birth, subjective needs analysis tries to find more concrete and authentic types of needs of the learner. Two different kinds of NA will be employed in this research. 1) A learner’s target needs are those demands that are relevant to a given scenario. In a given context, learners’ wants, needs, and strengths are the primary emphasis of target needs instruction. Necessary items for a language learner to know in a given situation. The student may need to be able to read and comprehend texts in a certain discipline for professional reasons. The degree to which a teacher needs to step in and help a student depends on the student’s level of independence. A profile of the learner’s deficits can then be constructed by comparing the desired proficiency with the learner’s actual proficiency. Finally, desires represent the student’s own interpretation of his or her educational requirements. The learner’s wants are the items they recognise they need in order to use the target language effectively. The instructor can gain insight into the students’ needs through questions and interviews. The student’s learning needs are the steps they must take to
achieve the course goals. As outlined in the learning needs checklist, the learner’s wants and needs provide a step-by-step guide for navigating the language learning process.

The learner’s attitude towards the target language, their grasp of the language, what motivates their development, effective learning strategies, and their individual profile are all essential components of the learning process. Exciting, intriguing, original, grounded, and realistic ESP courses can help students learn and apply the material in the allotted time. English as a Second Language classes are not like those you might have had in the past. The instructor must consider the learners’ target situation needs and learning needs while developing lessons to effectively satisfy the learners’ expectations and needs.

Several researchers have conducted studies on the needs of learners. Needs of learning material by (Yolanda, Ngadiso, & Sumardi, 2018), needs analysis on teaching and learning (Alfian, 2019) need analysis in ESP (Istiningrum, 2022), English Language Training Need Analysis for Engineering Students (Clement & Murugavel, 2015) and Students’ Need for Developing Material of English for Civil Engineering (Wulanjani, 2018). In this study, the researcher elaborates on the Students’ Learning and Language Needs in General English Courses in the Civil Engineering Study Program. In light of the foundation referenced above, specialists are intrigued and roused to investigate the students’ needs in General English Course at the Civil Engineering Study Program of Yapis University Papua, Indonesia. Therefore, the research question of this study is what are the needs of students in the General English Course of the second-semester students of the Civil Engineering Study Program, a Higher Education in Papua?

2. METHODS

The most common approach to educational research is quantitative, and that’s what we’ve done here (Crowther & Lancaster, 2012). Up to 200 students from a Papuan university’s civil engineering course in their second semester participated in the study. Of the total responses, 73 were men, and 127 were women. The respondents’ ages ranged from 20 to 22. The respondents’ ethnicities comprised Papuans, Javanese, Sulawesians, and Bornean. Surveys (questionnaires) were used to collect data (Creswell, Klassen, Plano Clark, & Smith, 2011). Allo and Baka (2018) provided the source for the questionnaire that was used. The information is first described using a descriptive method (Creswell, 2014), and then poured into a data table and matrix for analysis. In this study, we used a formula based on percentages and frequencies to do the analysis:

\[ P = \frac{f}{N} \times 100 \]

\( P \) = Percentage of students
\( f \) = The frequency of students who vote.
\( N \) = total respondent

After that, a descriptive analysis is conducted to obtain an idea of the Students’ Learning and Language Needs in the General English Course at the Civil Engineering Study Program of Higher Education in Papua.

3. FINDINGS AND DISCUSSION

This section is discussed the Students’ Learning and Language Needs in the General English Course at the Civil Engineering Study Program of Higher Education in Papua. The dimension of discussion is the importance of General English courses, Interest in learning English, attitude towards the discipline of working and collecting tasks, attitude to classroom participation, student attitudes toward material integration, English skills, and language elements, Interest in English skills, respondents’ attitudes towards teacher-centred learning, Respondent attitude towards learners who are active in learning, Needs of teaching methods, Respondent attitudes towards self-regulated learning, Respondents’ attitude towards enquiry-driven learning, Respondents’ attitude towards independent learning, and topics of preferred lessons in learning English.
a. The Importance of General English Course

![Bar Chart]

**Figure 1.** The result of the questionnaire on the significance of learning English

The results show that students understand the significance of learning English. Investing in a general English course can provide dividends for students' future success in many areas, including communication, education, employment, and cross-cultural understanding. English proficiency tests are becoming a standard admissions and hiring requirement at many institutions. Students can improve their English language skills and expand their academic and professional horizons by enrolling in a general English course. A second benefit of studying English is that it can help students develop a more global perspective by allowing them to communicate with native English speakers worldwide. The tourism business also makes extensive use of the English language. Students' ability to get around and interact with natives in a foreign country is greatly enhanced by their command of the English language.

b. Attitude to the discipline of working and collecting tasks

![Bar Chart]

**Figure 2.** The result of the questionnaire on students' discipline

From the data, it's clear that students know how to work and gather tasks in order. Students can learn a lot from the discipline of working and completing chores in a number of ways: Better time management skills: When students keep track of their tasks and work on them regularly, they learn how to use their time well. They are more likely to set priorities and not put things off, which can help them get better grades and feel less stressed. Next, more work was done: Students can stay focused and
inspired if they have routines and follow the rules. Students can work on chores one at a time and get closer to their goals if they break them up into smaller, more manageable parts. Also, students are more likely to get better grades when they are responsible for finishing and turning in their work on time. This is because they are less likely to miss deadlines and can use their teachers’ comments to make their work better. The last one is better self-discipline. Students can learn self-discipline by working on tasks regularly and meeting goals. This skill can help them reach their goals and stay inspired for the rest of their lives. Overall, working and collecting projects can help students do better in school, be more productive, be better at managing their time, and be more self-disciplined.

c. Classroom participation

![Figure 3. The result of the questionnaire on classroom participation]

Generally, learners need to be active learners in the classroom. Learners need to be active in the classroom because it enhances their ability to retain and apply knowledge. Active learning involves engaging in activities requiring learners to interact with the material being presented rather than simply receiving information passively. This can include asking questions, participating in discussions, working on projects, and practising skills. When learners actively engage with the material, they are more likely to remember it because they are forming connections between the new information and their prior knowledge. Additionally, active learning promotes a deeper understanding of concepts and encourages critical thinking and problem-solving skills. Active learning also promotes student engagement and motivation, as it makes the learning process more enjoyable and meaningful. When learners are actively involved in the learning process, they are more likely to be interested in the subject matter and more willing to put in the effort required to succeed. Overall, active learning is an effective way to promote student learning and engagement in the classroom, and it is a crucial component of any successful educational program.

d. Attitudes on material integration, English skills, and language elements

![Figure 4. The result of the questionnaire on material integration]

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The results show that material integration, English abilities, and language components are crucial for pupils. The term "material integration" refers to using several sources to increase one’s knowledge of and facility with English. In today’s increasingly interconnected and internationalised world, the ability to communicate effectively in English is more important than ever. The ability to express oneself clearly and concisely in English necessitates a solid foundation in grammar and vocabulary as well as familiarity with cultural norms and colloquial idioms.

Material integration can help individuals develop their English skills in several ways. For example, incorporating multimedia resources such as videos, podcasts, and interactive language learning apps can enhance listening and speaking skills. Reading materials such as books, articles, and newspapers can help improve reading and comprehension skills and expand vocabulary and knowledge of different topics. In addition to using various materials, integrating different language elements can also help improve English skills. This includes using idiomatic expressions, phrasal verbs, and other commonly used expressions in English conversation. Using different types of sentence structures and varying word choices can also help make one’s language more natural and fluent.

Therefore, material integration significantly improves English skills and language elements. By incorporating different resources and language elements, individuals can develop a comprehensive understanding of English and become effective communicators in both personal and professional settings.

### Interest in English

![Figure 5](image)

*Figure 5. The result of the questionnaire on students’ interest in English*

From the data, it is obvious that students need all English skills to learn General English Courses. Students need all English skills in learning General English Course because General English is designed to help students develop a well-rounded proficiency in English, encompassing all aspects of the language. The four key skills that students need to develop in order to become proficient in English are listening, speaking, reading, and writing. These skills are interconnected, and mastering all of them is essential for effective communication in English. In a General English Course, students learn basic grammar and vocabulary and how to use these language elements in real-life situations. They learn to listen to and comprehend spoken English, speak English confidently and accurately, read English texts and understand their meaning, and write English fluently and coherently. In addition, students need all English skills in order to be able to interact with people from different countries and cultures, and to access information and resources in English. This is particularly important in today’s globalized world, where English has become the lingua franca of international communication and commerce. Therefore, by mastering all English skills, students will be better equipped to communicate effectively in a variety of situations, both professionally and personally.
f. Interest in Language Elements

![Figure 6](image)

**Figure 6.** The result of the questionnaire on interest in language elements

It is clear from the data that students taking a General English Course need to be exposed to all linguistic domains. A General English course aims to provide students with a solid foundation in the English language and the skills they need to communicate effectively in a wide range of situations. Grammar, vocabulary, pronunciation, and discourse (i.e., how language is used in context) are also part of the language elements, along with the four linguistic abilities of listening, speaking, reading, and writing. Learning each of these facets of the English language is crucial if you want to become fluent in the language as a whole. A student may have trouble expressing himself clearly, for instance, even though they have a solid command of syntax. A kid who excels in oral communication but struggles in reading may face similar difficulties. Students who take the time to master all facets of the language are better equipped to express themselves in a wide range of situations, from the classroom to the workplace. A student who can talk smoothly and confidently in an interview may fare better than one who can compose a well-structured essay in terms of academic pursuits. Students can gain a deeper understanding of the English language and enhance their communication skills by studying all aspects of the language.

g. Interest in the Learning Approach

![Figure 7](image)

**Figure 7.** The result of questionnaire on students interest to learning approach

Generally, learners need the Student-Centred Learning Approach in the classroom context of the General English Course. There are several reasons why learners need a student-centred learning approach in a classroom context of a General English Course. Active engagement: Student-centered learning encourages active engagement from the learners, which means that they are actively involved in the learning process. This makes the learning experience more enjoyable and engaging for learners, and they are more likely to remember and apply what they have learned. Personalized learning: In a student-centered learning environment, learners can personalize their learning experience based on...
their interests, needs, and learning style. This helps learners take ownership of their learning and develop critical thinking skills. Collaboration and communication: Student-centered learning promotes collaboration and communication among learners, which enhances their social skills and allows them to learn from each other. Learner autonomy: Learners are given more autonomy and responsibility for their learning in a student-centred classroom. This allows them to develop their decision-making skills and become more independent learners. Motivation: Learners are more motivated in a student-centred learning environment because they are actively involved in the learning process and have control over their learning experience. This can lead to higher levels of engagement, participation, and achievement. Overall, a student-centred learning approach can help learners develop the skills and knowledge they need to succeed in their General English courses and beyond.

h. Interest in Student-centred Learning Approach

![Figure 8. The result of the questionnaire on the student-centred learning approach](image)

From the data, it is obvious that students need independent learning, enquiry-driven learning, and self-regulated learning (Student-centred Learning Approach) in learning General English Courses. There are several reasons why students need independent learning, inquiry-driven learning, and self-regulated learning in learning. Independent learning, enquiry-driven learning, and self-regulated learning all require students to engage in critical thinking. By taking charge of their own learning, students are required to think more deeply about the subject matter and develop a deeper understanding of it. Active Engagement: Student-centred learning approaches encourage students to engage in the learning process actively. Rather than passively receiving information from the teacher, students are actively involved in the learning process, which leads to greater motivation and deeper learning. Adaptability: Independent learning, enquiry-driven learning, and self-regulated learning also promote adaptability. Students learn to be flexible in their approach to learning and are better able to adjust to new situations and learning environments. Lifelong Learning: By fostering independent learning, enquiry-driven learning, and self-regulated learning skills, students are better equipped for lifelong learning. These skills are essential for success in any field and will serve students well beyond the classroom. Increased Responsibility: Student-centred learning approaches also promote increased responsibility. By taking charge of their own learning, students learn to be accountable for their own progress and are better equipped to take on leadership roles in the future. In summary, independent learning, enquiry-driven learning, and self-regulated learning are essential components of a student-centred learning approach to General English Course. These approaches help students develop critical thinking skills, become actively engaged in learning, promote adaptability, foster lifelong learning, and increase responsibility.
i. Topics of preferred lessons in learning English

Figure 9. The result of the questionnaire on topics of preferred

The data shows that students need material related to civil engineering context, contextual material, science and technology, and topic about daily activities. Students studying civil engineering need material related to their field of study in order to gain the necessary knowledge and skills to become successful engineers. This includes understanding fundamental concepts such as structural analysis, mechanics of materials, and geotechnical engineering. Additionally, students need to be familiar with the latest technologies and practices used in the field of civil engineering. Contextual material is also important as it helps students understand how the concepts they learn apply in real-world situations. This can include case studies of successful engineering projects, examples of engineering failures, and discussions of current events and trends in the field. Science and technology are essential components of civil engineering, as they provide the basis for much of the civil engineers’ work. Students need to have a strong foundation in mathematics, physics, chemistry, computer-aided design (CAD), and other software used in the field. Finally, students benefit from learning about topics related to daily activities, as this helps them to understand how their work as civil engineers can impact people’s lives in meaningful ways. This can include environmental sustainability, community planning, and infrastructure development discussions. An excellent civil engineering education should cover not just the specifics of the field but also its context and practical applications. As a result, they are more equipped to become productive and responsible engineers and have a broader understanding of their area.

The findings of this study demonstrate that students enrolled in a general English course understand the significance of the language and recognise the need to acquire a wide variety of English skills and linguistic features. According to the findings, students need a Student-Centered Learning Approach in the classroom, which entails strategies such as independent study, inquiry-based instruction, and self-regulation. Diverse materials that are relevant to the learners’ circumstances and interests are also emphasised. Previous research has also shown that a student-centred learning approach is effective in enhancing learning outcomes in English language courses (Benson, 2011). This approach is based on the belief that learners construct their own knowledge and understanding of language and that learning occurs through interaction with peers and teachers. It also acknowledges the role of the learner as an active participant in the learning process.

Another study has shown that the use of varied materials and activities is essential in improving learners’ motivation and engagement in English language courses (Dornyei, 2001). This study suggests that teachers should provide learners with various materials and activities relevant to their interests and needs to enhance their motivation and engagement. Moreover, research has also shown that speaking skills are important for learners of English (Brown & Yule, 1983). This study suggests that

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learners need to develop their speaking skills to be able to communicate effectively in English. Thus, the finding of this study that teachers need to infuse more speaking skills in the General English course is in line with previous research. In conclusion, the result of this study emphasizes the importance of a Student-Centered Learning Approach, varied materials, and speaking skills in General English courses. Teachers should strive to provide learners with a range of materials and activities relevant to their interests and needs, and encourage them to actively participate in the learning process. By doing so, learners will be able to develop their English language skills effectively.

The results of this study update the results of the research conducted by (Allo & Baka, 2018). The present study shows something new from the aspect of the approach used by the lecturer. Previous research did not explore this. The present study also different with the result found by several researcher in different fields such as needs of learning material by (Yolanda et al., 2018), needs analysis on teaching and learning (Alfian, 2019) needs analysis in ESP (Istiningrum, 2022), English Language Training Need Analysis for Engineering Students (Clement & Murugavel, 2015) and Students’ Need for Developing Material of English for Civil Engineering (Wulanjani, 2018).

4. CONCLUSION

The Students’ needs in general English courses at the Civil Engineering Study Program of higher education in Papua, namely the students are aware of the importance of English being studied in general English courses. In classroom activities, it is obvious that students are aware of the discipline of working and collecting tasks. They also need to be an active learner in the classroom. Students need material integration, English skills, and language elements related to the course topics. They need all English skills and language elements in learning General English Course. To achieve the learning objective, learners generally need the Student-Centred Learning Approach in the General English Course classroom context. Learners need approaches such as independent learning, enquiry-driven learning, and self-regulated learning. Varied material that students needed, such as civil engineering context, contextual material, science and technology, and topic about daily activities. This research is limited to the analysis of student needs in general English. Thus, researchers recommend studies on the development of syllabus and teaching materials for General English courses.

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