



MAPPING STUDENT LEVELS USING THE COMMON EUROPEAN FRAMEWORK OF REFERENCE FOR LANGUAGES (CEFR) AS A FIRST STEP IN DEVELOPING ENGLISH LANGUAGE MATERIALS

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Abstract

English language instructors regularly encounter difficulties teaching ESP (English for Specific Purposes) classes in higher education since they must instruct students with various skill levels. Lecturers in this topic are needed to produce appropriate and targeted teaching materials adapted to the students' study program backgrounds. In addition to variations in majors, unclear proficiency level requirements frequently result in materials that are out of step with students' actual aptitudes. The aim of this article is to describe how the Common European Framework of Reference for Languages (CEFR) is used to map student competency levels in order to create ESP materials. In order to determine skill level mapping in creating materials, this study used a descriptive-reflective methodology that involved classroom observations, documentation of CEFR test results, and teaching practice. The results show that CEFR-based level mapping helps instructors create learning objectives, choose text kinds, and create instructional materials that are suitable for students' skill levels. Material development becomes more targeted, practical, and efficient with well-defined level criteria. As a level mapping tool, the CEFR is essential to raising the standard of ESP learning creation and implementation in higher education.

Keywords: level mapping, instructional material development, CEFR, ESP

Abstrak

Para pengajar bahasa Inggris secara teratur menghadapi kesulitan dalam mengajar kelas ESP (Bahasa Inggris untuk Tujuan Khusus) di pendidikan tinggi karena mereka harus mengajar mahasiswa dengan berbagai tingkat kemampuan. Para dosen dalam bidang ini dituntut untuk menghasilkan materi pengajaran yang tepat sasaran dan disesuaikan dengan latar belakang program studi mahasiswa. Selain variasi jurusan, persyaratan tingkat kemampuan yang tidak jelas seringkali mengakibatkan materi yang tidak sesuai dengan kemampuan aktual mahasiswa. Tujuan artikel ini adalah untuk menjelaskan bagaimana Kerangka Acuan Bersama Eropa untuk Bahasa (CEFR) digunakan untuk memetakan tingkat kompetensi mahasiswa guna menciptakan materi ESP. Untuk menentukan pemetaan tingkat kemampuan dalam pembuatan materi, penelitian ini menggunakan metodologi deskriptif-reflektif yang melibatkan observasi kelas, dokumentasi hasil tes CEFR, dan praktik pengajaran. Hasil penelitian menunjukkan bahwa pemetaan tingkat kemampuan berbasis CEFR membantu pengajar menciptakan tujuan pembelajaran, memilih jenis teks, dan membuat materi pembelajaran yang sesuai dengan tingkat kemampuan mahasiswa. Pengembangan materi menjadi lebih tepat sasaran, praktis, dan efisien dengan kriteria tingkat kemampuan yang terdefinisi dengan baik. Sebagai alat pemetaan tingkat kemampuan, CEFR sangat penting



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untuk meningkatkan standar pembuatan dan implementasi pembelajaran ESP di pendidikan tinggi.

Kata kunci: pemetaan level, pengembangan materi pembelajaran, CEFR, ESP

I. INTRODUCTION

English has long been a basic general course required for students. Every study program at various universities has made it a mandatory and essential course. New students typically take this course at the beginning of the odd semester, alongside other general courses such as Pancasila (the Five Principles), religion, Indonesian language, and citizenship. Although English is not included in the mandatory curriculum outlined in the Indonesian Minister of Education, Culture, Research, and Technology Regulation No. 3 of 2020 concerning National Standards for Higher Education, it has been emphasized that the higher education curriculum must include all standard learning subjects in all study programs, including literacy skills (Asra et al., 2025). In this sense, literacy is not limited to the ability to master Indonesian but also includes the ability to master foreign languages, such as English, so that college graduates can be competitive in the global marketplace.

A major problem arises when English courses in higher education, particularly English for Specific Purposes (ESP), do not have a standardized starting proficiency level. Without a clear and measurable reference, students tend to develop materials based on subjective assumptions about student abilities. As a result, the material presented often doesn't reflect the real-world classroom: too difficult for some students or too easy for others. Consequently, learning effectiveness is considered low because lower-ability students feel left behind and lose motivation, while higher-ability students don't receive adequate challenges. Furthermore, without standardized levels, the learning evaluation process also becomes less objective because it isn't based on a clear competency framework.

One solution is to administer internationally standardized tests such as the CEFR (Common European Framework of Reference for Languages), which is considered capable of providing a structured and measurable description of language ability. With these standardized levels, lecturers will have a strong foundation for designing learning objectives, selecting relevant ESP materials, and determining strategies and evaluations that align with student competencies. The CEFR provides an international reference framework that

describes language ability in detail and is measured at six levels, from A1 to C2. Each level is complemented by competency descriptors covering listening, speaking, reading, and writing.

In the context of ESP learning, the CEFR serves not only as a measuring tool but also as a pedagogical guideline. By using the CEFR, lecturers can objectively identify students' initial abilities, so that the design of teaching materials and resources is no longer based solely on estimates but rather on empirical data.

The application of the CEFR allows for the adjustment of learning objectives, the selection of ESP texts relevant to various fields, and the design of classroom activities appropriate to students' levels. Thus, the CEFR helps create more focused, adaptive, and effective learning, and can bridge the ability gap between students within a class.

Based on the author's experience teaching ESP in various fields (majors), particularly elementary school teacher education (PGSD), English literature, informatics, civil engineering, and computer engineering, mapping student ability levels significantly impacts learning design. Before using the CEFR, ESP materials were structured based on general estimates of student abilities, often not fully reflecting the needs and real-world conditions in the classroom (Elia, Fitra, 2024).

After implementing a CEFR-based diagnostic test at the beginning of the course, the author obtained a more accurate picture of the proficiency levels of students from various majors. Although they came from different fields of study, the majority of students were at levels A2 to B1. These findings helped the author determine the starting point for learning, set realistic achievement targets, and adjust the complexity of the texts and assignments (Azizah, 2025).

In the Informatics department, for example, the material focused on understanding software documentation and simple technical instructions. In Civil Engineering, the emphasis was on procedural texts, project descriptions, and technical construction terms. Meanwhile, in Computer Engineering, the material focused on understanding hardware manuals and short technical reports. This adjustment was made possible by the CEFR-based level mapping.

This article aims to describe the use of the CEFR in mapping the English proficiency levels of students from various majors. Furthermore, it aims to demonstrate that the CEFR mapping results can be used as a basis for designing ESP teaching materials and resources that better align with students' actual needs and abilities. Specifically, the purpose of writing

this article is to identify the initial level of students' abilities based on the CEFR standards, explain the role of CEFR in making it easier for lecturers to design ESP teaching materials and materials, and show the relevance of CEFR mapping in creating more effective and targeted English language learning in the engineering student environment.

II. THEORETICAL STUDIES

The CEFR Concept

The Common European Framework of Reference for Languages (CEFR) is an international reference framework developed by the Council of Europe to describe language proficiency in a systematic and standardized manner. The CEFR aims to provide a transparent and consistent basis for learning, teaching, and assessing foreign languages.

The CEFR classifies language proficiency into six main levels: A1, A2, B1, B2, C1, and C2. Levels A1 and A2 are categorized as Basic Users, B1 and B2 as Independent Users, and C1 and C2 as Proficient Users. Each level is accompanied by descriptors that explain what learners can do in the four language skills: listening, speaking, reading, and writing (Council of Europe, n.d.).

In the context of higher education and English for Specific Purposes (ESP) learning, the CEFR serves as both a measurement tool and a pedagogical guide. By using the CEFR, lecturers can objectively identify students' initial abilities, set realistic learning objectives, and design materials and activities appropriate to their competency levels. Thus, the CEFR helps create more targeted, adaptive, and needs-based language learning.

CEFR in English Language Learning

As previously described, the CEFR can be used as a reference framework in English language learning, providing a clear, measurable, and hierarchical description of language skills (Nilay Ozdemir, 2022). The CEFR is not only used to assess language proficiency but also as a basis for lesson planning, curriculum development, material development, and evaluation of learning outcomes.

Applying the CEFR in learning allows lecturers or instructors to objectively determine students' initial abilities. This allows learning objectives to be formulated according to student level, materials can be selected appropriately, and classroom activities can be designed in stages from simple to more complex.

Furthermore, the CEFR helps align the learning process with international standards. In the context of higher education, this is crucial for graduates to have globally comparable English language competencies (Rabbani, A Syahid, Talqis Nurdianto, 2023). In ESP learning, the CEFR facilitates the adaptation of language content to the needs of subject areas, such as engineering, business, or health, without neglecting students' actual abilities.

In other words, the CEFR bridges the gap between language proficiency measurement and classroom learning practices, making the teaching and learning process more focused, consistent, and effective.

Level Mapping as a Basis for Material Development

Mapping students' language proficiency levels is a crucial first step in developing English language learning materials, particularly in ESP (Hutchinson & Waters, 2010). Without knowing students' initial abilities, material development risks being off-target, making it difficult to achieve learning objectives optimally.

By using the CEFR as a basis for mapping, lecturers obtain an objective picture of students' competency levels in listening, speaking, reading, and writing. This information serves as the basis for determining learning objectives, selecting topics and text types, and designing activities appropriate to the students' levels (Tarigan, Fatin Nadifa, 2023). In the context of engineering students, level mapping helps lecturers adjust the complexity of ESP material, such as the use of technical terms, sentence structure in reports, and the types of communicative tasks assigned (Kristianti, Tri Hevie Dwi Novianto, 2023). Students at level A2, for example, are more focused on understanding simple descriptive and procedural texts, while students at level B1 are introduced to more complex technical reports and discussion texts. Thus, CEFR-based level mapping makes material development more systematic, gradual, and relevant to students' actual needs and abilities.

III. RESEARCH METHODS

This research uses a descriptive-reflective qualitative approach. This approach was chosen to describe in depth the author's experience in applying the CEFR as a basis for mapping student levels and developing English for Specific Purposes (ESP) materials in various study programs. Reflexivity here is a series of ongoing, collaborative, and multifaceted practices in which researchers (in this case, ESP lecturers) consciously critique, assess, and evaluate how their own subjectivity and context influence the research process.

They frame reflexivity as a way to embrace and value the subjectivity of researchers (lecturers) (Vega, Francisco M. Olmos, Renee E. Stalmeijer, Lara Varpio, 2022).

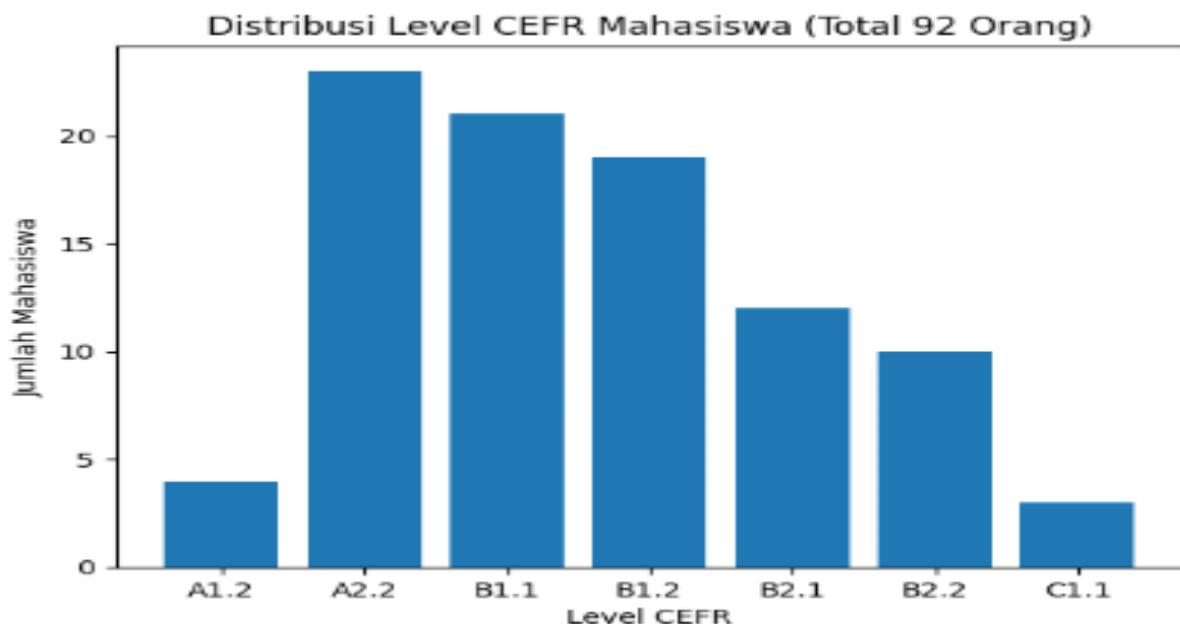
The research subjects were students from various study programs at the Open University (Universitas Terbuka) in the PGSD and English Literature programs and the Payakumbuh College of Technology, specifically Informatics, Civil Engineering, and Computer Engineering students taking English/ESP courses. Data collection techniques included (1) Classroom observation, to observe student responses to materials designed based on CEFR results, (2) The author's teaching experience, as a reflection of the practice of applying CEFR in the design and implementation of learning, and (3) Documentation, in the form of CEFR test results, teaching materials, lesson plans, and examples of student assignments.

The data were then analyzed using qualitative descriptive techniques, namely by grouping, interpreting, and describing findings related to the role of CEFR in facilitating the design of ESP teaching materials and materials.

IV. RESEARCH RESULTS

Student Level Mapping Process

The process of mapping students' English proficiency levels is conducted at the beginning of the course as a diagnostic step. This mapping aims to determine students' initial abilities before ESP material is introduced. The instrument used is a CEFR-based test covering language skills such as reading, listening, writing, and speaking. It also tests language components such as grammar, vocabulary, and pronunciation. Based on combined data from students taking this test from two different universities and majors, the distribution of CEFR levels shows a predominance of level A2, followed by B1 and B2. This data confirms that students from various university backgrounds and majors still need to strengthen their basic skills before being directed to more complex ESP material.



The diagram above shows the distribution of CEFR levels for students from several study programs, with a total of 92 students. Level A2.2 dominates, followed by B1.1 and B2.1. This indicates that most students are still at the basic to early independent user stage.

The following describes several stages in determining the mapping of students' English proficiency levels. The first stage involved administering a diagnostic test to students from various study programs, including Elementary School Teacher Education (PGSD), English Literature, Informatics, Civil Engineering, and Computer Engineering. The test was administered online and tailored to the students' context. The test results were then classified into CEFR levels, ranging from A1 to C1.

The second stage involved analyzing the test results. The mapping results indicate that most students are at levels A2 to B1. This finding indicates that the majority of students are still at the early independent user stage. Only a small proportion reached level B2, and very few reached level A1. In more detail, the majority of students' CEFR test results were at level A2 (Elementary–Pre-Intermediate), some at level B1–B2 (Intermediate–Upper Intermediate), and only a few reached level C1 (Advanced).

The third stage is pedagogical reflection. Based on the mapping results, the author made adjustments to the learning objectives, material types, and assignment formats given to students. Thus, the mapping process did not stop at measurement alone, but continued with learning design tailored to the students' ability profiles.

This CEFR-based level mapping process serves as the main foundation for developing more targeted, relevant, and realistic ESP materials tailored to students' needs.

Ease of Developing Materials After CEFR Levels

Once students' ability levels were identified through CEFR-based mapping, the process of developing English for Specific Purposes (ESP) materials became more focused and systematic. Previously, materials were often developed based on general assumptions about student abilities, which risked not being appropriate to actual classroom conditions. With level data, lecturers have a clear basis for determining the starting point for learning.

The first benefit is seen in determining learning objectives. For A2 level students, objectives focus on understanding simple texts, using basic technical vocabulary, and developing functional communication. Meanwhile, for B1 level students, objectives begin to shift toward understanding more challenging and complex technical texts, such as writing short reports or discussing technical topics.

The second benefit is the selection of text types and activities. Lecturers can tailor the difficulty of reading materials, instructions, and assignments to the students' level. For example, A2 level students are given simple descriptive and procedural texts, while B1 level students are introduced to light technical articles and case studies.

The third benefit is the gradual development of teaching materials. Material can be structured sequentially, moving from the simplest to the most complex, according to the students' competency development. Thus, the existence of the CEFR levels makes the process of developing ESP materials more efficient, realistic, and tailored to students' needs.

This ease of material development is supported by mapping results, which show that the majority of students are at levels A2–B1, both at UT and in the Civil Engineering and Computer Engineering departments. Informatics students show a more heterogeneous level variation, reaching B2.2. The use of teaching modules has also proven effective and facilitates independent student learning. This condition allows lecturers to differentiate the types of material for each group more precisely.

Impact on the Learning Process

The implementation of CEFR-based level mapping has had a significant impact on the English language learning process, particularly in the context of ESP across various study

programs. With information on students' ability levels, learning becomes more focused and controlled.

One major impact is seen in the improved match between the material and students' abilities. Students no longer perceive the material as too difficult or too easy, because assignments and activities are tailored to their level. This has a positive impact on student motivation and participation in class.

Furthermore, classroom interactions have become more active. Students are more confident in participating in discussions, completing assignments, and practicing communication because the material is tailored to their actual abilities. At the A2 level, for example, speaking activities focus on simple expressions and functional situations, while at the B1 level, discussions on technical topics begin to develop.

Another impact is the increased effectiveness of learning time. Lecturers no longer need to spend excessive time repeating overly difficult material or explaining things that some students have already mastered. This makes the learning process more efficient and focuses on developing relevant competencies. Developing modules for students has also proven to significantly facilitate students' understanding and independent implementation of theory, along with exercises and assignments.

Overall, the application of the CEFR in mapping student levels contributed to the creation of ESP learning that was more adaptable to context, meaningful, and aligned with students' academic needs. This positive impact was increasingly evident in A2-level students who previously struggled to follow technical texts. However, after the material was adapted based on the CEFR results, they became more active and confident. Meanwhile, Informatics students at the B2.2 level showed increased participation in technical discussions, group presentations, and individual presentations.

V. CONCLUSION

This study shows that mapping students' English proficiency levels using the CEFR is a strategic first step in developing English for Specific Purposes (ESP) teaching materials and resources. The mapping results show that the majority of students from various study programs, particularly Elementary School Teacher Education (PGSD), English Literature, Informatics, Civil Engineering, and Computer Engineering, are at levels A2 to B1. This finding provides a strong basis for determining the direction and complexity of English

language learning in higher education. Based on these findings, it is recommended that CEFR-based level mapping be systematically implemented at the beginning of English language courses, particularly in ESP courses in higher education. Furthermore, it is necessary to develop CEFR test instruments that are contextual to students' fields of study, and to conduct further research using a quantitative approach to measure the impact of CEFR implementation on improving student learning outcomes.

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