INTERNATIONAL JOURNAL OF
Practical and Pedagogical Issues in English Education
IJPIE
ISSN : 2980-9533
Homepage: www.ijpie.org
4(1), Mar. 2026

# A Student's Needs Analysis: Investigating the ESP Program of Biomedical Engineering Students in the Iranian Setting

Shahram Esfandiari [1,*], Parastou Sarkhoshi [2], Mohammad Rahim Bohlooli Niri [1], Fariba Ahmadi [3]

[1] Department of English Language Teaching, Farhangian University, Tehran, Iran

[2] Department of English Language Teaching, Ard. C., Islamic Azad University, Ardabil, Iran

[3] Department of English Language Teaching, Ministry of Education, Ardabil, Iran

Corresponding Author's Email: sh.esfandiari2012@yahoo.com

**KEYWORDS**

Biomedical Engineering Students, ESP Program, Iranian Context, Needs Analysis

**ARTICLE INFO**

**Article type:** Original article
**Article history:**
Received: 29 July 2025
Revised: 05 September 2025
Accepted: 18 October 2025
Published online: 18 October 2025

**ABSTRACT**

One of the main challenges facing English for Specific Purposes (ESP) courses in the Iranian context, especially in engineering fields, is their apparent inability to meet students' goals and expectations. This study aimed to examine the current ESP curriculum for biomedical engineering students in Iran by conducting a needs analysis based on students' perspectives. To achieve this, a quantitative, descriptive, and ex post facto research design was used. The sample included 100 biomedical engineering students from Tabriz, Zanjan, Ardabil, and Urmia Universities who had completed their ESP courses and were selected through random sampling. These students completed a researcher-developed and validated needs analysis questionnaire, written in Persian, designed to gather comprehensive data about their language learning needs. Results showed that the participants viewed their general English language requirements positively as addressed by the current curriculum. However, their perception of the program's effectiveness in meeting their specialized English needs was only moderate, indicating a gap in addressing ESP-specific content. The students expressed a need for more exposure to specialized tasks, including translating technical biomedical engineering documents, understanding scholarly journal articles, and working with advanced textbooks. Overall, the participants' feedback suggests that the current ESP curriculum only partially meets their actual learning needs. Therefore, it is recommended that the curriculum be revised to include new courses and innovative teaching methods aimed at raising learners' proficiency to the desired level. The insights from this study provide valuable guidance for EFL curriculum designers and textbook developers striving to improve English education in biomedical engineering universities.

## Introduction

A core principle of learner-centered approaches to language learning is the idea that teaching and learning programs should respond to what learners need. There is a widespread agreement that needs analysis which plays a critical role in identifying language learning objectives and is a fundamental part of designing effective programs. Put simply, needs analysis should be integrated into language planning from the beginning, as it is essential for any systematic course design. Munby (1978) described needs analysis as a necessary step in defining or creating a syllabus. Learners' current and anticipated ways of interacting, along with the challenges and demands they perceive, can significantly influence educational goals, emphasizing the importance of aligning instruction with

**How to Cite**: Esfandiari, S., Sarkhoshi, P., Bohlooli Niri, M. R., & Ahmadi, F. (2026). A Student's Needs Analysis: Investigating the ESP Program of Biomedical Engineering Students in the Iranian Setting. *International Journal of Practical and Pedagogical Issues in English Education*, 4(1), 60-78. DOI: 10.22034/ijpie.2025.537954.1123

learners' aims and expectations. As Brindley (1989) pointed out, "If teaching staff are not aware of the learners' wants and needs, learners may become demoralized, threatened, or in some cases, hostile, when their expectations are not met" (p. 74). When course content or teaching methods do not reflect what learners need, dissatisfaction often occurs. Therefore, needs assessment plans are developed to guide curriculum design, define course content, address key issues, select suitable methodologies, apply the findings, and allocate resources effectively for each project.

Richterich and Chancerel (1978) argued that needs analysis is an ongoing process rather than something that only happens at the start of a course. They suggested it might only begin after instruction has already started. They acknowledged that learners' needs can change while the course is underway due to factors like shifts in financial circumstances, changes in employment, or the redefinition of goals based on progress—or lack of it—during the course. Alemi et al. (2019) stated that needs analysis is the key step to designing relevant and practical courses in ESP, but finding ways to deliver needs in a motivating and engaging way is also paramount. Therefore, investigating students' perspectives to learn ESP is central to needs analysis. ESP has developed over time as a specialized branch of English language teaching aimed at facilitating communication among speakers of different languages. This approach focuses on addressing the specific needs of language learners by equipping them with the necessary language skills relevant to academic or professional contexts. Ngo et al. (2024) emphasized that ESP plays a vital role in higher education, yet its absence in college curricula can have significant repercussions.

Despite the importance of needs analysis, research focusing on the ESP needs of engineering students in Iran remains limited. While some studies have examined needs analysis in the Iranian context (Amiri, 2000; Saffarzadeh, 1981; Shahini, 1988; Zohrabi et al., 2025), none have specifically addressed the demands, expectations, and desires of biomedical engineering students through ESP courses. The present study aimed to fill this gap by conducting a needs analysis of the current ESP curriculum for biomedical engineering students in Iranian universities. It investigated biomedical engineering students' perceived needs in both general and specific English skills and identified potential discrepancies between these perceived needs and the skills emphasized in the existing curriculum.

## Literature Review

The ESP approach was mainly developed to meet the specific needs and expectations of learners worldwide who require proficiency in English to access scientific, technological, and economic information more easily. English plays an important role in many societies, achieving global status and widespread use. In several countries, especially those with a post-colonial background like Nigeria and Singapore, English has been adopted as an official language and is used in government agencies, judicial systems, media, and schools (Brutt-Griffler, 2002). Additionally, many nations assign English a special and prioritized role as a second or foreign language in both public and government sectors. As Graddol, Leith, and Swann (1996) note, about a quarter of the world's population speaks English fluently or competently, emphasizing its unmatched and continuous global growth.

According to Crystal (2003), the current worldwide prominence of English is primarily due to the influence of its speakers rather than the language's inherent qualities. Essentially, English has become widely accepted and used internationally because of the significant political, cultural, socioeconomic, and technological dominance of England and the United States. Still, it is important to recognize that throughout history, other languages such as Greek, Persian, and Spanish have also

gained similar prominence, serving as key languages for commerce and education across different parts of the world. The spread of dominant languages often faces opposition from nationalists around the globe. A clear example of this resistance is the rejection of former colonial languages after independence by those working to restore their indigenous identities through promoting local languages. For example, Kenyan author Ngũgĩ wa Thiong'o (1986) chose not to write in English, emphasizing the cultural impositions colonial languages place on native languages, which he argued ultimately erode local identity.

There is a consensus that the rise of World English has taken place within the context of linguistic imperialism, viewing the spread of English as a form of language imposition (Pennington, 2018). On the other hand, recent technological advances and the digital revolution, especially the widespread use of the Internet, have established English as a global communication medium and made learning it a valuable investment. Warschauer (1999) argued that the communication revolution pushes people to extend their interactions beyond local linguistic boundaries. Crystal (2003) noted that English now accounts for about 75% of emails worldwide and 90% of online content. Despite resistance to English's dominance, alternatives like translation have proven neither cost-effective nor practical, allowing English to maintain its global prevalence. As a result, many countries see learning English as a way to foster development. The potential benefits of learning a foreign language greatly influence which languages are taught in schools. For instance, in Algeria, English replaced French as the primary foreign language in 1996 because it was considered essential for the country's continued growth. Therefore, investing in English language education enhances access to the resources available through this international language.

Students' engagement with a new language should be seen as adding a new discourse alongside their existing linguistic skills, rather than replacing or dominating their native language. According to Norton (2017), language learners invest in their linguistic identities, aiming to gain access to educational opportunities, social networks, and economic resources. This investment is reflected in the amount of second language learning needed to navigate different discourses and meet diverse communication needs. As a result, learners have the opportunity to expand their existing discourses and develop proficiency in new ones, which helps integrate features of their first language (L1) into English learning and its use as a lingua franca. A language should primarily be viewed as a shared tool for communication among a group of people in order to work effectively as a lingua franca. Given the widespread global use of English, it is no longer possible to claim exclusive ownership by any particular country or nation. As a result, various forms of English reflect the different linguistic traits emphasized by diverse ethnic groups expressing their identities through distinct languages. Brutt-Griffler (2002) described this phenomenon of World English as a form of second language acquisition by speech communities, which has helped English become a global lingua franca. Because English provides access to knowledge and commerce, it is used both worldwide and regionally as a common way for different nationalities and ethnic groups to communicate.

**English for Specific Purposes (ESP)**

Studies have shown that neglecting ESP courses hampers students' ability to communicate effectively in professional contexts. Orr (2001) defined ESP as a means to fulfill specific learning goals within a set timeframe, where general English instruction may not be sufficient. Basturkmen (2019) described ESP as a targeted approach aimed at enabling learners to perform successfully in their academic or professional roles. Zhao (2019) noted that, unlike general English learners who

study to broadly master the language or pass exams, ESP learners pursue English for specific, personalized objectives. As a subfield of applied linguistics, ESP emphasizes the connection between teaching and learning processes to meet learners' expectations. Widdowson (1981) characterized ESP by its focus on designing language programs based on detailed analysis of learners' needs to address their particular demands in specific situations. The difference between ESP and general English courses is not in the needs themselves but in the awareness of those needs. For example, a schoolchild's main goal might be passing an exam, but the content of language courses depends on recognizing such needs. Hutchinson and Waters (1992) argued that the awareness and understanding of learners, sponsors, and instructors regarding the reasons for learning English greatly influence the logical design of content and materials. Zohrabi et al. (2025) studied how metalinguistic, direct, and indirect written corrective feedback strategies affected Iraqi nursing students' performance in nursing report writing within ESP courses. The findings indicated that all these feedback strategies significantly improved the students' ESP writing skills. However, the metalinguistic and direct strategies were more effective than the indirect strategy. Additionally, the nursing students showed a strong preference for metalinguistic and direct strategies in their writing tasks.

Basically, ESP is a learner-centered, needs-based method that focuses on practical language skills tailored to specific academic or professional goals. It connects general English learning to the specialized language needs of different fields, making sure learners can communicate effectively in their areas. The ESP approach has shifted from a focus on Chomskyan-influenced register analysis to a needs analysis framework. In the past, language needs were defined by formal linguistic categories, emphasizing the creation of specific registers—sets of lexical and grammatical features designed for particular groups. For instance, English for engineers involves identifying the most common grammatical and lexical items used in engineering contexts (Hutchinson & Waters, 1992). This register analysis was based on Chomsky's (1964) ideas of competence (idealized grammatical knowledge) and performance (actual use of language), which saw language learning mainly as mastering innate grammatical rules. However, Hymes (1972) criticized Chomsky's limited view, arguing that competence should include the rules that govern actual language use in social settings, not just grammar. He expanded competence to cover four areas: grammatical competence, rules of speaking (like how to start and end conversations), knowledge of speech acts (such as requests and apologies), and sociolinguistic competence (using appropriate language in different social situations). This broader concept, called communicative competence, combines both psycholinguistic and sociolinguistic aspects, viewing language as a social tool rather than just a structural system.

This theoretical shift influenced second language acquisition (SLA) and language teaching, moving from a focus on language forms to language use. Consequently, the communicative approach emerged, emphasizing learners' communicative needs rather than solely memorizing vocabulary and grammar from register analysis. This change led researchers and educators to reconsider learners' needs more holistically, focusing on real-world language use and communication. In ESP, this evolution gave rise to needs analysis as a central research method. Unlike register analysis, which primarily targets linguistic structures and lexicons, needs analysis involves empirical investigation of learners' actual language use in specific contexts. It aims to identify the precise language demands learners face in real situations, guiding the design of ESP courses that are relevant and practical.

In summary, the shift from register analysis to needs analysis in ESP reflects a broader understanding of language competence, emphasizing communicative effectiveness and

contextualized language use. Needs analysis enables ESP programs to be more precisely tailored to real-life language needs, increasing the relevance and effectiveness of language instruction. Needs analysis in language teaching adopts the communicative competence perspective to meet learners' demands effectively. It aligns with the notional-functional approach, which aims to achieve two main goals through instructional activities: first, to teach the meanings and concepts (notions) necessary for effective communication, such as time, quantity, and location; and second, to teach the language functions or speech acts (e.g., requests, suggestions, promises, descriptions) used to express those notions (Richards, Platt, & Weber, 1985). While needs analysis focuses on specific learner groups through detailed profiles, the notional-functional approach serves a broader audience by addressing overlapping communicative needs.

Building on the concept of communicative competence, linguistic practices are examined within the target discourse community to identify language needs, making needs analysis a crucial step in understanding language learning as a comprehensive process (Weddle & Van Duzer, 1997). Weddle and Van Duzer (1997) argued that balancing curriculum, materials, teaching methods, and learners' actual and perceived needs enhances motivation and achievement, providing evidence for course design that promotes communicative competence in appropriate contexts. Needs analysis is also recognized as the initial step in designing communicative language teaching, focusing on identifying the specific communicative practices that audiences need to improve their language skills (Hall, 2001). Norton (2017) proposed a needs analysis model that considers both current and target competencies within the framework of communicative competence. West (1994) viewed needs analysis as a diagnostic tool that includes interlanguage study, error analysis, and diagnostic testing to connect learners' language proficiency with the communicative functions required in target contexts. Ellis (1997) and Nunan (1988) emphasized that enhancing language teaching—a key goal of SLA—provides the theoretical foundation for ESP, which heavily depends on needs analysis. In summary, the influence of communicative competence theory and the social functions of language has shifted ESP's focus from language systems to real-world applications. This change has promoted needs analysis as a vital method for gathering empirical data to guide effective language planning tailored to specific learner groups and their communicative needs. As a result, this approach supports the development of second language communicative skills in targeted areas.

## Needs Analysis

From Brown's (1995) viewpoint, needs analysis or assessment involves systematic data collection practices designed to form the foundation for curriculum development, thereby addressing the specific learning demands of a particular group of learners. These demands are inherently linked to language learning within the broader scope of language planning. The identified needs are then translated into clear goals and objectives, which subsequently guide the creation of exams, instructional materials, teaching methods, and assessment strategies. The primary purpose of needs analysis is to bridge the "gap" between what is currently offered in language programs and what learners require. This distinction also clarifies the difference between needs analysis and evaluation: the former identifies the needs of a target group, while the latter assesses how well existing programs fulfill those needs. Needs analysis refers to "the techniques for collecting and assessing information relevant to course design: it is the means of establishing the *how* and *what* of a course" (Hyland, 2006, p.73). Previous studies have acknowledged the importance of conducting a needs analysis to identify academic and workplace needs (Chan, 2019; Spence & Liu, 2013). West (1994) highlighted the absence of a unified definition and the ambiguity surrounding the term, while Richards (2001) pointed out that its meaning often depends on the perspectives and values of those

making the judgments. Consequently, educators, learners, administrators, employers, parents, and other stakeholders may all hold differing views on what constitutes a "need." This diversity of perspectives makes it impossible to assess the difference between learners 'current and expected language abilities from a single viewpoint. Mahbub (2019) noted that although linguists have not reached a consensus on the definition, there is agreement that external factors such as staffing, time constraints, and cultural considerations influence the understanding of needs and must be accounted for during needs analysis.

Recently, course design has shifted from teacher-centered to learner-centered and learning-centered approaches, giving significant importance to needs-based courses in ESL programs. Needs analysis enables the development of practical courses with content tailored to learners' necessities, requirements, and gaps. This process helps define valid curriculum goals, educational objectives, and management strategies, creating a learning environment closely aligned with real-world contexts. Thus, the roles and settings learners are likely to encounter after their formal education become central to instructional planning. In other words, modern teaching increasingly focuses on learner-centered communication and the specific needs of learners. Jordan (1997) considered needs analysis an integral and essential part of all language planning and systematic course design. Similarly, Johns and Dudley-Evans (1991) emphasized its significant contribution to English Language Teaching (ELT) programs. Tripepi (2012) described ESP as a response to learners' demands and needs analysis, aimed at creating practical tools to facilitate learning specific content rather than following a predetermined general syllabus. Long (2005) stressed that a properly conducted needs analysis accurately characterizes learners' requirements within the English medium. Puspitaloka et al. (2024) found that Software Engineering students primarily need mastery of vocabulary as well as listening and speaking skills. English is an important skill for students to help them communicate with foreigners in the workplace. Additionally, the learning materials were found to be irrelevant to the English needs of software engineering students. Therefore, teachers should add supplementary materials related to software engineering. Zohrabi and Khalili (2024) conducted a study to determine the effectiveness of various written corrective feedback strategies for improving medicine English for Specific Purposes (ESP) students' writing skills. Additionally, they aimed to explore these students' perspectives on the relevant strategies. The results showed that, while meta-linguistic, electronic, direct, and reformulation-based strategies enhanced ESP students' writing ability in the short, medium, and long term, the indirect strategy was only effective in the short term. Furthermore, the participants favored explicit strategies over implicit ones. Based on the above, the study aimed to answer the following research questions:

1. What are biomedical engineering students' perceived general English skill needs?

2. What are biomedical engineering students' perceived specific English skill needs?

3. What gaps exist between what biomedical engineering students perceive as their general English needs and what the current curriculum covers?

4. What gaps exist between what biomedical engineering students perceive as their specific English needs and what the current curriculum covers?

## Method

### Research Design

This study aimed to examine the current ESP curriculum for biomedical engineering students in Iran by conducting a needs analysis based on students' perspectives. To do this, a quantitative, descriptive, and ex post facto research design was used.

### Participants

One hundred biomedical engineering students from Tabriz, Zanjan, Ardabil, and Urmia Universities who had completed their ESP courses were randomly selected to participate in this study. They volunteered, and ethical considerations were adequately addressed. The research took place in the second semester of the 2023-2024 academic year, with participants aged between 19 and 24. Gender was not a restriction in this study; both males and females participated. This study included safeguards to ensure that the participants' rights were not violated in any way. The researchers obtained permission from the participants, and they were aware that they were part of a study. The researchers explained to the participants that their participation was voluntary and that any information gathered from them would be kept strictly confidential.

### Instrument

In this study, a researcher-made questionnaire was the primary tool for data collection, reflecting its widespread use in survey-based research (Field, 2019). The Persian version of the needs analysis questionnaire was employed to gather comprehensive data, focusing on three main areas: students' English language proficiency, their needs related to general and specific English skills, and topics of interest for curriculum inclusion. The questionnaire consisted of four sections: the first, with ten items, assessed students' perceived needs in general English; the second, also with ten items, evaluated their perceived needs in specific English; the third included ten items related to general English needs addressed in the current curriculum; and the fourth contained ten items about students' opinions on the special English needs covered in the existing curriculum.

### Procedure and Data Analysis

The design of the questionnaire was based on a comprehensive review of the literature, insights from in-depth interviews with students and faculty members, and results from a pilot study involving 30 biomedical engineering students. Initially, interviews were conducted to gather essential data, which helped develop the questionnaire items. Next, an impressionistic survey was carried out with members of the scientific boards in biomedical engineering to review and refine the preliminary items, ensuring face and content validity. A second pilot study with 30 randomly selected students was conducted to verify the clarity, relevance, comprehensibility, and lack of ambiguity of the questionnaire items, leading to necessary revisions.

To assess reliability, Cronbach's alpha was calculated because the data were at the interval level. Reliability coefficients ranged from .84 to .97, with an overall alpha of .97, reflecting excellent internal consistency. The final version of the questionnaire was distributed to students, some via email. Out of 150 questionnaires distributed, 100 complete and usable responses were collected. The data were entered into SPSS version 25 for analysis, utilizing descriptive statistics such as percentages and frequencies, along with inferential statistics like the Chi-square test.

Since the researchers developed the questionnaire, another important aspect was to assess its validity. The content validity of the scale was established by four experts from TEFL and biomedical engineering scientific boards, based on their expert judgment. The construct validity

was also confirmed through factor analysis, which verified the loadings of the variables on all the scale's factors. To do this, a Principal Component Analysis (PCA) was conducted to determine whether these questions or variables represented different general attributes or underlying structures as hypothesized. The results showed that the four extracted factors accounted for over 95% of the variance in the data. The analysis has some assumptions that should be met. The most important of these are the acceptable Keyser-Mayer-Olkin (KMO) measure and Bartlett's test results. KMO evaluates the adequacy of our sampling, while Bartlett's test indicates whether the correlation matrix generated by all included variables differs from an identity matrix. This outcome means all correlations are significantly different from zero, showing some degree of correlation between every pair of variables. Table 1 displays the KMO and Bartlett's test results, which meet the necessary assumptions.

**Table 1**

*KMO and Bartlett's Test Results*

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .812 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1067.854 |
| | df | 55 |
| | Sig. | .000 |

The Anti-image values, which indicate the adequacy of sampling for each question or variable, were generally larger than .5, which is acceptable. One of the most important tables in PCA is the Total Variance Explained (Table 2), which shows how many variables we can retain. In this analysis, the generated table revealed that, although the variables could be thought of as having underlying major factors, the number of these factors is four because the first four extracted factors explained more than 95% of the variance in the data. The other potential factors have eigenvalues larger than 1, but the sizes of these eigenvalues are not comparable to the first four.

**Table 2**

*Total Variance Explained*

| | Initial Eigen values | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.881 | 53.466 | 53.466 | 5.881 | 53.466 | 53.466 |
| 2 | 2.833 | 25.752 | 79.218 | 2.833 | 25.752 | 79.218 |
| 3 | 1.089 | 9.901 | 89.119 | 1.089 | 9.901 | 89.119 |
| 4 | .733 | 6.662 | 95.780 | | | |
| 5 | .123 | 1.117 | 96.897 | | | |
| 6 | .118 | 1.072 | 97.969 | | | |
| 7 | .081 | .735 | 98.704 | | | |

## Results

### RQ1. What are biomedical engineering students' perceived general English skill needs?

The first part of the students' questionnaire, which included ten items, examined their perceived needs related to general English skills. Table 3 shows the frequencies and percentages for these items. It can be seen that 57.1 percent of the respondents (43.7 percent indicating "good" and 13.4 percent indicating "very good") had a positive view of their needs for general English skills.

**Table 3**

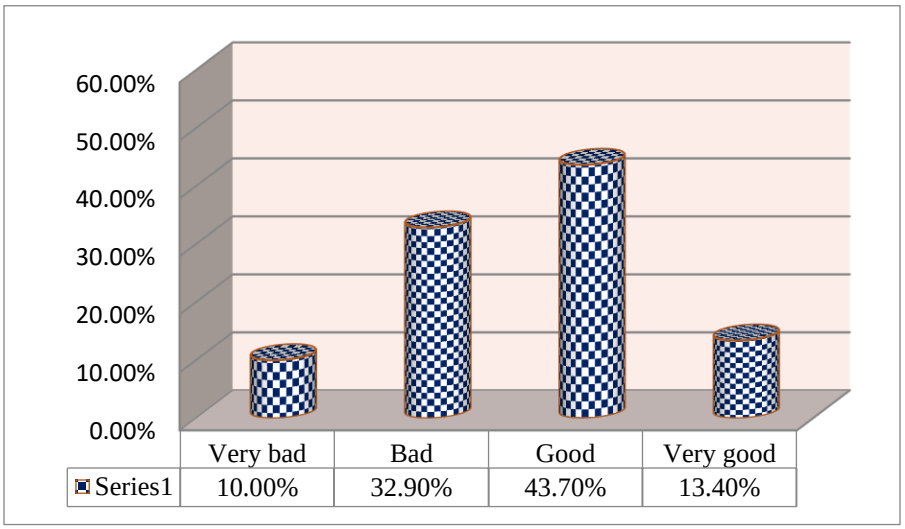
*Frequencies and Percentages: Perceived Needs in General Skills*

| | | | Choices | | | | Total |
|---|---|---|---|---|---|---|---|
| | | | Very Bad | Bad | Good | Very Good | |
| Items | 1 | Count | 3 | 13 | 40 | 9 | 65 |
| | | % within Item | 4.6% | 20.0% | 61.5% | 13.8% | 100.0% |
| | 2 | Count | 7 | 22 | 26 | 10 | 65 |
| | | % within Item | 10.8% | 33.8% | 40.0% | 15.4% | 100.0% |
| | 3 | Count | 3 | 21 | 31 | 10 | 65 |
| | | % within Item | 4.6% | 32.3% | 47.7% | 15.4% | 100.0% |
| | 4 | Count | 7 | 23 | 27 | 8 | 65 |
| | | % within Item | 10.8% | 35.4% | 41.5% | 12.3% | 100.0% |
| | 5 | Count | 11 | 17 | 32 | 5 | 65 |
| | | % within Item | 16.9% | 26.2% | 49.2% | 7.7% | 100.0% |
| | 6 | Count | 4 | 25 | 28 | 8 | 65 |
| | | % within Item | 6.2% | 38.5% | 43.1% | 12.3% | 100.0% |
| | 7 | Count | 5 | 28 | 22 | 10 | 65 |
| | | % within Item | 7.7% | 43.1% | 33.8% | 15.4% | 100.0% |
| | 8 | Count | 11 | 30 | 18 | 6 | 65 |
| | | % within Item | 16.9% | 46.2% | 27.7% | 9.2% | 100.0% |
| | 9 | Count | 8 | 20 | 27 | 10 | 65 |
| | | % within Item | 12.3% | 30.8% | 41.5% | 15.4% | 100.0% |
| | 10 | Count | 6 | 15 | 33 | 11 | 65 |
| | | % within Item | 9.2% | 23.1% | 50.8% | 16.9% | 100.0% |
| Total | | Count | 65 | 214 | 284 | 87 | 650 |
| | | % within Item | 10.0% | 32.9% | 43.7% | 13.4% | 100.0% |

On the other hand, about 43 percent of the students (10% very poor + 32.9% very good) did not have a positive view of their needs regarding general skills in English.

**Figure 1**

*Percentages: General Skills in English Needs*




**RQ2. What are biomedical engineering students' perceived specific English skill needs?**

The second section of the students' questionnaire, which included ten items, aimed to explore their perceived needs related to specific English skills. Table 4 shows the frequencies and percentages for these items. Interestingly, most students—39.3 percent—felt that their specific English needs were only moderately met. The views on these needs were fairly balanced, with 39.6 percent expressing a positive outlook (21.5% saying "much" and 8.1% "very much"). In comparison, 31.1 percent conveyed a negative attitude (20.7% "little" and 10.4% "very little"). This suggests that students have mixed feelings about how well their specific language needs are being addressed.

**Table 4**

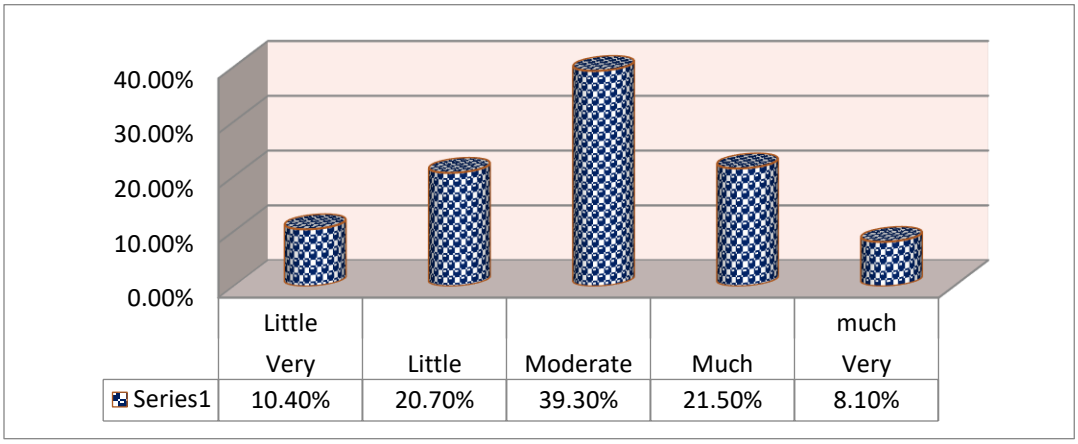
*Frequencies and Percentages: Specific Needs*

| | | | Choices | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | | Very Little | Little | Moderate | Much | Very much | |
| Item | 11 | Count | 6 | 10 | 33 | 11 | 5 | 65 |
| | | % within Item | 9.2% | 15.4% | 50.8% | 16.9% | 7.7% | 100.0% |
| | 12 | Count | 2 | 3 | 26 | 26 | 8 | 65 |
| | | % within Item | 3.1% | 4.6% | 40.0% | 40.0% | 12.3% | 100.0% |
| | 13 | Count | 2 | 3 | 25 | 28 | 7 | 65 |
| | | % within Item | 3.1% | 4.6% | 38.5% | 43.1% | 10.8% | 100.0% |
| | 14 | Count | 1 | 12 | 27 | 19 | 6 | 65 |
| | | % within Item | 1.5% | 18.5% | 41.5% | 29.2% | 9.2% | 100.0% |
| | 15 | Count | 1 | 11 | 22 | 22 | 9 | 65 |
| | | % within Item | 1.5% | 16.9% | 33.8% | 33.8% | 13.8% | 100.0% |
| | 16 | Count | 5 | 15 | 27 | 12 | 6 | 65 |
| | | % within Item | 7.7% | 23.1% | 41.5% | 18.5% | 9.2% | 100.0% |
| | 17 | Count | 9 | 14 | 28 | 9 | 5 | 65 |
| | | % within Item | 13.8% | 21.5% | 43.1% | 13.8% | 7.7% | 100.0% |
| | 18 | Count | 6 | 15 | 33 | 7 | 4 | 65 |
| | | % within Item | 9.2% | 23.1% | 50.8% | 10.8% | 6.2% | 100.0% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 19 | Count | 9 | 11 | 25 | 11 | 9 | 65 |
| | | % within Item | 13.8% | 16.9% | 38.5% | 16.9% | 13.8% | 100.0% |
| | 20 | Count | 11 | 21 | 17 | 14 | 2 | 65 |
| | | % within Item | 16.9% | 32.3% | 26.2% | 21.5% | 3.1% | 100.0% |
| Total | | Count | 115 | 229 | 434 | 238 | 89 | 1105 |
| | | % within Item | 10.4% | 20.7% | 39.3% | 21.5% | 8.1% | 100.0% |

**Figure 2**

*Percentages: Specific Skills in English Needs*




**RQ3. What gaps exist between what biomedical engineering students perceive as their general English needs and what the current curriculum covers?**

An analysis using the Chi-square test was conducted to examine potential differences between the biomedical engineering students' perceived general English needs and those addressed in the current curriculum. The questionnaire items numbered 21 to 30 specifically targeted the general English needs reflected in the existing curriculum. According to the results presented in Table 5, it can be asserted that students tend to underestimate their general language skills when compared to the expectations outlined in the curriculum. Apart from the "very much" category, which was not included in the first section, 13.4% of students rated their general abilities as good. In contrast, this same category was represented by a higher percentage (23.7%) within the curriculum. Approximately 44% of respondents considered their abilities to be moderate, while a larger proportion—49%—identified the curriculum's relevant content as moderate. On the lower end of the scale, students 'self-assessments were more negative than the curriculum's portrayal: about 43% (comprising 32.9% selecting "little" and 10% "very little") compared to 19.8% of the curriculum (13.2% "little" and 6.6% "very little").

**Table 5**

*Frequencies, Percentages, and Std. Residuals: Perceived General Needs vs. Curriculum*

| | | Choices | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Very Little | Little | Moderate | Much | Very much | |
| Perceived | Count | 65 | 214 | 284 | 87 | 0 | 650 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Needs | % within Section | 10.0% | 32.9% | 43.7% | 13.4% | 0.0% | 100.0% |
| | Std. Residual | 1.2 | 4.2 | -.8 | -2.6 | -4.5 | |
| Curriculum | Count | 30 | 60 | 223 | 108 | 34 | 455 |
| | % within Section | 6.6% | 13.2% | 49.0% | 23.7% | 7.5% | 100.0% |
| | Std. Residual | -1.5 | -5.0 | 1.0 | 3.1 | 5.3 | |
| Total | Count | 95 | 274 | 507 | 195 | 34 | 1105 |
| | % within Section | 8.6% | 24.8% | 45.9% | 17.6% | 3.1% | 100.0% |

Note. Negative signs in statistics convey direction, not value. The Std. Residual value of -5 means that the choice is selected significantly lower than expectation, while a value of 5 indicates that the choice is chosen significantly beyond expectation.

In addition to reporting frequencies and percentages, Table 5 also presents the standardized residual values (Std. Residual). Any Std. Residual exceeding ±1.96 was interpreted as evidence that the choice selection was not due to random chance. According to these values, participants chose the "much" option significantly more often than expected for the curriculum (Std. Residual = 3.1 > 1.96), whereas their self-assessment of general abilities for this category was significantly lower than anticipated (Std. Residual = -2.6 < -1.96). Conversely, on the opposite side of the table, participants selected the "little" option significantly less frequently than expected concerning the curriculum (Std. Residual = -5 < -1.96). At the same time, their self-reported abilities for this choice were notably higher than expected (Std. Residual = 4 > 1.96). Furthermore, the Chi-square test results ($\chi^2$ (4) = 112.13, p = .000), as shown in Table 6, confirmed significant discrepancies between the biomedical engineering students' general perceived language needs and those established by the current curriculum. The effect size measures—Cramer's V and Phi (.319, p = .000)—suggested that these differences represent a moderate effect, highlighting a meaningful gap between students ' perceptions and curricular provisions.

**Table 6**

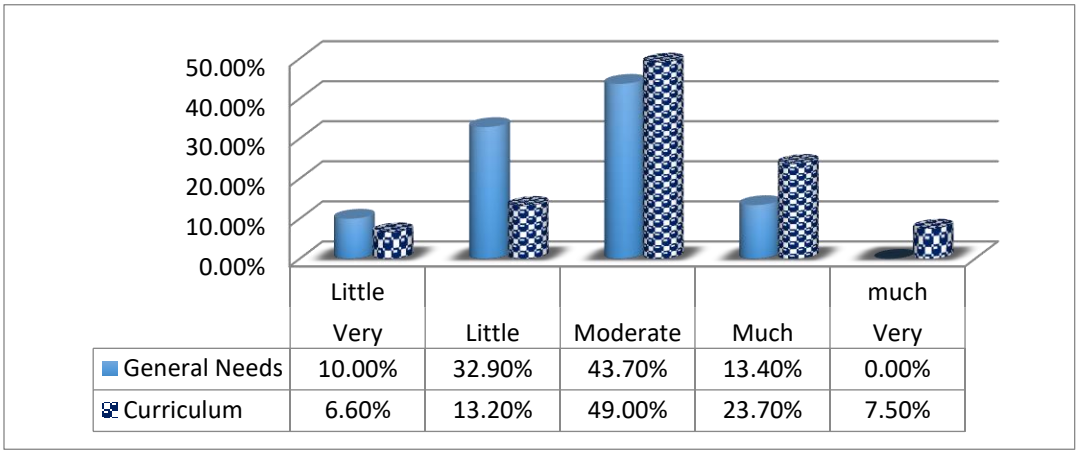
*Chi-Square Tests: Perceived Needs vs. Curriculum*

| | Value | df | Asymp. Sig. (2-sided) | Effect Size Indices | Values | p |
|---|---|---|---|---|---|---|
| Pearson Chi-Square | 112.130[a] | 4 | .000 | Phi | .319 | .000 |
| Likelihood Ratio | 127.177 | 4 | .000 | Cramer's V | .319 | .000 |
| Linear-by-Linear Association | 83.744 | 1 | .000 | | | |
| N of Valid Cases | 1105 | | | | | |

a. 0 cells (0.0%) have an expected count less than 5. The minimum expected count is 14.00.

**Figure 3**

*Discrepancies between General Needs and Curriculum*




**RQ4. What gaps exist between what biomedical engineering students perceive as their specific English needs and what the current curriculum covers?**

A Chi-square analysis was conducted to investigate any discrepancies between the biomedical engineering students' perceived special English needs and those addressed in the current curriculum. Questionnaire items numbered 31 to 40 specifically targeted the special English needs represented in the curriculum. According to the findings presented in Table 7, it appears that students tend to underestimate their specific language skills when compared to what is emphasized in the curriculum. For instance, only 8.1% of respondents rated their specific abilities as very good (Std. Residual = -2.5 < -1.96), whereas this category was more prominently represented in the curriculum at 12.4% (Std. Residual = 2.2 > 1.96). Similarly, 21.5% of students considered their specific abilities as good (Std. Residual = -2.3 < -1.96), while the curriculum allocated a higher proportion, 27.7%, to this level (Std. Residual = 2 > 1.96).

**Table 7**

*Frequencies, Percentages, and Std. Residuals: Specific Needs vs. Curriculum*

| | | Choices | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Very Little | Little | Moderate | Much | Very much | |
| Specific Needs | Count | 115 | 229 | 434 | 238 | 89 | 1105 |
| | % within Section | 10.4% | 20.7% | 39.3% | 21.5% | 8.1% | 100.0% |
| | Std. Residual | -1.7 | 3.0 | 2.3 | -2.3 | -2.5 | |
| Curriculum | Count | 194 | 201 | 456 | 393 | 176 | 1420 |
| | % within Section | 13.7% | 14.2% | 32.1% | 27.7% | 12.4% | 100.0% |
| | Std. Residual | 1.5 | -2.6 | -2.0 | 2.0 | 2.2 | |
| Total | Count | 309 | 430 | 890 | 631 | 265 | 2525 |
| | % within Section | 12.2% | 17.0% | 35.2% | 25.0% | 10.5% | 100.0% |

Approximately 40% of the respondents (Std. Residual = 2.3 > 1.96) considered their specific English abilities to be average, while a smaller proportion—32.1% (Std. Residual = -2 < -1.96)—rated the curriculum as addressing these skills at a moderate level. On the lower end of the scale, students' self-assessments were more negative than the curriculum's representation, with about 31% (20.7% selecting "little" and 10.4% "very little") compared to 27.9% in the curriculum (14.2% "little" and 13.7% "very little"). Notably, students significantly underestimated their specific needs

by choosing the "little" option (Std. Residual = 3 > 1.96), whereas the curriculum's emphasis on this option was notably lower (Std. Residual = -2.6 < -1.96). The Chi-square test results ($\chi^2$ (4) = 50.69, p = .000), presented in Table 8, revealed significant discrepancies between the engineering students' perceived specific English needs and those incorporated in the current curriculum. However, the effect size measures—Cramer's V and Phi (.149, p = .000)—indicate a weak effect, suggesting that these findings should be interpreted with caution.

**Table 8**

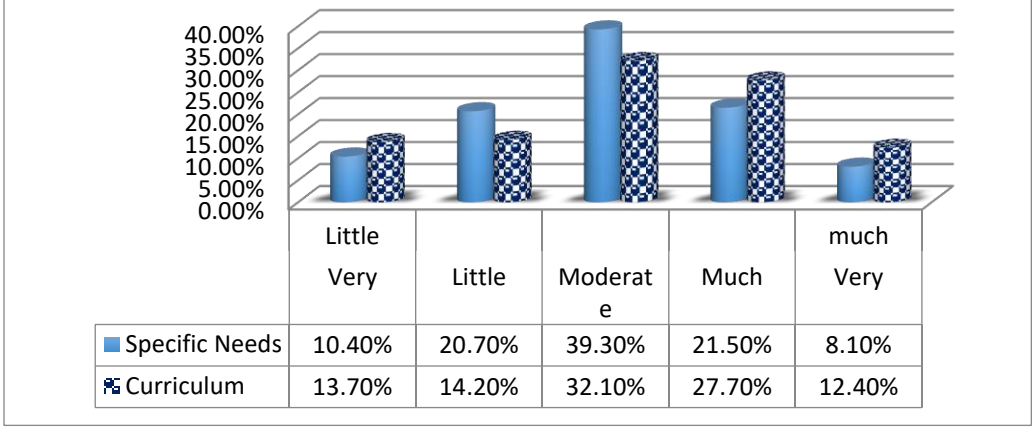
*Chi-Square Tests: Perceived Specific Needs vs. Curriculum*

| | Value | df | Asymp. Sig. (2-sided) | Effect Size Indices | Values | p |
|---|---|---|---|---|---|---|
| Pearson Chi-Square | 50.693[a] | 4 | .000 | Phi | .142 | .000 |
| Likelihood Ratio | 50.958 | 4 | .000 | Cramer's V | .142 | .000 |
| Linear-by-Linear Association | 10.357 | 1 | .001 | | | |
| N of Valid Cases | 2525 | | | | | |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 115.97.

**Figure 4**

*Discrepancies between Specific Needs and Curriculum*




## Discussion

The data analysis revealed that biomedical engineering students generally have a positive attitude toward their English needs as outlined in the current ESP curriculum. However, their perception of their specialized English requirements within the program is more moderate, suggesting that, from the students' viewpoint, the curriculum is somewhat lacking in addressing specific ESP issues. Specifically, students expressed a desire to become more familiar with tasks such as translating biomedical engineering documents, reading academic journal articles, and understanding advanced biomedical engineering textbooks. Overall, based on students' feedback, the curriculum somewhat meets their actual learning needs. These findings support Richards (2001), who highlighted the vital role of ESP instruction in preparing learners for real-world professional demands. Richards pointed out that English is the international language of science and serves as the primary communication

medium—a Lingua Franca—in scientific disciplines. Supporting this, Shahini (1988) found at Shiraz University that beyond the essential four language skills, English major students needed improved translation skills in both speaking and writing. Similarly, Amiri (2000) emphasized the importance of instructional design in helping students effectively use English in their future careers. Mahbub (2019) also recognized English as crucial in vocational settings. Additionally, the study showed that students tend to underestimate their general English skills compared to those emphasized in the curriculum. Significant gaps exist between students' perceptions of their general and specialized English needs versus what is included in the current curriculum. This aligns with Khajavi and Gordani's (2010) findings that academic training, especially in ESP and EAP, often fails to prepare Iranian M.A. students for professional workplace challenges adequately. They recommended revising such programs to meet professional requirements better. Similarly, Ismail, Hussin, and Darus (2012) identified the need for targeted instruction in English writing to help ESL students develop skills directly applicable to the workplace. Moattarian and Tahririan (2014) argued that graduate students' language needs must match real workplace demands, emphasizing translation skills along with reading and writing for tourism management students in Iran. Aliakbari and Boghayeri (2014) also stressed the importance of ESP design based on learners' future job contexts. Faraji et al. (2023) concluded that there was a significant difference between students' and instructors' perceptions of their preferred skills. For students, reading was the most preferred skill, followed by writing, listening, and speaking. However, for instructors, reading was also the top skill needed, but it was followed by writing, speaking, and listening. Based on their findings, revising the current program appears necessary to provide Iranian Social Sciences students with more effective ESP courses. The results of Nateghian's study (2024) showed that, besides proficiency in general English, civil engineers need to discuss technical issues, attend conferences and seminars, read or write specific genres, and communicate orally, all of which require knowledge of both general and technical English. However, university programs are not explicitly designed to address students' specialized needs. Zohrabi et al. (2025), in a study, concluded that EFL teachers have to develop practical writing tasks in their general English classes that enable them to provide learners with appropriate feedback based on their language proficiency level. Mehrpouyan's study (2025) showed significant improvements in employees' communication and writing skills, indicating that targeted training can effectively enhance these competencies. Additionally, a positive correlation between language training and job performance was observed, leading to increased productivity, improved work quality, and higher job satisfaction. This suggests that investing in needs-based language training is a strategic move that can bring substantial organizational benefits.

The current study's findings show that the biomedical engineering ESP program does not adequately prepare students for real-world professional situations, with many students reporting limited progress in job-related language skills. This highlights broader criticism of the educational system's failure to offer relevant ESP training for engineering students. Richards (2001) emphasized the increasing dominance of English as the Lingua Franca of science, noting its widespread use in scientific publications and international conferences—even in countries where English is not the native language—underscoring the urgent need for engineering students to develop both general English skills and specialized ESP abilities. Moslemi (2008) also stated that ESP training often fails to meet EFL learners' practical needs. Consistent with this study, Moslemi et al. (2011) concluded that without curriculum reforms aligned with actual workplace demands, university ESP programs cannot significantly enhance students' mastery of specialized English. This collection of research collectively calls for a comprehensive review and enhancement of ESP

curricula to ensure students acquire the language skills necessary for their future professional success.

## References

Aliakbari, M., & Boghayeri, M. (2014). A needs analysis approach to ESP design in the Iranian context. *Procedia-Social and Behavioral Sciences, 98*, 175–181. https://doi.org/10.1016/j.sbspro.2014.03.404

Amiri, M. (2000). *A study on the English language programs at the B.A. level at Tehran universities*. Master's thesis, Allameh Tabatabai University, Tehran, Iran.

Alemi, M., Jafari Pazoki, S. (2019). Evaluating engineering major ESP courses in Iranian universities. *RELC Journal, 51*(2), 212–226. https://doi.org/10.1177/0033688218811371

Basturkmen, H. (2019). ESP teacher education needs. *Language Teaching, 52*(3), 318–330. https://doi.org/10.1017/s0261444817000398

Brindly, G. (1989). The role of needs analysis in adult ESL program design. In R.K. Johanson (Ed.), *The second language curriculum* (pp. 63–78). Cambridge: Cambridge University Press.

Brown, J. D. (1995). *The elements of language curriculum: A systematic approach to program development.* Boston: Heinle & Heinle.

Brutt-Griffler, J. (2002). *World English: A study of its development*. N.Y.: Multilingual Matters.

Chan, C. S. C. (2019). Long-term workplace communication needs of business professionals: Stories from Hong Kong senior executives and their implications for ESP and higher education. *English for Specific Purposes, 56*, 68–83. https://doi.org/10.1016/j.esp.2019.07.003

Chomsky, N. (1964). *Syntactic structures.* The Hague: Mouton.

Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge: Cambridge University Press.

Cheraghi, Z., & Motaharinejad, A. (2023). Investigating the challenges of Iranian ESP teachers at medical schools: The role of video presentation on subject-related critical incidents. *Informatics in Medicine Unlocked*, 39, 101250. https://doi.org/10.1016/j.imu.2023.101250

Dou (2024). Needs analysis of ESP courses from the perspective of students and teachers. *Frontiers in Educational Research, 7*(6). https://doi.org/10.25236/fer.2024.070620

Faraji, M. N., Dowlatabadi, H. R., Moelaie, B., & Rahmanpanah, H. (2023). Investigating ESP Needs Analysis in Iranian Universities: The Case of Social Sciences Students. *Teaching English Language, 17*(2), 103–133. https://doi.org/10.22132/tel.2023.177413

Graddol, D., Leith, D., & Swann, J. (1996). *English: History, diversity, and change*. New York: Open University Press.

Hutchinson, T., & Waters, A. (1992). *English for Specific Purposes*. Cambridge: Cambridge University Press.

Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp.42–51). Harmondsworth, England: Penguin Books.

Ismail, N., Hussin, S., & Darus, S. (2012). ESL students' attitudes, learning problems, and needs for online writing. *GEMA: Online Journal of Language Studies*, *12*(4), 1089–1107. https://doi.org/10.18848/1447-9494/cgp/v18i09/47748

Johns, A. M., & Dudley-Evans, T. O. N. Y. (1991). English for specific purposes: International in scope, specific in purpose. *TESOL Quarterly*, *25*(2), 297–314.

Jordan, R. R. (1997). *English for academic purposes: A guide and resource book for teachers.* Cambridge: Cambridge University Press.

Khajavi, Y., & Gordani, Y. (2010). Investigating Iranian MA students' perceptions of their academic English language needs, abilities, and problems. *ESP world*, *31*(10), 1–22.

Long, M. (2005). *Second language needs analysis*. Cambridge: Cambridge University Press.

Mackay, R., & Mountford, A. (1978). The teaching of English for specific purposes: Theory and Practice. In R. Mackay & A. Mountford (Eds.), *English for specific purposes* (pp. 2–20). London: Longman Group Limited.

Mahbub, M. A. (2019). English teaching in vocational high school: A needs analysis. *JEELS (Journal of English Education and Linguistics Studies)*, *5*(2), 229–258. https://doi.org/10.30762/jeels.v5i2.835

Mehrpouyan, A. (2025). The Impact of Needs-Based English Language Training on Employees' Language Proficiency and Job Performance at Mobin Mining and Construction Company. (e219768). *International Journal of Practical and Pedagogical Issues in English Education*, (), e219768. https://doi.org/10.22034/ijpie.2025.511574.1090

Moattarian, A., & Tahririan, M. H. (2014). Language needs of graduate students and ESP courses: The case of tourism management in Iran. *Journal of Research in Applied Linguistics*, *5*(2), 4–22.

Moslemi (2008). ESP needs analysis of Iranian MA students: A case study of the University of Isfahan. *The Linguistics Magazine of Isfahan University*, *3*, 24–32.

Moslemi, F., Moinzadeh, A., & Dabaghi, A. (2011). ESP needs analysis of Iranian MA students: A case study of the University of Isfahan. *English Language Teaching*, *4*(4), 121–132. https://doi.org/10.5539/elt.v4n4p121

Munby, J. (1978). *Communicative syllabus design: A sociolinguistic model for defining the content of purpose-specific language programs*. Cambridge: Cambridge University Press.

Ngäugäi wa, T. O. (1986). *Decolonising the mind: The politics of language in African literature.* London: Heinemann.

Norton, B. (2017). *Identity and language learning: Gender, ethnicity and educational change (2nd ed.)* New York: Harlow.

Nunan, D. (1988). *The learner-centered curriculum: A study in second language teaching.* Cambridge: Cambridge University Press.

Ngo, C. G. A., Mabale, A. L. M., Maspara, C. M., Montalbo, J. R. C., & Alcayde, F. A. B. (2024). ESP Needs Analysis of Macroskills of Social Work Students. *Journal Corner of Education, Linguistics, and Literature, 4*(2), 174–183. https://doi.org/10.54012/jcell.v4i2.324

Nateghian, N. (2024). English Language Needs of Iranian Students of Civil Engineering: Are the Courses Aligned with Workplace Needs?. https://doi.org/10.1016/j.esp.2024.08.002

Orr, T. (2001). English language education for specific professional needs. *IEEE Transactions on Professional Communication, 44*(3), 207–211. https://doi.org/10.1109/47.946467

Pennington, M. (2018). ESP revisited. *TESOL Quarterly, 20* (2), 207–226.

Puspitaloka, N., Ambarwati, E. K., Nurjanah, K. D., & Fauziah, D. N. (2024). English for Specific Purpose Needs Analysis at a Vocational High School. *Proceedings of the 7th International Conference on Language, Literature, Culture, and Education (ICOLLITE 2023)*, 337–342. https://doi.org/10.2991/978-94-6463-376-4_43

Richards, J. C. (2001). *Curriculum development in language teaching*. Cambridge: Cambridge University Press.

Richterich, R., & Chancerel, J. L. (1978). *Identifying the needs of adults learning a foreign language.* Strasbourg: Council of Europe.

Saffarzadeh, T. (1981). *An introduction to the English books published by SAMT*. Tehran: SAMT Publications.

Savignon, S. J. (2007). Beyond communicative language teaching: What is ahead? *Journal of Pragmatics, 39*(1), 207–220. https://doi.org/10.1016/j.pragma.2006.09.004

Shahini, G. H. (1988). *A needs assessment for EFL courses at Shiraz University*. M.A. thesis. Shiraz University, Shiraz, Iran.

Spence, P., & Liu, G.-Z. (2013). Engineering English and the high-tech industry: A case study of an English needs analysis of process integration engineers at a semiconductor manufacturing company in Taiwan. *English for Specific Purposes, 32*(2), 97–109. https://doi.org/10.1016/j.esp.2012.11.003

Tripepi, W.S. (2012). English for special purposes used by and for non-native English-speaking interlocutors: The interpreter's role and responsibility. In J. Munday (Ed.), *Translation and ESP* (pp. 141–151). London: Longman.

Van Ek, J. A., & Trim, J. L. M. (1984). *Across the threshold: readings from the modern languages' projects of the Council of Europe*. Prentice Hall.

Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education.* Mahwah, N.J.: L. Erlbaum Associates.

Weddel, K. S., & Van, D. C. (1997). *Needs assessment for adult ESL learners.* ERIC Digest No. ED407882).

West, R. (1994). Needs analysis in language teaching. *Language teaching, 27*(1), 1–19.

Widdowson, H. G. (1978). *Teaching language as communication*. Oxford: OUP.

Widdowoson, H. G. (1981). English for specific purposes: Criteria for course design. In L.

Wilkins, D. (1976). *Notional syllabuses*. Oxford: Oxford University Press.

Xue, L. (2019). Implementation of Communicative Teaching Approach in College English Teaching. In *2019, the 4th International Conference on Social Sciences and Economic Development (ICSSED 2019)*. Atlantis Press. https://doi.org/10.2991/icssed-19.2019.121

Zhao, P. (2019). Analysis of ESP course design in college English based on genre theory. In H. Wagemaker & R. M. Wolf (Eds.), Proceedings of the 1st International Education Technology and Research Conference (IETRC 2019) (pp. 3238–332). UK: Francis Academic Press.

Zohrabi, M. & Khalili, A. (2024). A Cross-Cultural Study into the Utility of Diverse Written Corrective Feedback Strategies in Medicine Students' ESP Writing Courses. *International Journal of Society, Culture & Language*, *12*(2), 150–169. https://doi.org/10.22034/ijscl.2024.2025600.3436

Zohrabi, M., Nourdad, N. and Abbas Alsaadi, I. (2025). The Utility of Written Corrective Feedback in Tertiary Education: The Case of Iraqi ESP Students. *Iranian Journal of English for Academic Purposes*, *14*(1), 94–111.

Zohrabi, M., Nourdad, N. and Abbas Alsaadi, I. (2025). The Impacts of Direct, Indirect, and Metalinguistic Feedback Strategies on Iraqi Students' Writing Performance in EGP Courses. *Journal of Modern Research in English Language Studies*, *12*(4), 127–153. https://doi.org/10.30479/jmrels.2025.21507.2477

**Shahram Esfandiari** holds a Ph.D. in English Language Teaching (ELT). He has been teaching various courses for B.A. and M.A. students for about ten years. His research interests include SLA theories, artificial intelligence, and technology integration in language teaching.

**Parastou Sarkhoshi** is a Master's student in English Language Teaching at the Islamic Azad University of Ardabil, Iran. Her research interests include the application of AI in language education and the exploration of various teaching methods in English language instruction.

**Mohammad Rahim Bohlooli Niri** was born in Nir, Ardabil, Iran in 1973. He received his B.A., M.A., and Ph.D. degrees in English Translation and ELT (English Language Teaching) from Allameh Tabatabaei University, Tehran Islamic Azad University (Central Branch), and Hyderabad Central University in India. Currently, he is an assistant professor of ELT at Farhangian University of Ardabil.

**Fariba Ahmadi** holds a Master's degree in English Language Teaching and has over 25 years of professional experience in teaching English. She is the founder of a licensed English language institute in Iran, authorized by the Ministry of Education. Her research interests include learner-centered teaching, second language acquisition, and curriculum development.