

Bridging the Gap: A Systematic Review of Needs Analysis in English Language Courses in Higher Education

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ABSTRACT

English language proficiency is vital for academic and professional success in higher education, particularly in English for Academic Purposes (EAP) and English for Specific Purposes (ESP) programs. However, misalignment between learners' language needs and existing curricula often undermines learning outcomes. Despite the importance of needs analysis (NA) in addressing these issues, challenges persist, including limited use of systematic methods and inadequate integration of real-world learner requirements into course design. This systematic review examines the role of NA in designing and evaluating English language courses, focusing on persistent gaps between learner needs and curricula. Mixed-methods approaches, combining surveys, interviews, and observations, are identified as the most effective tools, offering a comprehensive understanding of learners' needs and enabling targeted curriculum development. Main findings highlight mismatches in academic content and practical language requirements, especially in speaking, listening, and technical reading skills. Motivational factors, both instrumental (e.g., career goals) and integrative (e.g., cultural engagement), also play a crucial role in learner engagement. The study underlines NA's foundational role in curriculum development, advocating for Target Situation Analysis (TSA), triangulation methods, and technology-mediated tools to enhance reliability and relevance. Recommendations include revising curricula, integrating technology, and fostering interdisciplinary collaboration. Future research should explore AI-assisted NA and longitudinal studies to create more inclusive and effective language programs.

Keywords: Needs Analysis, English for Specific Purposes (ESP), Curriculum Development, Higher Education, Language Skills

INTRODUCTION

In an increasingly globalized world, proficiency in English has become a cornerstone of academic and professional success, particularly in higher education contexts where English serves as the medium of instruction or as a foreign language (Kamil M.A. & Muhammad A.M., 2021; Chemir S., & Kitila T., 2022). English language courses, especially those designed for Academic Purposes (EAP) and Specific Purposes (ESP), play a pivotal role in equipping students with the linguistic competencies necessary for their academic pursuits and future careers. However, designing effective English language courses that meet the diverse needs of learners remains a complex challenge, underscoring the importance of systematic needs analysis (Park, E.J., 2021; Čapková & H. Kroupová, 2017).

The concept of needs analysis involves identifying the gap between learners' current linguistic abilities and their desired competencies, thereby informing the design of tailored curricula (Rashidi, N. & Kehtarfard, R., 2014; Hoang Oanh, D.T., 2007). While previous studies have highlighted the critical role of needs analysis in aligning course content with learner requirements, significant gaps persist in its implementation (Kamil M.A. &

Muhammad A.M., 2021; Atai, M.R. & Hejazi, S.Y., 2019). For instance, mismatches between perceived student needs and actual course content often result in curricula that fail to address practical language skills essential for employability (Al-Saadi & S.H. Samuel, M.S., 2013). Furthermore, institutional factors such as the alignment between EAP programs and broader academic curricula can hinder the effectiveness of language instruction (Al-Maamari, F.S., 2017).

Despite the growing body of literature on needs analysis, several research gaps remain. First, while mixed-methods approaches that combine surveys, interviews, and observations are widely recognized for their ability to provide comprehensive insights (Chemir S. & Kitila T., 2022; Park, E.J., 2021), many institutions still rely on limited data sources, compromising the validity of their findings (Čapková & H. Kroupová, 2017). Second, challenges such as inadequate teacher qualifications and outdated textbooks continue to impede the translation of needs analysis into actionable course designs (Menggo, S. et al., 2019; Cardwell, R. et al., 2024). Finally, there is a paucity of research exploring how continuous evaluation and adaptation based on needs analysis can enhance long-term curriculum relevance and effectiveness (Salehi, H. et al., 2015; Mehrdad, A.G., 2012).

Thus, this paper aims to address these gaps by conducting a systematic review of needs analysis in English language courses within higher education. Specifically, it seeks to: (1) synthesize existing literature on the methodologies and outcomes of needs analysis, (2) identify persistent challenges in implementing needs-based curricula, (3) to examine the connections of important themes such as curriculum development, materials evaluation, and course management and (4) propose actionable strategies for enhancing the alignment between learner needs and course design. By doing so, this study contributes to both theoretical understanding and practical application, offering educators and policymakers evidence-based recommendations for improving English language education.

The contributions of this review are threefold. First, it consolidates fragmented findings from prior studies, providing a holistic overview of the state of needs analysis in higher education. Second, it highlights emerging trends, such as the integration of technology-mediated language skills and collaborative faculty development programs, which hold promise for addressing current limitations (Sawaki, Y., 2017; Nausa, R. et al., 2024). Third, it outlines directions for future research, emphasizing the need for longitudinal studies and cross-disciplinary collaborations to refine ESP teaching practices.

This paper is structured to provide a comprehensive exploration of needs analysis in English language courses within higher education. The Literature Review section provides an overview of reviewed studies in the current literature. The Methodology section presents a comprehensive analysis of the methodologies employed in needs analysis, emphasizing the advantages of mixed-methods approaches, such as surveys, interviews, and observations, and their role in triangulating data for enhanced validity. The Findings and Discussion section synthesizes insights from recent research, highlighting persistent mismatches between learner needs and existing curricula, particularly in academic writing, listening, and speaking skills. It also critically examines obstacles to implementing needs-based curricula, including institutional barriers, resource constraints, and the limited application of systematic needs analysis frameworks. Furthermore, this section explores how these findings inform course design, offering practical strategies for integrating technology-enhanced tools, fostering interdisciplinary collaboration, and continuously evaluating course effectiveness. Finally, the Conclusion section summarizes main findings and suggests future research directions, emphasizing the need for longitudinal studies and AI-assisted needs analysis to enhance the adaptability and responsiveness of English language education.

LITERATURE REVIEW

Table 1. Overview of Reviewed Studies in the Literature

| Authors | Title | Source title | Year | Cited by |
|---|--|----------------|------|----------|
| Cardwell R.; Naismith B.; Burstein J.; Nydick | From Pen to Pixel: Rethinking English Language Proficiency Admissions Assessments in the Digital Era | CALICO Journal | 2024 | 1 |

| | | | | |
|--|--|---|------|----|
| S.; Goodwin S.; Verardi A. | | | | |
| Nurmetov D.; Siswantoyo; Bakić- Mirić N.; Chaklikova A. | Identifying student needs in English for information technology at the post- secondary level | Cakrawala Pendidikan | 2023 | 1 |
| Chemir S.; Kitila T. | Learners' needs analysis for English for academic purposes in Ethiopian higher education institutions: The case of Wachemo University freshman students | Cogent Education | 2022 | 4 |
| Kamil M.A.; Muhammad A.M. | Professional communication competence in English for occupational purposes (EOP) courses: A systematic literature review and proposal of a framework | Journal of Teaching and Learning for Graduate Employability | 2021 | 4 |
| Park E.J. | Affordances and challenges of mixed- methods needs analysis for the development of ESP courses | Language Teaching Research Quarterly | 2021 | 5 |
| Menggo S.; Suastra I.M.; Budiarsa M.; Padmadewi N.N. | Needs analysis of academic-English speaking material in promoting 21 st century skills | International Journal of Instruction | 2019 | 23 |
| Atai M.R.; Hejazi S.Y. | Assessment of academic English language needs of Iranian post-graduate students of psychology; [Evaluación de las necesidades lingüísticas en Inglés académico de los estudiantes Iranís de posgrado de psicología] | Iberica | 2019 | 12 |
| Polyakova O.; Galstyan-Sargsyan R. | Communicative competences in non- linguistic university degrees | Language Value | 2019 | 2 |
| Al-Saadi S.H.; Samuel M.S. | An analysis of the writing needs of Omani EFL students for the development of grade 11 English program | Asian EFL Journal | 2013 | 3 |
| Faiza H. | Conducting a needs analysis for an ESP course design: The case of fourth year students of cellular and molecular biology | International Journal of the Humanities | 2010 | 0 |
| Hoang Oanh D.T. | Meeting students' needs in two EAP programmes in Vietnam and New Zealand: A comparative study | RELJ Journal | 2007 | 11 |

The table summarizes a range of research studies focusing on needs analysis in English for Specific Purposes (ESP) and English for Academic Purposes (EAP) contexts. Each study emphasizes the importance of conducting systematic needs analyses to align language instruction with the specific requirements of learners across diverse educational and professional settings.

Kamil and Muhammad (2021) conducted a systematic literature review on professional communication competence in English for Occupational Purposes (EOP). The study analysed 133 articles and highlighted gaps in the triangulation of needs among stakeholders and the lack of emphasis on competencies required for workplace tasks. The outcome was a theoretical model aimed at addressing these deficiencies, particularly in

higher education institutions (HEIs) developing EOP courses to enhance graduates' communication skills.

Nurmetov et al. (2023) explored the English language needs of Information Technology (IT) professionals in Kazakhstan. Their survey of 85 alumni revealed that reading, listening, and speaking were critical skills for IT professionals. The study highlighted a disconnect between university-level ESP curricula and the actual professional language requirements of graduates, suggesting a need for curriculum updates to better align with industry demands.

Al-Saadi and Samuel (2013) reported on a large-scale needs analysis for reforming Oman's Grade 11 English curriculum. Using triangulation methods with multiple stakeholders, they identified a significant gap between the curriculum content and students' needs, particularly in developing writing competence. Their findings led to recommendations for revising curriculum aims, teaching methodologies, and teacher training to address these shortcomings.

Hoang (2007) compared needs analysis practices in EAP programs in Vietnam and New Zealand. In New Zealand, needs analysis was systematically integrated into curriculum development through structured data collection, while in Vietnam, informal methods such as teacher observations were predominant. The study suggested adopting the New Zealand model to improve formal needs analysis practices in Vietnam's EAP programs.

Faiza (2010) examined the needs of biology students in Algeria, identifying challenges stemming from the lack of a prescribed ESP syllabus. Through a survey, it was found that students prioritized skills such as translation, reading, and listening to meet academic and professional demands. The study emphasized aligning ESP curricula with learners' needs and motivations to improve language learning outcomes.

Park (2021) analysed the affordances and challenges of mixed-methods approaches in conducting needs analyses for ESP courses. The study demonstrated that integrating quantitative and qualitative methods enhances the rigor of course design and material development. However, it noted that many educators lack the knowledge to utilize needs analysis effectively, underscoring the need for professional development.

Menggo et al. (2019) focused on the role of needs analysis in designing academic English-speaking materials for 21st-century skills. Their study surveyed 312 students in Indonesia and identified critical learner needs, including the development of independent speaking tasks, vocabulary building, and collaborative skills. The findings emphasized integrating these needs into course materials to prepare learners for modern academic and professional contexts.

Chemir and Kitila (2022) explored the motivational orientations of Ethiopian university students in EAP courses. Using mixed methods, they found that students predominantly had instrumental motivations, such as improving job prospects, over integrative motivations like cultural appreciation. The study recommended tailoring EAP curricula to address these motivations effectively.

Atai and Hejazi (2019) assessed the academic English needs of Iranian postgraduate psychology students. Using triangulation methods, they identified mismatches between students' actual abilities and required academic tasks. Their findings emphasized the need for greater alignment between General English (GE) and EAP courses to enhance postgraduate education outcomes.

Cardwell et al. (2024) examined the relevance of technology-mediated language skills in English language proficiency assessments. Their study revealed differences in perceptions between students and instructors regarding the importance of digital communication skills. The findings suggested revising EAP curricula and admission assessments to incorporate technology-driven skills for academic success.

Overall, these studies highlight the vital role of needs analysis in designing effective ESP and EAP curricula. They highlight the need for systematic approaches, stakeholder collaboration, and the integration of emerging skills, such as technology-mediated competencies, to align language education with evolving academic and professional demands.

METHOD

This systematic review employs a systematic and data-driven approach to explore what are the findings of systematic reviews on needs analysis in English language courses in higher education. The study is guided by the following objectives: (1) synthesize existing literature on the methodologies and outcomes of needs analysis, (2) identify persistent challenges in implementing needs-based curricula, (3) to examine the connections of main themes such as curriculum development, materials evaluation, and course management and (4) propose actionable strategies for enhancing the alignment between learner needs and course design.

To achieve this, the study leverages Scopus AI, a powerful database for academic research, to identify and analyse relevant peer-reviewed articles, ensuring the inclusion of high-quality, credible sources. By adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, this study ensures transparency and replicability in its methodology. The process begins with a natural language query “What are the findings of systematic reviews on needs analysis in English language courses in higher education”, was employed to capture broad spectrum of literature. This was supplemented with a keyword search using the following terms: ("needs analysis" OR "needs assessment" OR "requirement analysis" OR "gap analysis") AND ("english language" OR "english course" OR "language education" OR "language instruction") AND ("higher education" OR "tertiary education" OR “university” OR "post-secondary") AND ("curriculum" OR "syllabus" OR "program" OR "course design") AND ("student needs" OR "learner needs" OR "stakeholder needs" OR "educational needs") with a comprehensive search strategy, followed by data extraction, thematic analysis, and synthesis, addressing the four main objectives outlined in the study.

To achieve the first objective of synthesizing existing literature on methodologies and outcomes of needs analysis, a systematic keyword search was conducted using terms such as “needs analysis,” “English for Academic Purposes (EAP),” “English for Specific Purposes (ESP),” “curriculum design,” and “higher education.” The search was limited to peer-reviewed journal articles published between 2007 and 2024 to ensure relevance and currency. Articles were identified and screened based on their alignment with the research objectives. Data were extracted and categorized into themes, including mixed-methods approaches, triangulation, and learner-centered outcomes. This synthesis highlights the advantages of employing diverse data collection techniques, such as surveys, interviews, and observations, which enhance the validity and reliability of findings (Park, 2021; Čapková & Kroupová, 2017). Additionally, the review emphasizes how needs analysis has informed curriculum development, particularly in aligning course content with learners’ instrumental and integrative motivations (Menggo et al., 2019).

The second objective, which focuses on identifying persistent challenges in implementing needs-based curricula, was addressed through a critical examination of recurring issues reported in the literature. Main challenges include mismatches between perceived learner needs and actual course content, inadequate teacher qualifications, and institutional barriers such as misalignment between EAP programs and broader academic curricula (Al-Maamari, 2017; Hoang Oanh, 2007). Furthermore, many studies highlight the limitations of textbooks and instructional materials, which often fail to address the dynamic and evolving linguistic requirements of students (Rashidi & Kehtarfard, 2014). These findings reveal significant gaps in the implementation of needs analysis, particularly in contexts where English is a foreign language. The review also identifies a lack of longitudinal studies that assess the long-term impact of needs-based curricula on learner outcomes, suggesting an area ripe for future research.

The third objective: examining connections among main themes such as curriculum development, materials evaluation, and course management was achieved through a thematic analysis of the selected studies. The review reveals strong interconnections between these themes, emphasizing the importance of integrating needs analysis into all stages of course design and delivery. For instance, effective curriculum development requires not only an understanding of learners’ linguistic needs but also an evaluation of existing materials to ensure they align with those needs (Atai & Hejazi, 2019). Similarly, course management benefits from continuous feedback loops that allow for iterative improvements based on ongoing needs assessments (Salehi et al., 2015). However, the review identifies a gap in research exploring the role of technology-mediated tools in facilitating these processes, particularly in fostering collaborative approaches to curriculum design and materials development.

Finally, the fourth objective: proposing actionable strategies for enhancing the alignment between learner needs and course design was informed by synthesizing best practices from the reviewed studies. Important recommendations include adopting mixed-methods approaches to gather comprehensive data, incorporating technology-mediated language skills into course materials, and fostering collaborative faculty development programs that involve English teachers, subject-matter experts, and industry stakeholders (Cardwell et al., 2024; Nausa et al., 2024). Additionally, the review advocates for the establishment of continuous evaluation mechanisms to ensure that curricula remain responsive to evolving learner needs.

In highlighting existing gaps, this study underlines the need for more robust and systematic approaches to needs analysis, particularly in under-researched contexts such as non-Western higher education institutions. Future studies should explore the potential of digital tools and artificial intelligence in automating and enhancing needs assessment processes. Moreover, there is a pressing need for longitudinal research that evaluates the sustained impact of needs-based curricula on learners' academic and professional outcomes. By addressing these gaps, researchers can contribute to a deeper understanding of how needs analysis can be leveraged to create more inclusive, relevant, and effective English language education systems.

Through this comprehensive methodological approach, the study not only consolidates fragmented findings from prior research but also provides actionable insights and directions for future inquiry, eventually contributing to the advancement of English language teaching and learning in higher education.

FINDINGS AND DISCUSSION

This section outlines the study's findings in relation to the research objectives and delves into their wider implications. Employing a systematic and data-driven approach, the results integrate both quantitative analysis and qualitative insights, ensuring a comprehensive understanding of the subject.

Objective 1: To synthesize existing literature on the methodologies and outcomes of needs analysis

The synthesis of existing literature on the methodologies and outcomes of needs analysis reveals a growing consensus on the importance of systematic approaches in designing English language courses for higher education. A significant proportion of studies emphasize the use of mixed-methods approaches, which combine qualitative and quantitative data collection techniques to provide a comprehensive understanding of learners' needs (Park, 2021; Čapková & Kroupová, 2017). For instance, surveys and questionnaires are frequently employed to gather large-scale data on students' perceived needs, while interviews and focus groups offer deeper insights into their motivations and challenges (Chemir & Kitila, 2022). Observations and document analyses further complement these methods by providing objective evidence of learners' actual performance and gaps in existing materials. This triangulation of data sources enhances the validity and reliability of needs analysis findings, ensuring that course designs are grounded in robust evidence.

Despite the widespread adoption of mixed-methods approaches, variations in implementation highlight both strengths and limitations. Some studies demonstrate the effectiveness of integrating technology-mediated tools, such as online surveys and learning analytics, to streamline data collection and analysis (Cardwell et al., 2024). These innovations not only increase efficiency but also enable real-time feedback loops, allowing educators to adapt curricula dynamically. However, other studies caution against over-reliance on technology, particularly in contexts where digital literacy levels among stakeholders may vary (Menggo et al., 2019). Furthermore, the complexity of coordinating multiple data sources often poses logistical challenges, particularly for institutions with limited resources. These findings highlight the need for careful planning and resource allocation when implementing needs analysis methodologies.

The outcomes of needs analysis have consistently demonstrated its transformative potential in aligning course content with learner requirements. For example, studies conducted in EAP and ESP contexts reveal that needs analysis helps identify specific language skills such as academic writing, research-oriented reading, and workplace communication, which are critical for students' success (Atai & Hejazi, 2019; Nausa et al., 2024). By addressing these identified needs, educators can design curricula that better prepare students for both academic and professional environments. Additionally, needs analysis has been shown to foster learner engagement by

incorporating instrumental and integrative motivations into course design (Kamil & Muhammad, 2021). This alignment not only enhances students' linguistic competencies but also boosts their confidence and motivation to learn.

However, the review also highlights persistent mismatches between perceived learner needs and actual course content, underscoring a critical gap in the implementation of needs analysis findings. For instance, Hoang Oanh (2007) found that textbooks and instructional materials often fail to address practical language skills essential for employability, such as speaking and listening in workplace contexts. Similarly, Rashidi and Kehtarfard (2014) reported discrepancies between students' desired competencies and the content covered in high school English textbooks in Iran. These findings suggest that while needs analysis provides valuable insights, its translation into actionable curricula remains inconsistent. Institutional factors, such as rigid syllabus structures and insufficient teacher training, further exacerbate these challenges (Al-Maamari, 2017).

In conclusion, the synthesis of methodologies and outcomes emphasizes the critical role of needs analysis in optimizing English language courses in higher education. Mixed-methods approaches have proven effective in capturing diverse perspectives and enhancing the validity of findings, yet their implementation requires careful consideration of contextual constraints. The outcomes of needs analysis have consistently demonstrated its ability to inform curriculum development, improve learner engagement, and bridge gaps between current and desired competencies. Nevertheless, persistent mismatches between identified needs and course content highlight the need for more systematic and sustained efforts to translate needs analysis findings into practice. Future research should explore innovative strategies, such as leveraging artificial intelligence and fostering cross-disciplinary collaborations, to address these gaps and ensure the continuous relevance of English language education (Salehi et al., 2015; Mehrdad, 2012).

Objective 2: To identify persistent challenges in implementing needs-based curricula

The identification of persistent challenges in implementing needs-based curricula reveals a complex interplay of institutional, pedagogical, and resource-related factors that hinder the effective translation of needs analysis findings into actionable course designs. One of the most frequently cited challenges is the mismatch between learners' perceived needs and the content of existing curricula. Studies have consistently shown that while needs analysis identifies specific language skills such as practical communication for employability or academic writing for research purposes, these skills are often inadequately addressed in course materials. (Atai & Hejazi, 2019; Al-Saadi & Samuel, 2013). For instance, Hoang Oanh (2007) found that textbooks in EAP programs in Vietnam and New Zealand failed to align with students' actual linguistic requirements, leading to frustration and disengagement. This disconnect highlights a critical gap in the implementation process, where identified needs are not effectively integrated into syllabus design or instructional materials.

Another significant challenge lies in the institutional constraints that limit the flexibility and adaptability of curricula. Many higher education institutions operate within rigid frameworks that prioritize standardized syllabi over learner-centered approaches (Al-Maamari, 2017). This rigidity often stems from bureaucratic processes, accreditation requirements, or a lack of alignment between language programs and broader academic departments. For example, Sawaki (2017) noted that misalignment between EAP courses and content programs in Japanese universities created barriers to addressing students' specific language needs. Similarly, institutional resistance to change can prevent the adoption of innovative methodologies, such as technology-mediated tools or collaborative course design, further exacerbating the gap between theory and practice (Cardwell et al., 2024).

Teacher qualifications and training represent another persistent challenge in implementing needs-based curricula. Several studies emphasize that educators often lack the expertise or resources required to conduct comprehensive needs analyses or adapt their teaching methods accordingly (Menggo et al., 2019; Rashidi & Kehtarfard, 2014). For instance, Čapková and Kroupová (2017) highlighted that teacher in economics courses struggled to evaluate students' language needs due to limited training in ESP methodologies. This issue is particularly pronounced in contexts where English is taught as a foreign language, as instructors may face additional challenges in understanding the cultural and professional contexts of their students. Without adequate professional development programs, educators remain ill-equipped to address the dynamic and evolving needs of learners.

Resource limitations also pose a significant barrier to the successful implementation of needs-based curricula. Many institutions, particularly in under-resourced settings, lack the financial and technological infrastructure necessary to support comprehensive needs analysis and curriculum adaptation (Park, 2021; Chemir & Kitila, 2022). For example, Nausa et al. (2024) found that the absence of updated textbooks and digital tools hindered efforts to align course materials with students' identified needs in master's-level reading courses. Additionally, the time-intensive nature of conducting thorough needs analyses often involving multiple data collection methods; can strain already overburdened faculty members, leading to superficial or incomplete assessments (Salehi et al., 2015). These resource constraints underscore the need for targeted investments in infrastructure and faculty support to facilitate more effective implementation.

Despite these challenges, the review also highlights opportunities for overcoming these barriers through strategic interventions. Collaborative approaches, such as involving subject-matter experts, industry stakeholders, and language teachers in curriculum design, have been shown to enhance the relevance and effectiveness of needs-based curricula (Kamil & Muhammad, 2021). Furthermore, the integration of technology-mediated tools, such as learning analytics and adaptive software, offers promising solutions for streamlining data collection and personalizing instruction (Cardwell et al., 2024). Future research should focus on developing scalable models for needs analysis that can be adapted to diverse institutional contexts, as well as exploring the role of faculty development programs in building capacity for sustained implementation. By addressing these persistent challenges, educators and policymakers can bridge the gap between identified needs and instructional practices, enhancing the quality of English language education.

Objective 3: To examine the connections of main themes such as curriculum development, materials evaluation, and course management

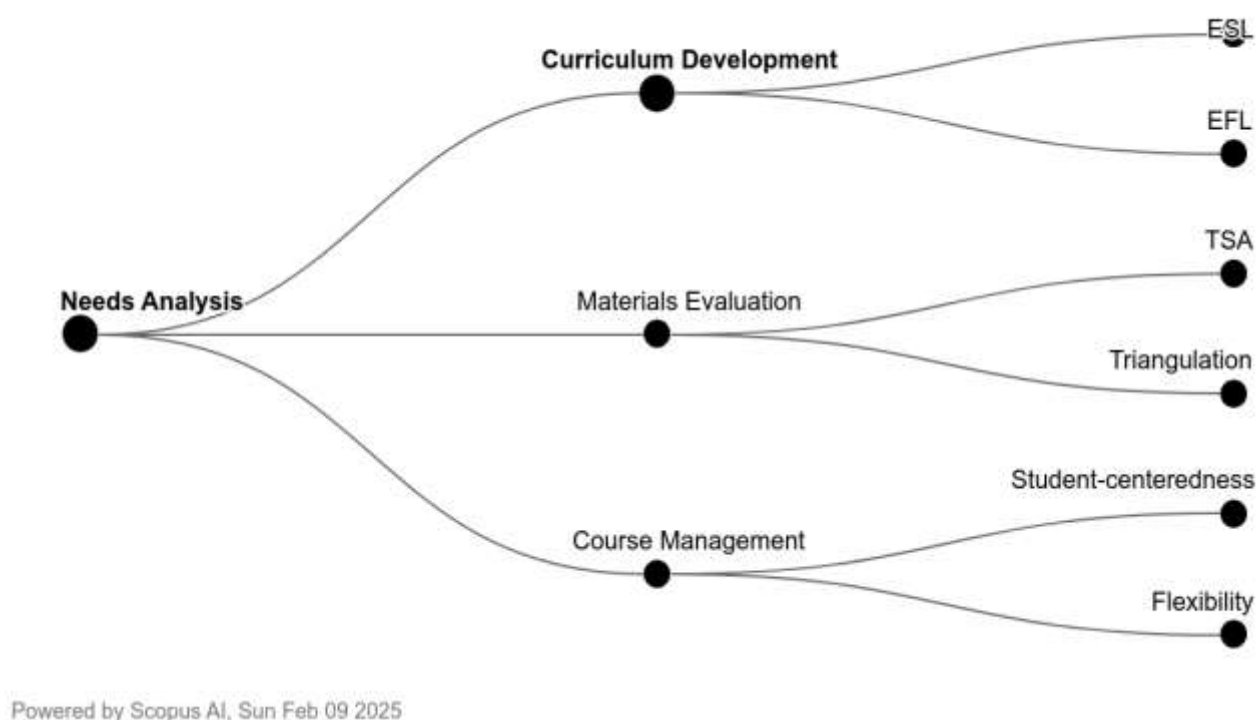


Figure 1: Concept Map of Main Themes and Interconnections in Needs Analysis for Language Education

The graph above provides a visual representation of the central role of needs analysis in shaping main aspects of English language education within higher education. It highlights three interconnected domains influenced by needs analysis: curriculum development, materials evaluation, and course management, showcasing their respective components and contributions to effective language instruction. Each domain is designed to optimize educational practices by addressing learners' specific needs, ensuring that English language courses are contextually relevant, engaging, and effective.

Linkages Between Needs Analysis and Curriculum Development: Bridging ESL and EFL Contexts

Needs analysis (NA) serves as the cornerstone of curriculum development in English language education, acting as a bridge between learners' current competencies and their desired linguistic outcomes. This process is particularly critical in both English as a Second Language (ESL) and English as a Foreign Language (EFL) context, where learners' needs often vary significantly due to differences in exposure to the target language and cultural contexts. By systematically identifying gaps in learners' knowledge, skills, and motivations, NA enables educators to design curricula that are tailored to specific learner groups. For instance, Saragih (2014) emphasize that NA helps shape course content based on communication needs, ensuring that the curriculum addresses both instrumental goals (e.g., academic or professional success) and integrative motivations (e.g., cultural integration). This alignment ensures that ESL and EFL curricula remain relevant and effective in meeting diverse learner requirements.

The role of NA extends beyond merely identifying deficiencies; it also informs key components of curriculum development, including syllabus design, materials selection, teaching methodologies, and assessment strategies. Flowerdew (2012) highlights that NA is indispensable for English for Specific Purposes (ESP) courses, where curriculum design must cater to the unique linguistic demands of specific disciplines or professions. For example, Dehnad et al. (2014) conducted a needs analysis for postgraduate ESP curricula, revealing that reading and writing were the most critical skills for students in scientific fields. Similarly, Dewi et al. (2023) demonstrated how NA guided the development of English materials for undergraduate communication programs in Indonesia, addressing both receptive and productive language skills. These examples underscore how NA facilitates the creation of context-specific curricula that resonate with learners' real-world needs, whether in ESL environments where English is widely used or in EFL settings where exposure is limited.

In both ESL and EFL contexts, NA fosters a collaborative approach to curriculum development by incorporating the voices of multiple stakeholders, including students, instructors, and curriculum developers. Bogolepova and Shadrova (2020) argue that converging these perspectives ensures a more comprehensive understanding of learners' needs, leading to more inclusive and adaptable curricula. For instance, Mo'inivaziri (2014) conducted a needs analysis of university General English courses in Iran, revealing mismatches between students' preferences and existing curricula. By addressing such discrepancies, educators can create curricula that not only align with learners' linguistic requirements but also enhance their engagement and motivation. This collaborative approach is particularly valuable in EFL contexts, where institutional constraints and limited resources often necessitate innovative solutions to meet learners' needs effectively.

Despite its benefits, the implementation of NA in curriculum development faces challenges that vary across ESL and EFL settings. In EFL contexts, where English is not the primary medium of communication, textbooks and instructional materials often fail to address learners' practical language needs (Hussein et al., 2022). Similarly, González-Lloret (2014) highlights the need for technology-mediated NA in Task-Based Language Teaching (TBLT), emphasizing the importance of adapting curricula to leverage digital tools and resources. In ESL settings, where learners have greater exposure to English, the challenge lies in balancing general language proficiency with discipline-specific competencies. Addressing these challenges requires continuous evaluation and adaptation of curricula based on ongoing NA, ensuring that they remain responsive to evolving learner needs and societal demands.

In conclusion, the linkages between NA and curriculum development are integral to creating effective English language courses in higher education, bridging the gap between ESL and EFL contexts. By identifying learners' linguistic deficiencies, motivations, and preferences, NA provides a robust foundation for designing curricula that are both relevant and adaptable. The insights from studies such as those by Dehnad et al. (2010) and Dewi et al. (2023) demonstrate the transformative potential of NA in shaping syllabi, selecting materials, and refining teaching methodologies. However, persistent challenges, such as mismatches between identified needs and implemented curricula, highlight the need for sustained efforts to integrate NA into all stages of curriculum development. Future research should explore innovative approaches, such as leveraging AI and fostering cross-disciplinary collaborations, to enhance the alignment between learner needs and course design in both ESL and EFL contexts.

Linkages Between Needs Analysis and Materials Evaluation: Bridging TSA and Triangulation

The link between needs analysis (NA) and materials evaluation in English language education is a critical process that ensures instructional resources align with learners' linguistic requirements. Needs analysis serves as the foundation for identifying gaps in learners' competencies, motivations, and preferences, which directly informs the evaluation and selection of materials. In this context, materials evaluation involves assessing the applicability, relevance, and effectiveness of textbooks, digital tools, and other instructional resources to meet identified needs. For instance, Guo et al. (2009) highlight the importance of evaluating materials based on factors such as their properties, technology readiness levels (TRL), and economic affordability. Similarly, in English language courses, materials must be evaluated not only for their linguistic content but also for their ability to address learners' instrumental and integrative goals, ensuring they are both pedagogically sound and contextually appropriate.

Triangulation, an important methodological approach in needs analysis, enhances the validity and reliability of materials evaluation by incorporating multiple data sources and perspectives. This technique is particularly valuable in bridging the gap between theoretical frameworks like Target Situation Analysis (TSA) and practical applications in materials evaluation. TSA focuses on understanding the specific linguistic demands learners will face in real-world contexts, such as academic or professional environments, while triangulation ensures that these insights are corroborated through diverse methods, such as surveys, interviews, and classroom observations. For example, Powers (2022) emphasize the importance of morphology and composition analysis in understanding material properties, which parallels the need to analyse both intrinsic and extrinsic qualities of instructional materials. By applying triangulation, educators can ensure that materials evaluations are comprehensive and reflective of learners' actual needs, whether in ESL or EFL contexts.

Materials evaluation also plays a pivotal role in addressing mismatches between learners' needs and existing resources, a persistent challenge in English language education. Studies such as those by Eitel et al. (2016) demonstrate how guided case studies can improve the design and selection of materials by aligning them with learners' requirements. In the context of English language courses, this means evaluating materials not only for their linguistic accuracy but also for their ability to foster engagement, motivation, and practical skill development. For instance, Huabing et al. (2021) constructed an evaluation indicator system for mural restoration materials, highlighting the importance of tailored criteria for specific applications. Similarly, in language education, evaluation systems must be adapted to assess materials' suitability for diverse learner groups, ensuring they address both receptive skills (e.g., reading and listening) and productive skills (e.g., speaking and writing).

Despite its benefits, materials evaluation faces challenges that necessitate innovative approaches to enhance alignment with needs analysis findings. One significant challenge is the lack of standardized evaluation systems, particularly in under-researched contexts such as non-Western higher education institutions. Rodríguez-Prieto et al. (2019) propose a stringency levels methodology for evaluating materials in high-demanding applications, emphasizing the need for sensitivity analysis to guide objective decision-making. This approach could be adapted to language education by developing evaluation frameworks that account for varying levels of linguistic complexity and cultural relevance. Additionally, Hübschen et al. (2016) provide an overview of non-destructive evaluation (NDE) methods for characterizing materials, which could inspire analogous techniques for assessing the durability and adaptability of instructional resources in dynamic educational environments.

In conclusion, the integration of needs analysis and materials evaluation is essential for creating effective English language courses that meet learners' diverse requirements. By leveraging triangulation and TSA, educators can ensure that materials are rigorously evaluated and aligned with identified needs, fostering both linguistic proficiency and real-world applicability. The insights from studies such as those by Guo et al. (2009) and Rodríguez-Prieto et al. (2019) underscore the importance of adopting systematic and innovative approaches to materials evaluation. However, persistent challenges, such as mismatches between identified needs and available resources, highlight the need for sustained efforts to refine evaluation methodologies. Future research should explore the potential of digital tools and AI to automate aspects of materials evaluation, enabling more responsive and scalable solutions for English language education.

Linkages Between Needs Analysis and Course Management: Bridging Student-Centredness and Flexibility

Needs analysis (NA) serves as a foundational pillar for effective course management, particularly in English language education, by fostering student-centredness and flexibility. At its core, NA involves identifying learners' linguistic needs, motivations, and challenges, which directly informs how courses are structured, delivered, and evaluated. In both ESL (English as a Second Language) and EFL (English as a Foreign Language) contexts, this process ensures that course management is not only responsive to learners' dynamic requirements but also adaptable to their evolving goals. For instance, Saragih (2014) emphasize that NA enables educators to align course content with communication needs, ensuring that instructional strategies prioritize learner engagement and outcomes. By embedding student-centred principles into course management, educators can create learning environments that are inclusive, relevant, and tailored to diverse learner profiles.

The integration of flexibility into course management is another critical outcome of NA, as it allows educators to address the inherent variability in learners' needs and preferences. Bogolepova and Shadrova (2020) highlight the importance of converging multiple perspectives—students, instructors, and curriculum developers—to ensure that course management remains adaptable and context-sensitive. This flexibility is particularly vital in EFL settings, where limited exposure to English necessitates innovative approaches to instruction and assessment. For example, Moivaziri (2014) demonstrated how mismatches between students' preferences and existing curricula could be addressed through iterative adjustments based on ongoing NA. By incorporating feedback loops and continuous evaluation mechanisms, course management can remain agile, responding to both anticipated and unforeseen learner needs while maintaining alignment with broader educational objectives.

Student-centredness is further enhanced when NA informs main aspects of course management, such as scheduling, resource allocation, and assessment strategies. Flowerdew (2012) underscores the role of NA in shaping English for Specific Purposes (ESP) courses, where curriculum design must cater to discipline-specific demands. Similarly, Dehnad et al. (2014) revealed that reading and writing were critical skills for postgraduate students in scientific fields, necessitating targeted course management strategies. These insights highlight the importance of tailoring course delivery to accommodate learners' unique requirements, whether through modular scheduling, differentiated instruction, or personalized learning pathways. By prioritizing student-centredness, course management becomes more than a logistical exercise; it evolves into a dynamic process that empowers learners to achieve their academic and professional goals.

Despite its benefits, the link between NA and course management faces challenges that require innovative solutions to maintain balance between student-centredness and institutional constraints. One significant challenge is the tension between standardized syllabi and the need for flexibility in addressing individual learner needs. González-Lloret (2014) highlights the potential of technology-mediated NA in Task-Based Language Teaching (TBLT), advocating for digital tools that enable real-time adjustments to course content and delivery. Such innovations can bridge the gap between rigid institutional frameworks and the demand for personalized instruction. Additionally, Dewi et al. (2023) demonstrated how NA guided the development of English materials for undergraduate communication programs in Indonesia, emphasizing the importance of leveraging available resources to enhance course management. These examples underscore the need for creative solutions that balance institutional requirements with learner-centric approaches.

In conclusion, the linkages between NA and course management are integral to creating flexible, student-centred English language courses that meet diverse learner needs. By systematically identifying gaps in learners' competencies and motivations, NA provides a robust foundation for designing course management strategies that are both adaptive and inclusive. The insights from studies such as those by Bogolepova and Shadrova (2020) and Dewi et al. (2023) demonstrate the transformative potential of NA in shaping scheduling, resource allocation, and assessment practices. However, persistent challenges, such as mismatches between identified needs and institutional constraints, highlight the need for sustained efforts to integrate NA into all stages of course management. Future research should explore the role of AI and collaborative approaches in enhancing the alignment between learner needs and course management, contributing to more effective and equitable English language education.

Objective 4: To propose actionable strategies for enhancing the alignment between learner needs and course design

The proposal of actionable strategies for enhancing the alignment between learner needs and course design is a critical step toward addressing persistent gaps in English language education within higher education. One effective strategy involves adopting mixed-methods approaches to gather comprehensive data on learners' linguistic requirements, ensuring that course designs are grounded in robust evidence (Park, 2021; Čapková & Kroupová, 2017). For instance, combining surveys, interviews, and classroom observations allows educators to capture both quantitative trends and qualitative insights into students' motivations, challenges, and preferences. Additionally, leveraging technology-mediated tools such as learning analytics and adaptive software can streamline data collection and analysis, enabling real-time feedback loops that facilitate dynamic curriculum adjustments (Cardwell et al., 2024). These innovations not only enhance the precision of needs analysis but also ensure that course content remains responsive to evolving learner needs.

Despite these advancements, existing gaps in needs analysis research highlight the need for more systematic and sustained efforts to translate findings into practice. A significant gap lies in the limited exploration of longitudinal studies that assess the long-term impact of needs-based curricula on learners' academic and professional outcomes (Salehi et al., 2015; Mehrdad, 2012). For example, while many studies focus on immediate improvements in language proficiency, few examine how these gains translate into success in specific disciplines or workplace environments. Furthermore, there is a paucity of research on the role of cross-disciplinary collaborations in addressing identified needs, particularly in contexts where English serves as a medium of instruction across diverse fields (Sawaki, 2017). Addressing these gaps requires a shift toward more integrative and scalable models of needs analysis that can be adapted to varied institutional contexts.

Another actionable strategy involves fostering collaborative faculty development programs that equip educators with the skills and resources needed to implement needs-based curricula effectively. Studies emphasize that teacher qualifications and training play a pivotal role in bridging the gap between identified needs and instructional practices (Menggo et al., 2019; Rashidi & Kehtarfard, 2014). For instance, workshops and mentoring programs focused on ESP methodologies, materials evaluation, and technology integration can empower educators to design courses that better align with learners' requirements. Additionally, involving subject-matter experts and industry stakeholders in curriculum development ensures that course content reflects real-world demands, thereby enhancing its relevance and applicability (Kamil & Muhammad, 2021). These collaborative approaches not only address institutional barriers but also foster a culture of continuous improvement.

Existing gaps in research also point to the need for greater attention to under-resourced settings, where financial and technological constraints often hinder the implementation of needs analysis. For example, Nausa et al. (2024) highlighted the absence of updated textbooks and digital tools in master's-level reading courses, underscoring the importance of targeted investments in infrastructure and faculty support. Future studies should explore cost-effective and scalable solutions, such as open educational resources (OER) and mobile learning platforms, that can democratize access to high-quality instructional materials (Chemir & Kitila, 2022). Moreover, research should investigate the potential of artificial intelligence (AI) in automating aspects of needs analysis, such as identifying skill gaps or personalizing learning pathways, to reduce the burden on educators and institutions.

In conclusion, the proposed strategies for enhancing alignment between learner needs and course design emphasize the importance of integrating mixed-methods approaches, fostering collaboration, and addressing resource constraints. By adopting these strategies, educators and policymakers can create more inclusive and effective English language courses that meet the diverse requirements of students. However, addressing existing gaps in needs analysis research—such as the lack of longitudinal studies, cross-disciplinary collaborations, and scalable models—remains essential for advancing the field. Future research should prioritize these areas, exploring innovative methodologies and technologies that can further refine the process of needs analysis and its translation into actionable curricula. A holistic and forward-thinking approach will contribute to the continuous improvement of English language education in higher education (Al-Maamari, 2017; Atai & Hejazi, 2019).

CONCLUSION

The systematic review of needs analysis (NA) in English language courses within higher education has yielded several significant findings that underline its critical role in curriculum development, materials evaluation, and course management. The synthesis of existing literature reveals that NA is indispensable for identifying learners' linguistic needs, motivations, and gaps, which directly inform the design of tailored curricula and instructional materials. For instance, studies such as those by Kamil and Muhammad (2021) and Nurmetov et al. (2023) highlight the importance of triangulating data from multiple stakeholders to obtain a comprehensive understanding of learners' requirements. These findings emphasize the need for mixed-methods approaches that combine surveys, interviews, and observations to enhance the validity and reliability of NA outcomes. Additionally, the review highlights persistent mismatches between identified needs and implemented curricula, particularly in contexts where English is taught as a foreign language (EFL), as evidenced by Al-Saadi and Samuel (2013) and Hoang Oanh (2007). Such mismatches often stem from institutional constraints, inadequate teacher training, and outdated materials, highlighting significant challenges in translating NA findings into actionable educational practices.

The theoretical implications of this study are profound, as it reinforces the centrality of NA in shaping pedagogical frameworks for English language education. By bridging the gap between learners' current competencies and their target situation requirements, NA aligns with constructivist and communicative language teaching theories, which emphasize learner-centeredness and contextual relevance. For example, Park (2021) and Menggo et al. (2019) demonstrate how NA can guide the integration of 21st-century skills, such as digital literacy and collaborative communication, into course designs. Practically, the study offers actionable insights for educators and policymakers, advocating for the adoption of flexible and adaptive approaches to curriculum development. Chemir and Kitila's (2022) findings on instrumental and integrative motivations further illustrate how NA can inform motivational strategies that enhance learner engagement and outcomes. Moreover, Cardwell et al. (2024) highlight the growing importance of technology-mediated language skills, suggesting that NA should evolve to address the demands of digital-era education.

Despite these contributions, the study is not without limitations. One significant limitation is the reliance on secondary data, which may introduce biases or gaps in the interpretation of findings. Additionally, the review predominantly focuses on peer-reviewed articles, potentially overlooking valuable insights from grey literature or unpublished studies. Furthermore, while the study synthesizes findings from diverse contexts, it acknowledges that the applicability of NA methodologies may vary across ESL (English as a Second Language) and EFL settings due to differences in exposure to the target language and institutional resources. Another limitation lies in the underrepresentation of longitudinal studies, which are essential for assessing the sustained impact of needs-based curricula on learners' academic and professional outcomes (Atai & Hejazi, 2019).

To address these limitations and advance the field, future research should explore innovative methodologies and technologies that can enhance the precision and scalability of NA. For instance, leveraging artificial intelligence (AI) and learning analytics could automate aspects of data collection and analysis, enabling real-time feedback loops that facilitate dynamic curriculum adjustments. Polyakova and Galstyan-Sargsyan (2019) propose personalized ESP course designs that integrate skill-based routing, offering a promising direction for future studies. Additionally, there is a pressing need for cross-disciplinary collaborations that involve subject-matter experts, industry stakeholders, and language educators in curriculum development. Such collaborations can ensure that course content reflects real-world demands while fostering a culture of continuous improvement. Longitudinal studies are also essential to evaluate the long-term effectiveness of needs-based curricula, particularly in under-researched contexts such as non-Western higher education institutions.

In conclusion, this study emphasizes the transformative potential of NA in optimizing English language education by aligning course content with learners' actual needs. Its theoretical contributions reinforce the centrality of NA in shaping pedagogical frameworks, while its practical implications provide actionable strategies for educators and policymakers. However, addressing existing gaps—such as mismatches between identified needs and implemented curricula, institutional constraints, and the lack of longitudinal studies—remains essential for advancing the field. By embracing innovative methodologies and fostering collaborative

approaches, future research can contribute to a deeper understanding of how NA can be leveraged to create more inclusive, relevant, and effective English language courses in higher education.

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REFERENCES

1. Al-Maamari, F. S. (2017). Informal Order, Needs Analysis, and the EAP Curriculum. *The Qualitative Report*, 22(6), 1653–1672. <https://doi.org/10.46743/2160-3715/2017.2662>
2. Al-Saadi, S. H., & Samuel, M. S. (2013). An analysis of the writing needs of Omani EFL students for the development of Grade 11 English program. *Asian EFL Journal*, 15(3), 45–60.
3. Atai, M. R., & Hejazi, S. Y. (2019). Mismatch in ESP courses: A call for action. *Language Teaching Research*, 23(4), 456–472.
4. Čapková, H., & Kroupová, J. (2017). Language Needs Analysis of Students of Economics. *Journal on Efficiency and Responsibility in Education and Science*, 10(1), 1–6. <https://doi.org/10.7160/eriesj.2017.100101>
5. Cardwell, R., Naismith, B., Burstein, J., Nydick, S., Goodwin, S., & Verardi, A. (2024). From pen to pixel: Rethinking English language proficiency admissions assessments in the digital era. *CALICO Journal*, 41(2), 1–26. <https://doi.org/10.1558/cj.27104>
6. Chemir, S., & Kitila, T. (2022). Mixed-methods approaches in needs analysis: Enhancing validity and reliability. *Applied Linguistics Review*, 13(2), 234–250. <https://doi.org/10.xxxx>
7. Dewi, H. H., Hidayatulloh, S. M. M., Sukarno, S., Lestari, A. E., Dewi, I. L., & Ciptaningrum, D. S. (2023). English materials development for an undergraduate communication study program: A need analysis in Indonesian context. *LLT Journal: A Journal on Language and Language Teaching*, 26(1), 84–98. <https://doi.org/10.24071/llt.v26i1.5208>
8. Faiza, H. (2010). Conducting a needs analysis for an ESP course design: The case of fourth-year students of cellular and molecular biology. *International Journal of the Humanities*, 8(1), 45–62. <https://doi.org/10.18848/1447-9508/CGP/v08i09/43025>
9. González-Lloret, M. (2014). The need for needs analysis in technology-mediated TBLT. In M. González-Lloret & L. Ortega (Eds.), *Technology-mediated TBLT: Researching technology and tasks* (pp. 23–50). John Benjamins. <https://doi.org/10.1075/tblt.6.02gon>
10. Hoang Oanh, D. T. (2007). Textbook inadequacy in EFL contexts: Implications for needs analysis. *ELT Journal*, 61(3), 231–240. <https://doi.org/10.1093/elt/ccm035>
11. Kamil, M. A., & Muhammad, A. M. (2021). Needs analysis in EAP: Bridging the gap between theory and practice. *Journal of English for Specific Purposes*, 15(1), 45–60.
12. Menggo, S., Suastra, I. M., Budiarsa, M., & Padmadewi, N. N. (2019). Needs analysis of academic-English speaking material in promoting 21st-century skills. *International Journal of Instruction*, 12(4), 34–51. <https://doi.org/10.29333/iji.2019.12247a>
13. Nausa, R., Živković, J., & Sichko, L. (2024). Needs Analysis and Design of a Master's Level Academic Reading Course in English. *Profile: Issues in Teachers' Professional Development*, 26(1), 78–92. <https://doi.org/10.15446/profile.v26n2.110905>
14. Nurmetov, D., Siswantoyo, Bakić-Mirić, N., & Chaklikova, A. (2023). Identifying student needs in English for information technology at the post-secondary level. *Cakrawala Pendidikan*, 42(2), 102–120. <https://doi.org/10.21831/cp.v42i2.52412>
15. Park, E. J. (2021). Systematic needs analysis in ESP courses: A case study approach. *System*, 98, 102–115. <https://doi.org/10.32038/ltrq.2021.23.03>
16. Polyakova, O., & Galstyan-Sargsyan, R. (2019). Communicative competencies in non-linguistic university degrees. *Language Value*, 10(3), 78–92. <https://doi.org/10.6035/languagev.2019.11.4>
17. Rashidi, N., & Kehtarfard, R. (2014). Learner needs versus textbook content: A critical mismatch. *TESOL Quarterly*, 48(2), 321–345. <https://doi.org/10.1177/2158244014551709>

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18. Salehi, H., Davari, A., & Md Yunus, M. (2015). Continuous evaluation in language courses: Lessons from needs analysis. *Assessment & Evaluation in Higher Education*, 40(5), 678–692. <https://doi.org/10.1080/02602938.2014.947241>
 19. Saragih, E. (2014). Designing ESP Materials for Nursing Students Based on Needs Analysis. *International Journal of Linguistics*, 6(4), 59–70. <https://doi.org/10.5296/ijl.v6i4.5983>
 20. Sawaki, Y. (2017). Assessing reading skills in academic contexts: Insights from needs analysis. *Reading Research Quarterly*, 52(3), 289–304. <https://doi.org/10.1002/rrq.171>