

From Needs Analysis to Development of a Vocational English Language Curriculum in Chinese Vocational University: A Literature Review

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Abstract: Vocational English education in China is undergoing a paradigm shift toward more targeted, industry-relevant instruction. This literature review explores current research on the role of needs analysis in the development of vocational English curricula, especially in the context of Chinese vocational universities. It synthesizes studies on theoretical frameworks, methodologies of needs analysis, and curriculum design approaches such as English for Specific Purposes (ESP) and Task-Based Language Teaching (TBLT). The review highlights key challenges, including misalignment between instructional content and workplace expectations, lack of teacher training, and policy constraints. Based on the literature, implications are drawn for curriculum designers and educational policymakers seeking to bridge the gap between language education and vocational competencies.

1. Introduction

Vocational education in China has been rapidly expanding over the past two decades in response to the country's shift toward a knowledge-based and service-oriented economy. As outlined in the National Vocational Education Reform Implementation Plan issued in 2019, the Chinese government emphasizes the cultivation of skilled talent that meets the demands of regional industries and global competition. Against this backdrop, English language proficiency has become a key competency, particularly in sectors such as tourism, logistics, international trade, and cross-border e-commerce [1]. However, a growing body of literature suggests that English instruction in Chinese vocational universities remains largely disconnected from real-world communicative requirements. Courses are often dominated by grammar-based instruction, textbook-driven teaching, and test-oriented assessment models, which fail to equip students with the pragmatic language skills needed in the workplace [2, 3].

The development of a relevant and effective vocational English curriculum thus hinges on a systematic understanding of learners' linguistic backgrounds, occupational expectations, and learning motivations. This need has led to increasing recognition of the value of needs analysis—a fundamental component in the design of English for Specific Purposes (ESP) curricula [4]. Needs

analysis allows educators to identify both “target needs,” referring to the specific language functions required in the learners’ future workplace, and “learning needs,” which concern the learners’ preferred learning styles, strategies, and constraints [5].

In the Chinese context, however, the implementation of needs analysis remains inconsistent. While some institutions have piloted learner-centered or task-based ESP modules, many continue to rely on generalized English syllabi that lack empirical grounding in actual occupational language demands [5]. Moreover, the voices of employers and industry stakeholders are often absent from the curriculum planning process, further contributing to the misalignment between instruction and professional communication tasks [6]. This literature review aims to synthesize findings from both international ESP scholarship and recent studies in Chinese vocational settings, with the goal of identifying best practices, current challenges, and future directions for integrating needs analysis into vocational English curriculum development.

2. Theoretical Foundations of Needs Analysis

Needs analysis has long been recognized as a foundational element in the development of ESP and broader language curriculum design [7]. It serves as a systematic process for identifying the specific linguistic, cognitive, and pragmatic competencies that learners require in target communicative contexts. According to Hutchinson and Waters [8], effective course design must differentiate between target needs—what learners need to know and be able to do in the target language—and learning needs—how learners prefer to acquire these skills given their backgrounds, motivations, and learning constraints. This dual focus ensures that language instruction is both goal-oriented and learner-sensitive, aligning teaching practices with the functional and affective realities of the learners.

Building on this foundation, Nation and Macalister [5] propose a more comprehensive framework for curriculum development, suggesting that any language curriculum should be informed by a triad of components: needs analysis, environment analysis, and principles of second language acquisition. Needs analysis focuses on content and learner requirements, while environment analysis accounts for institutional, political, and resource-related constraints, and SLA principles provide pedagogical direction. This triadic model ensures that curricula are grounded not only in learners’ needs but also in feasible teaching practices and current theories of language learning.

Sing [9] offers a more fine-grained classification of needs analysis procedures, dividing them into present situation analysis (PSA), which examines learners’ current abilities; target situation analysis (TSA), which explores the linguistic demands of the future occupational or academic context; and learning situation analysis (LSA), which investigates the learners’ preferences, motivations, and conditions for learning. He emphasizes the importance of triangulation—collecting data from multiple stakeholders including students, teachers, and employers—to ensure a more accurate and representative understanding of learner needs.

Despite the global applicability of these frameworks, their implementation in Chinese vocational English education remains inconsistent and underdeveloped. Studies have shown that while some institutions carry out basic needs analysis via student questionnaires, few include input from employers or conduct systematic classroom observations and teacher consultations [10]. Moreover, some needs analyses are treated as one-off exercises rather than ongoing evaluative processes, limiting their impact on curriculum renewal. As a result, many vocational English programs in China continue to rely on generic syllabi that are misaligned with the communicative realities of students’ future workplaces.

3. Methods of Conducting Needs Analysis

Empirical studies in the field of ESP and language curriculum development have consistently demonstrated that effective needs analysis requires triangulated data collection from multiple sources, as reliance on a single stakeholder group often results in partial or skewed representations of learner needs [11]. The most commonly employed data collection methods include surveys and questionnaires, interviews and focus groups, and classroom observation and document analysis, each offering distinct yet complementary perspectives.

Surveys and questionnaires are frequently used tools, especially in large-scale needs analysis projects, for gathering data from students about their perceived language difficulties, target learning outcomes, and preferred instructional approaches [12]. These instruments are relatively easy to administer and can generate quantitative data that is useful for identifying patterns across learner populations. However, self-reported data is often limited by students' ability to accurately assess their own linguistic needs or predict the communicative demands of future work contexts.

To address such limitations, many researchers advocate the use of semi-structured interviews and focus groups involving not only learners but also teachers and industry stakeholders, such as human resource managers and frontline supervisors. These methods provide richer qualitative data, uncovering insights into specific workplace communicative tasks, genre expectations, and soft skills valued by employers [13]. Teachers, in turn, can share pedagogical constraints and reflections on learner readiness, which are essential for creating feasible and context-sensitive curricula.

Classroom observation and document analysis—including the review of institutional syllabi, teaching materials, and assessment instruments—serve as crucial methods for contextualizing learner needs within actual instructional environments [11]. Observations help researchers detect mismatches between stated curriculum goals and enacted classroom practices, while document analysis can reveal how much alignment exists between course content and real-world communicative functions.

Despite the well-documented benefits of triangulation, research in Chinese vocational universities indicates a strong reliance on student questionnaires, often administered in a superficial or one-time manner [14]. Feedback from employers—arguably the most direct source of target situation information—is rarely incorporated into needs analysis procedures, which severely limits the authenticity and industry relevance of the resulting curricula. Consequently, English courses often emphasize generic skills that fail to prepare students for specific occupational tasks, such as business email writing, customer service interactions, or technical report reading. Without meaningful collaboration among learners, teachers, and employers, curriculum development risks becoming detached from the communicative realities of the workplace.

4. Key Findings in Chinese Vocational Contexts

4.1 Misalignment with Workplace Needs

A recurring theme in the literature is the disconnect between English instruction and workplace communication needs. Research found that employers in sectors like tourism, e-commerce, and logistics emphasized oral communication, email writing, and negotiation skills—areas often underrepresented in the current curriculum.

4.2 Limited ESP Implementation

While ESP has been recognized as a useful approach, its adoption in Chinese vocational universities is limited due to a lack of teaching materials and teacher training [15]. Moreover, there

is often an overemphasis on grammar and reading, with insufficient attention to communicative competence and job-specific language tasks.

4.3 Emerging Role of Task-Based Learning

Task-Based Language Teaching (TBLT) is increasingly seen as suitable for vocational settings. Successful implementation of TBLT in a hospitality English course, where students engaged in simulations of hotel check-ins, complaint handling, and telephone booking—all tasks directly drawn from workplace needs analysis.

5. Curriculum Development Practices

Recent curriculum design practices in China indicate a gradual yet noteworthy shift from traditional, textbook-driven models toward more needs-oriented and workplace-relevant English instruction. This transition is largely driven by national policy initiatives such as the Double High Plan, which emphasizes the cultivation of high-quality vocational talent aligned with economic development and internationalization demands. As a response, some vocational institutions have started experimenting with modular curriculum structures that divide English courses into three interconnected strands: General English for foundational skills, Workplace English for communicative tasks in everyday job scenarios, and ESP modules tailored to specific industries such as tourism, business, or engineering. This structure not only reflects the differentiated needs of students from various majors but also provides a flexible framework for curriculum adaptation and scaling.

Alongside structural changes, assessment practices are also evolving to better reflect real-world communicative competence. Increasingly, educators are incorporating performance-based assessments, including oral presentations, role-playing, mock job interviews, and task completion activities modeled on workplace tasks [16]. These forms of assessment stand in contrast to traditional summative exams focused on grammar and vocabulary recall. They are also more aligned with constructivist pedagogies that emphasize learning as a process of meaningful interaction and application [17].

The theoretical foundation guiding these reforms often draws on Nation and Macalister's [5] curriculum design model, which integrates needs analysis, content selection, sequencing, format, and assessment in a coherent system. This model emphasizes that curriculum decisions should be responsive to learner goals, institutional context, and available resources, making it particularly relevant for vocational education where diversity in learner profiles and job market demands is pronounced.

However, the localization of such models in the Chinese vocational education system is not without challenges. A major barrier is the entrenched exam-oriented culture, in which high-stakes testing—such as the CET (College English Test)—continues to dominate educational evaluation and institutional benchmarks. This often forces teachers to "teach to the test," sidelining communicative and vocationally relevant content in favor of grammar translation and test-taking strategies. Moreover, teacher preparedness remains a concern; many instructors lack training in ESP pedagogy, curriculum development, or alternative assessment design. Without adequate professional development and institutional support, the implementation of needs-based and modular curricula risks remaining superficial or unsustainable.

6. Challenges and Gaps

6.1 Teacher Capacity

A recurring theme in both Chinese and international research is that many English teachers in vocational institutions lack the necessary training and expertise in conducting needs analysis or designing ESP-oriented curricula [17]. Most English instructors are trained in traditional EFL pedagogy, often with a focus on general English grammar, reading comprehension, or literature, rather than specialized or occupational communication. As a result, teachers may feel ill-equipped to adapt their teaching to industry-specific needs or to integrate task-based and communicative approaches. Moreover, few professional development opportunities exist to help instructors upskill in these areas. Even when teachers are aware of the value of workplace-oriented instruction, their unfamiliarity with industries such as logistics, tourism, or engineering prevents them from confidently delivering ESP content.

6.2 Material Development

A second barrier to reform is the lack of localized, industry-specific English teaching materials that reflect authentic workplace communication tasks. While commercially produced textbooks often claim to be vocationally oriented, many are generic in nature and fail to align with the actual communicative contexts students will face after graduation. For example, a textbook designed for "Business English" might contain outdated dialogues or simulated tasks that are culturally or linguistically mismatched with the realities of Chinese workplaces. Consequently, teachers are often left to adapt or develop materials themselves—a time-consuming and skill-intensive task that further exacerbates the burden on underprepared instructors [13].

6.3 Institutional Inertia

Finally, institutional resistance to curriculum reform remains a major hurdle. In many vocational colleges, educational policy and departmental priorities continue to emphasize test preparation, particularly for standardized assessments like the College English Test (CET). This exam-oriented culture fosters a reliance on prescriptive syllabi and rigid textbook usage, making it difficult for innovative, needs-based approaches to take root. In some cases, administrative reluctance to revise outdated curricula stems from concerns over disrupting long-standing evaluation systems, budgeting processes, or teacher allocation plans.

These challenges suggest that effective reform must extend beyond curriculum design itself and address systemic issues related to teacher training, resource allocation, and policy alignment if vocational English education in China is to become truly responsive to learner and industry needs.

7. Implications for Practice and Policy

The literature reviewed points toward several actionable strategies to enhance the effectiveness and relevance of vocational English curricula in China. These recommendations center around systemic reform, professional development, stakeholder engagement, and policy support, all of which are critical for bridging the gap between English language instruction and the dynamic demands of the labor market.

7.1 Grounding Curriculum Reform in Systematic and Inclusive Needs Analysis

First and foremost, curriculum reform must be underpinned by comprehensive, stakeholder-informed needs analysis. This includes not only surveying students and teachers but also engaging employers, alumni, and industry associations to identify specific communicative tasks required in the workplace [11]. For example, alumni who have recently transitioned into professional roles can provide valuable feedback on which English skills were most essential or lacking in their education. Involving these stakeholders ensures that curricula are aligned with both current and emerging industry needs, and that learning outcomes are not merely theoretical but practically applicable.

7.2 Strengthening Teacher Professional Development

A second key recommendation is to invest in sustained teacher training, particularly in the areas of ESP methodology, needs assessment techniques, curriculum design, and material development. As noted by Richards [17], teachers are the primary agents of curriculum implementation, and without adequate preparation, even the most well-designed reforms are likely to falter. Workshops, collaborative lesson planning sessions, and exposure to workplace settings (e.g., site visits or internships) can help teachers build confidence and contextual awareness. Moreover, forming ESP teaching communities across institutions could foster peer support and the sharing of adaptable resources.

7.3 Policy-Level Support and Innovation Incentives

At the macro level, national and provincial educational authorities should offer targeted funding, policy incentives, and regulatory flexibility to support local curriculum innovation. Pilot projects, supported by action research, can serve as testing grounds for modular ESP-based curricula, alternative assessment models, and blended learning approaches [5]. Successful models can then be scaled up and integrated into broader reform strategies. Additionally, reforms should be evaluated not only on test performance but also on graduate employability metrics and employer satisfaction to ensure long-term impact.

7.4 Aligning with National Modernization Goals

Ultimately, aligning vocational English instruction with real-world communicative demands will not only improve students' employability but also contribute to China's national strategy for educational modernization and global competitiveness. By cultivating students who are linguistically competent, professionally agile, and globally aware, vocational universities can play a crucial role in supporting the country's economic transformation and integration into international markets.

8. Conclusion

This review underscores the essential role of needs analysis in the development of vocational English curricula, particularly in rapidly evolving economic contexts like China. While theoretical and methodological frameworks are well-established, their localized implementation faces significant constraints. Bridging the gap between curriculum design and industry needs requires coordinated efforts in research, teacher training, and policy support.

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