

Original Paper

Teaching Reform and Practice Research of Transportation English Course in Higher Vocational Colleges Based on Professional Competence Standards

Tianrui Zhang¹

¹ Liaoning Economy Vocational and Technical College, Shenyang, Liaoning, China

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Abstract

Against the backdrop of China's national strategy to build a strong transportation sector and the global development of the industry, the teaching quality of transportation English courses in vocational colleges directly impacts the job adaptability and professional competitiveness of technical and skilled personnel. Current transportation English curricula in vocational colleges commonly face issues such as content disconnection from occupational competency standards, monotonous teaching methods, evaluation systems lacking vocational orientation, and insufficient practical skills among faculty members, which fail to meet the actual demands of the transportation industry for English application capabilities. Guided by occupational competency standards and tailored to the characteristics of vocational education in transportation-related fields, this paper systematically analyzes the current teaching status and core challenges of transportation English courses. It proposes targeted reform measures in four aspects: curriculum restructuring, innovative teaching methods, improved assessment mechanisms, and faculty team development. The aim is to promote deeper alignment between transportation English courses and job requirements, enhance students' professional English application abilities and vocational competencies, and provide practical references for the reform of English teaching in transportation-related vocational programs.

Keywords

Vocational Competency Standards, Higher Vocational Colleges, Transportation English, Curriculum and Instruction Reform, English Application Competency

1. Introduction

1.1 Research Background

With the deepening implementation of the “Transportation Power” strategy, China’s transportation industry is accelerating its transformation toward internationalization, intelligence, and integration. International cooperation in fields such as civil aviation, high-speed rail, and port logistics is becoming increasingly frequent, placing higher demands on the English application skills of professionals. The “Professional Foreign Language Competency Standards for the Transportation Sector” released by the China Transportation Education Research Association in 2023 clearly states that transportation industry professionals should possess a trinity of English competencies—“basic communication, professional application, and emergency response”—to meet the needs of the industry’s international development.

As the primary training base for technical and skilled professionals in the transportation industry, the teaching quality of transportation English courses in vocational colleges directly impacts graduates’ job adaptability and career development prospects. However, current teaching practices in these courses still face multiple challenges. The curriculum content remains disconnected from actual industry demands, teaching methods overly emphasize theoretical instruction, and assessment systems lack vocational orientation, resulting in students’ knowledge failing to effectively translate into practical English application skills required for their positions. Against this backdrop, reconstructing the transportation English curriculum system based on vocational competency standards and advancing teaching reforms have become urgent needs to enhance talent cultivation quality and serve industry development.

1.2 Research Significance

1.2.1 Theoretical Significance

This study integrates vocational competency standards with higher vocational English education, thereby enriching the theoretical framework of vocational education curriculum reform. By systematically analyzing the core English proficiency requirements in transportation industry vocational competency standards, it establishes an integrated teaching reform framework encompassing “standards-curriculum-teaching-evaluation”. This provides theoretical references and paradigm references for similar institutions to implement specialized English curriculum reforms.

1.2.2 Practical Significance

This study addresses the key challenges in vocational transportation English education by proposing targeted reform strategies. These measures will enhance students’ practical English proficiency and job market competitiveness, meeting the talent demands of the transportation industry’s global expansion. Furthermore, through faculty development and innovative teaching approaches, the research facilitates a shift from “language knowledge transmission” to

“professional skill cultivation” in vocational English education, thereby promoting the quality-driven development of vocational institutions.

2. Current Status of Transportation English Courses in Higher Vocational Education Based on Vocational Competency Standards

2.1 Core Requirements of Occupational Competency Standards in the Transportation Industry

The Occupational Competency Standards for the Transportation Industry, developed through job analysis and aligned with global trends, establish core benchmarks for professionals ‘knowledge, skills, and ethical standards. These standards serve as essential references for vocational colleges in cultivating transportation specialists. Closely aligned with China’s national strategy for building a strong transportation sector, they integrate practical experience from frontline roles in aviation, high-speed rail, and port logistics. The English proficiency requirements transcend generic language skills, emphasizing “job relevance” and “problem-solving capabilities.” These competencies are structured into three progressive tiers, each corresponding to specific industry application scenarios.

Basic Communication Skills: As the foundational layer of professional English proficiency, this competency requires accurate information delivery and basic interaction in workplace scenarios. Different transportation sectors have distinct requirements: In civil aviation, proficiency in standardized English is essential for basic service communications such as passenger boarding guidance, flight information announcements, and baggage check-in consultations. For high-speed rail, English skills encompass ticket inquiries, transfer guidance, and carriage service notices. In port logistics, mastery of common phrases like cargo handover confirmation, warehouse location descriptions, and basic customs clearance procedures is crucial. These skills directly impact job efficiency and service quality.

Professional Application Competence: As the core of vocational English proficiency, this competency distinguishes general English from professional English by focusing on practical operational requirements of job-specific tasks. In civil aviation, proficiency includes reading and understanding professional English materials such as IATA regulations, aircraft maintenance manuals, and flight operation plans, as well as drafting operational documents like flight delay reports and passenger complaint records. For high-speed rail, the ability to interpret technical texts like UIC standards and train equipment operation manuals is essential. In port logistics, mastery of English documents such as bills of lading, packing lists, and customs declarations, along with accurate interpretation of core clauses in international freight forwarding agreements, is crucial. This competency serves as the cornerstone for ensuring standardized professional practices and alignment with international industry standards.

Emergency Response Competence: As the advanced tier of professional English proficiency, this skill emphasizes rapid response and effective communication in crisis situations, directly

impacting job safety and emergency management outcomes. In civil aviation, it requires the ability to issue clear and standardized English emergency instructions, calm passengers, and coordinate with ground rescue teams during scenarios like flight diverting, passenger health emergencies, or cabin safety alerts. For high-speed rail operations, it involves English communication skills for train malfunction announcements, passenger evacuation guidance, and cross-line emergency coordination. In port logistics, it entails efficient English communication with relevant departments to complete emergency procedures during incidents such as cargo damage, customs inspection anomalies, or port safety accidents. This competence serves as a critical safeguard for transportation industry professionals to navigate complex international work environments.

In summary, the occupational competency standards for the transportation industry outline a progressive framework for English proficiency: “fundamental communication builds service foundations, professional application supports business operations, and emergency response ensures safe operations.” This framework establishes the training objective for vocational transportation English courses as “position requirement-centered and application-oriented,” moving beyond traditional knowledge transmission to cultivate students’ comprehensive ability to solve practical work problems in real professional scenarios. This approach provides a clear benchmark for analyzing current teaching practices, identifying core issues, and formulating reform strategies.

2.2 Current Teaching Status of Transportation English Courses in Higher Vocational Education

At present, most of the higher vocational colleges still use the traditional teaching mode in the traffic English course, which mainly presents the following characteristics:

Course Structure: As extensions of general English or elective courses, these programs typically allocate limited class hours—most institutions schedule only two weekly sessions—with short teaching cycles that fail to systematically develop professional English competencies. Moreover, the curriculum lacks effective integration with core courses in specialized fields like civil aviation services, high-speed rail operations, and port logistics. This absence of tailored content for different transportation sectors results in ambiguous course positioning, making it difficult to precisely align with the vocational skill development goals of various disciplines.

The curriculum primarily covers fundamental topics such as general English grammar, vocabulary, and daily conversations, with specialized terminology for the transportation industry, business process terms, and workplace scenarios accounting for less than 30%. The textbook content lags behind industry developments, offering minimal coverage of emerging English applications in fields like smart transportation, cross-border logistics, and intelligent security checks. Moreover, case studies predominantly consist of abstract textual descriptions, lacking practical materials such as real industry documents, operational manuals, and workflow procedures. This deficiency hinders the enhancement of students’ professional English application skills.

Teaching methodology: The traditional “teacher-led instruction + text recitation + grammar analysis” model remains dominant, with classroom authority concentrated in teachers’ hands. Students passively absorb knowledge without opportunities for active thinking or expression. While some educators have introduced case-based teaching, these cases often detach from real professional contexts and lack accompanying simulation exercises. Emerging approaches like virtual simulation and project-based learning are scarcely adopted, failing to provide immersive English communication scenarios for students and thus hindering the achievement of “learning for practical application” objectives.

Assessment Methodology: The evaluation primarily relies on a final closed-book exam, accounting for over 70% of the total grade, which is a typical summative assessment model. The assessment content focuses on language knowledge aspects such as vocabulary retention, grammatical accuracy, and reading comprehension, while lacking coverage of core professional English application skills including oral expression, professional document processing, and emergency communication in workplace scenarios. The evaluation is conducted solely by in-house faculty without involving industry experts, resulting in outcomes that fail to accurately reflect students’ job-fit capabilities.

This teaching mode leads to the disconnection between learning and application, which is difficult to meet the actual demand of English ability in the industry.

2.3 Data Analysis and Summary of Current Status Survey

To gain a comprehensive understanding of the current teaching practices in vocational college transportation English courses, this study synthesizes authoritative survey data from multiple sources.

At the student level, research indicates that 38.46% of students are dissatisfied with the practicality of current courses, as they find the curriculum content disconnected from real-world job requirements and the knowledge acquired difficult to apply during internships.

At the teacher level, the survey “The Current Situation of English Teaching in Higher Vocational Colleges and the Needs of Enterprises for Higher Vocational Students” indicates that 48.9% of teachers admit that “the teaching methods are monotonous and lack effective practical teaching links”, which is difficult to meet the needs of students’ vocational ability training.

At the enterprise level, the “Survey and Analysis Report on English Proficiency Requirements for Vocational Graduates in Professional Positions” reveals that 72.3% of corporate experts identified “insufficient English application skills among graduates, necessitating pre-employment training,” which directly elevates recruitment costs for businesses.

Evaluation System: Over 80% of respondents believe that the current assessment system “fails to comprehensively reflect students’ English application abilities,” with one-sided evaluation content and monotonous assessment methods, urgently requiring reform.

The results show that there is a significant gap between the higher vocational traffic English curriculum and the vocational ability standard, and the teaching reform is imperative.

3. Current Issues in Teaching of Transportation English Courses in Higher Vocational Education Based on Vocational Competency Standards

3.1 The Curriculum Content is not in Line with the Vocational Ability Standard

The current content of higher vocational traffic English courses mainly has the following problems:

Excessive generality and insufficient specialization: The curriculum predominantly focuses on general English, with limited coverage of industry-specific vocabulary, terminology, and situational dialogues in transportation, leaving students ill-prepared for the professional English demands of their future careers.

The updates are outdated and disconnected from industry realities: the course materials predominantly use generic versions, failing to incorporate the latest industry developments, such as English application scenarios in smart transportation and cross-border logistics.

The lack of systematic integration and disconnection from specialized courses: The Transportation English curriculum fails to establish effective connections with core professional courses such as Civil Aviation Services, High-Speed Rail Operations, and Logistics Management, resulting in the absence of an integrated “Language + Specialty” training system.

3.2 Teaching Methods Fail to Meet the Application Needs of Professional English

The traditional “cramming” teaching method still dominates the teaching of traffic English in higher vocational colleges, which is mainly manifested as:

The theory is emphasized but the practice is neglected.

The lack of realistic scenarios and authenticity: In teaching, virtual environments or text-based dialogues are predominantly used, which differ significantly from the complex communication scenarios in real workplace settings. This makes it challenging for students to develop effective emergency response capabilities.

Insufficient application of information technology: Some institutions still rely on traditional teaching methods, with limited use of online learning platforms and virtual simulation systems, which fails to meet students’ personalized learning needs.

3.3 Lack of Vocational Orientation in the Assessment and Evaluation System

The current assessment system has the following defects:

The evaluation method is too simple: it mainly adopts the summative evaluation, and the final closed-book examination is the main evaluation basis, which ignores the performance and ability improvement of students in the learning process.

The evaluation criteria are one-sided: they focus on assessing linguistic knowledge, such as vocabulary, grammar, and reading comprehension, while insufficiently evaluating students' oral expression, professional application, and emergency response capabilities.

The limitation of evaluation subject: The evaluation is mainly completed by teachers, and the lack of participation of industry and enterprise experts leads to the disconnection between the evaluation results and the actual needs of the post.

3.4 Insufficient Professional English Teaching Competence of Faculty

The construction of higher vocational English teachers in transportation is facing the following challenges:

Limited professional background: Most English teachers lack experience in the transportation industry, resulting in insufficient understanding of job requirements and specialized knowledge, which makes it difficult for them to deliver targeted instruction.

Weak practical skills: Teachers have limited opportunities to participate in corporate internships and industry training, resulting in insufficient grasp of the latest industry trends and practical English application scenarios.

The teaching concept is lagging behind: some teachers still stick to the traditional teaching concept, the understanding of the vocational education "employment-oriented" is not deep, the initiative and innovation of teaching reform is insufficient.

4. Teaching Reform Strategies of Transportation English Courses in Higher Vocational Education Based on Vocational Competency Standards

4.1 Reconstructing the Course Content System Based on the Vocational Competency Standards

To achieve effective alignment between curriculum content and vocational competency standards, restructuring should be conducted from the following three aspects:

Modular Course Structure: The curriculum is organized into three core modules—Basic Communication, Professional Applications, and Emergency Response—tailored to the demands of transportation industry roles. Each module contains specialized subunits, such as the Civil Aviation Services module, which includes check-in and security screening, flight delay management, and passenger complaint resolution, ensuring seamless alignment with real-world operational scenarios.

Dynamic updates of teaching resources: Establish a textbook development mechanism featuring "industry-enterprise collaboration and school-enterprise co-construction", inviting corporate experts to participate in textbook compilation and revision, while promptly incorporating the latest industry standards and case studies. Simultaneously, develop an online learning resource repository including industry English videos, document templates, emergency dialogue scripts, etc., to enrich teaching content.

Strengthen the integration of “language + specialty”: Promote the deep integration of transportation English courses with core professional courses, such as embedding English communication scenarios in civil aviation service courses and incorporating English document processing in logistics management courses, to achieve “learning by doing and doing by learning”.

4.2 Teaching Methods Oriented to Innovative Vocational Scenarios

Focusing on professional contexts, we innovate teaching methods to enhance students’ practical English proficiency.

Scenario-based simulation teaching method: Create authentic professional settings, such as simulated airport check-in counters, high-speed rail service counters, and port logistics warehouses, enabling students to practice role-playing and dialogues in these environments, thereby enhancing their communication and adaptability skills.

Project-based learning: Students complete comprehensive projects like ‘Cross-border logistics document processing’ or ‘International flight emergency response’ in groups, enhancing their English proficiency and teamwork skills through hands-on practice.

Information-based teaching methods: Utilizing digital tools such as virtual simulation systems and online learning platforms to implement blended learning. By combining online self-directed learning with offline practical exercises, this approach meets students’ personalized learning needs and enhances teaching effectiveness.

4.3 Establishing a Diverse and Integrated Vocational Competency Assessment Mechanism

Establish a multi-dimensional assessment mechanism integrating process evaluation, summative evaluation, and corporate evaluation.

Formative assessment: accounting for no less than 50%, including classroom performance, group projects, scenario-based simulations, and assignment completion, comprehensively reflecting students’ learning process and competency development.

Terminal evaluation: A combined approach of ‘written test + oral test + practical operation’ is adopted, where the written test focuses on professional knowledge and reading comprehension, the oral test emphasizes oral expression and communication skills, and the practical operation evaluates English application abilities in job scenarios.

Corporate Evaluation: Industry experts are invited to assess students’ English proficiency during internships and projects, ensuring the evaluation aligns with actual job requirements.

4.4 Enhancing the Professional English Teaching Competence of Faculty

Enhance teachers’ professional English teaching competence through multiple approaches:

Cultivation of “Dual-qualified” Teachers: Encourage teachers to obtain industry vocational qualification certificates, such as the Civil Aviation English Proficiency Certificate and Logistics Professional Certificate, to enhance their professional practical skills. Simultaneously, establish a teacher enterprise practice system, regularly arranging teachers to undertake rotational assignments in transportation enterprises to gain in-depth understanding of job requirements.

Teacher Training and Exchange: Regularly organize teachers to participate in industry training and teaching seminars to learn advanced teaching concepts and methods. Conduct school-enterprise collaborative teaching research, inviting industry experts to jointly develop courses and design teaching cases with teachers.

Teaching team development: Establish a teaching team comprising English instructors, subject specialists, and industry experts to leverage complementary strengths and collaboratively advance pedagogical innovation and practical research.

5. Conclusion and Outlook

5.1 Research Conclusions

Through an in-depth analysis of the current teaching practices in vocational transportation English courses, this study has identified key challenges including the disconnect between curriculum content and occupational competency standards, monotonous teaching methodologies, evaluation systems lacking vocational orientation, and insufficient faculty qualifications. Based on these findings, the study proposes reform measures such as restructuring course content to align with professional competency standards, innovating scenario-based teaching approaches, establishing a diversified assessment framework, and strengthening faculty development initiatives.

Research demonstrates that vocational English curriculum reform based on occupational competency standards can effectively enhance students' English application skills and job competitiveness, meeting the talent demands of the transportation industry's internationalization. Simultaneously, this reform facilitates the transition of vocational English education from "language knowledge transmission" to "occupational competency cultivation", providing valuable insights for vocational education curriculum reform.

5.2 Future Outlook

In the future, the teaching reform of higher vocational transportation English courses will develop in a more precise, intelligent, and international direction. With the deep application of technologies such as artificial intelligence and big data in the field of education, new teaching models such as personalized learning and intelligent assessment will continue to emerge. At the same time, with the further advancement of the "Belt and Road" initiative, international cooperation in the transportation industry will become more frequent, placing higher demands on the English proficiency and cross-cultural communication skills of practitioners.

Therefore, higher vocational colleges should continue to deepen the teaching reform, constantly optimize the curriculum system and teaching methods, strengthen the in-depth cooperation with the industry and enterprises, cultivate more high-quality technical and skilled personnel to meet the needs of the development of the industry, and provide a strong talent support for the construction of a strong transportation country.

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