DOI: 10.53469/jrve.2025.7(09).12

Empowerment and Growth: The Application, Reflection, and Prospect of Value-Added Assessment in English Academic Quality Evaluation in Vocational Colleges

Xiaoli Hu

Jiangsu Maritime Institute, Nanjing 211170, Jiangsu, China

Abstract: ***Educational assessment reform is a pivotal lever for deepening high-quality development of vocational education in the new era. Traditional English academic assessment systems in vocational colleges suffer from inherent drawbacks such as "dominance of summative assessment, unidimensionality, and neglect of individual differences," making it difficult to accurately measure teaching effectiveness and student growth. Value-Added Assessment (VAA), with its core characteristics of "focusing on the starting point, emphasizing the process, and considering progress," provides a novel theoretical perspective and practical tool to address this dilemma. Based on the practice of English teaching in vocational colleges, this paper first explains the connotation of VAA and its applicability to the field of vocational college English. Secondly, it systematically constructs an academic quality VAA indicator system encompassing four dimensions—"language proficiency, professional competence, affective attitudes, and developmental potential"—and elaborates on its specific application models and methods in English teaching. Thirdly, it offers a profound reflection on the practical challenges encountered during implementation, including data collection, standardization of criteria, model accuracy, and application of results. Finally, it prospects future optimization paths, proposing strategies such as technological empowerment, deepening school-enterprise co-evaluation, enhancing teacher training, expanding research scope, and constructing a feedback loop. The aim is to promote the localized innovation and application of VAA, providing theoretical reference and practical paradigms for building a scientific, equitable, and developmental new ecosystem for English education assessment in vocational colleges.***

Keywords: Value-Added Assessment, Vocational College English, Academic Quality Evaluation, Application, Reflection, Prospect.

1. Introduction: The Voice of Change—An Inevitable Choice Under the Background of Educational Assessment Reform

Educational assessment determines the direction of education development and serves as the "baton" and "weather vane" for educational reform. In 2020, the Central Committee of the Communist Party of China and the State Council issued the "Overall Plan for Deepening the Reform of Educational Evaluation in the New Era," explicitly proposing the new concept of "four evaluations": "improving outcome evaluation, strengthening process evaluation, exploring value-added evaluation, and improving comprehensive evaluation." This set the tone for a profound transformation of China's educational assessment system [1]. Among these, "Value-Added Evaluation," as a developmental assessment concept, was elevated to the national policy level for the first time, underscoring its significance.

Higher vocational education, as a vital component of the modern education system with Chinese characteristics, bears the historical mission of cultivating high-quality technical and skilled talents, master craftsmen, and great artisans [2]. The English course in vocational colleges, as an important public foundational and humanities literacy course, has its teaching quality directly impacting students' comprehensive professional competence and sustainable development potential. However, for a long time, the academic quality evaluation system for vocational college English has been deeply influenced by traditional exam-oriented education concepts, leading to numerous predicaments:

Limitations of the "Result-Only Doctrine": Evaluations often rely on a one-off final exam as the ultimate verdict, neglecting students' efforts, progress, and changes throughout the entire learning process, failing to reflect the true "increment" of education.

Narrowness of "Score-Only Doctrine": Evaluation content is overly concentrated on easily quantifiable linguistic knowledge like vocabulary and grammar, while paying insufficient attention to key competencies and core literacies such as oral communication, workplace application, cross-cultural communication, teamwork, and learning strategies. This disconnects from the "competency-based" goals of vocational education [3].

Unfairness of "Ignoring Differences": Using the same "ruler" to measure all students ignores the vast differences in their English proficiency upon entry. This makes it difficult for students with weak foundations who exert tremendous effort and make significant progress to receive fair recognition, severely dampening their learning motivation, while potentially fostering complacency among students with strong foundations.

The aforementioned issues indicate that the traditional evaluation system struggles to objectively reflect the teaching effectiveness of vocational college English and cannot effectively serve the goal of cultivating technical and skilled talents. Reforming the evaluation model is no longer a multiple-choice question of "whether to do it" but a mandatory question that "must be done well." Value-Added Assessment is the inevitable choice responding to this call of the times [4]. It aims to measure the magnitude of student

progress rather than absolute achievement levels. Its core philosophy is "consider the starting point, compare progress, value development," which precisely aligns with the educational philosophy of vocational education—"serving everyone and teaching according to individual aptitude." It provides a novel solution for scientifically assessing English academic quality in vocational colleges and stimulating the endogenous motivation of both teachers and students.

2. Application in Practice: System Construction and Practical Pathways for Value-Added Assessment in English Academic Quality Evaluation in Vocational Colleges

Translating the concept of VAA into practice requires constructing a scientific and operable evaluation indicator system and designing clear implementation pathways.

2.1 Theoretical Connotation and Applicability to Vocational College English

Value-Added Assessment is not simply "subtracting pre-test scores from post-test scores." It is an evaluation method that collects data on student academic performance multiple times over a period, employs scientific statistical methods to attempt to isolate the influence of school education from other factors such as students' prior attainment and family background, thereby estimating the "net effect" of education on student academic achievement [5].

Its application in the field of vocational college English is highly appropriate:

Philosophical Applicability: It embodies the modern educational concepts of "student-centeredness" and "promoting holistic development," focusing on the growth value of each individual.

Goal Applicability: It matches the complex goal of vocational education to cultivate talents with "both moral integrity and technical proficiency," capable of guiding evaluation from a unidimensional knowledge focus to multiple dimensions including ability, literacy, and attitude [6].

Object Applicability: Vocational college students exhibit huge disparities in English foundation. VAA respects and scientifically accounts for these differences, providing a basis for implementing personalized teaching and assessment.

2.2 Construction of a Value-Added Assessment Indicator System for English Academic Quality in Vocational Colleges

Based on principles of scientific rigor, developmental focus, and vocational orientation, we constructed the following four-dimensional indicator system:

2.2.1 Primary and Secondary Indicators:

A1 Value-Added in English Language Proficiency: The foundational dimension of evaluation, focusing on the instrumental value of English as a language.

B1.1 Value-Added in Linguistic Knowledge: Growth in areas such as vocabulary, core grammar, and pragmatic knowledge.

B1.2 Value-Added in Language Skills: Progress in listening & speaking (from "dare not speak" to "able to communicate") and reading, writing & translation (practical writing, reading and translation of professional literature).

A2 Value-Added in Professional Competence and Comprehensive Skills: The core dimension of evaluation, reflecting the characteristics of vocational education.

B2.1 Value-Added in Workplace Application Ability: Improvement in the ability to use English to complete tasks in simulated or real workplace scenarios.

B2.2 Value-Added in Learning and Innovative Thinking: Changes in the ability to utilize resources for independent learning, collaborate in teams, and solve problems innovatively.

A3 Value-Added in Learning Process and Affective Attitudes: The motivational dimension of evaluation, focusing on students' non-intellectual factors.

B3.1 Value-Added in Learning Engagement: Trends in changes regarding attendance, class participation, and online learning activity.

B3.2 Value-Added in Affective Attitudes and Confidence: Positive transformations in learning anxiety, interest, self-confidence, and cultural inclusivity.

A4 Value-Added in Developmental Potential: The sustainable dimension of evaluation, focusing on the student's future.

B4.1 Value-Added in Sustainable Learning Ability: Improvement in metacognitive abilities such as planning and strategy use.

B4.2 Certifications and Advanced Learning: Explicit developmental markers such as obtaining vocational English certificates or intention to pursue further studies (e.g., upgrading to bachelor's degree).

2.2.2 Data Sources and Collection Methods:

The effectiveness of the indicator system relies on diversified data support.

Quantitative Data: Standardized pre- and post-tests (for A1), backend data from online learning platforms (login frequency, assignment completion rate, test score trends, for A1, A3), Likert-scale questionnaires (for A3).

Qualitative Data: Student portfolios (writing samples, project reports, for A1, A2), classroom observation records (for A1, A2, A3), interview and focus group records (for A3), evaluations from enterprise mentors (for A2), student learning logs and reflections (for A2, A3, A4).

2.2.3 Value-Added Calculation Methods:

Standard Score Difference Method: Primarily used for dimension A1. Value-Added Score (VA) = Final Standard Score - Entrance Standard Score. This method is intuitive and clearly shows absolute progress.

Level Progression Method: Used for qualitative indicators like A2, A3, A4. Observation points are divided into several levels (e.g., 1-5). Level progression value = Final Level - Initial Level.

Composite Index Method: For a comprehensive assessment, different weights are assigned to each dimension (e.g., A1: 40%, A2: 30%, A3: 20%, A4: 10%). The standardized scores of each dimension are weighted and summed to obtain a Composite Value-Added Index, used to measure the overall growth level of a student or class.

2.3 Practical Application Model

In practice, we follow a closed-loop process: "Baseline Measurement — Process Tracking — Summative Evaluation — Data Analysis — Feedback Application."

Baseline Measurement (Beginning of Term): Conduct diagnostic English proficiency tests and affective attitude questionnaires immediately after new students enroll to establish individual and class "baseline profiles."

Process Tracking (During Term): Continuously collect various process data throughout the teaching process via teaching platforms, classroom activities, project assignments, etc., storing them in students' "e-portfolios."

Summative Evaluation (End of Term): Administer final tests (equivalent to the initial test), post-test questionnaires, and collect all final works and reports.

Data Analysis: Use the methods above to calculate various value-added scores and the composite index. Simultaneously, conduct content analysis on qualitative materials to unearth typical growth cases.

Feedback and Application:

For Students: Provide personalized "Academic Growth Reports," not only informing scores but also using charts to display progress trajectories across dimensions, offering specific improvement suggestions, allowing them to feel the reward of their efforts.

For Teachers: Identify strengths and weaknesses in teaching precisely through class average value-added indices and sub-item data (e.g., low VA value for speaking across the class indicates a need to strengthen oral teaching), driving teaching reflection and reform.

For Management: Provide data-based decision-making support for program development, course optimization, and resource allocation.

3. Reflective Analysis: Practical Challenges and Deep Thinking in the Implementation of Value-Added Assessment

Despite its significant advantages, numerous challenges were encountered in the practical promotion of VAA, necessitating deep reflection and resolution.

1) Challenges of Data Collection Burden and Authenticity. Constructing a multi-dimensional indicator system implies a surge in data collection points. Recording classroom performance, grading project reports, analyzing learning logs, interviewing students... these tasks significantly increase teachers' workload. Furthermore, ensuring the authenticity of process data (e.g., student self-assessment, peer assessment) and avoiding formalism where students "study for the sake of boosting data" are practical difficulties [7].

2) Challenges of Evaluation Standard Uniformity, Reliability, and Validity. For qualitative indicators like language skills and professional competence, scoring criteria may vary between different teachers or even the same teacher at different times due to subjective bias, affecting the reliability of the evaluation. Developing clear, observable, and measurable level descriptors and providing ongoing calibration training for teachers are crucial for ensuring fair and scientific evaluation results.

3) Challenges of Model Precision and Statistical Complexity. The simple "pre-post test difference" is intuitive but somewhat crude, as it cannot fully isolate the impact of non-instructional factors (e.g., family support, extracurricular tutoring, other course loads) on student progress [8]. More precise statistical models, such as Hierarchical Linear Modeling (HLM), can better control these variables. However, their operational complexity and higher demand on teachers' statistical literacy somewhat limit their widespread application.

4) Challenge of the "Ethical Boundary" in Result Application. The application of VAA results must be handled with extreme caution. If simplistically and directly tied to teacher performance appraisal and promotion, it may lead teachers to focus only on "measurable progress," neglecting educational goals that are difficult to quantify but equally important (e.g., character development, cultural cultivation), and might even incentivize utilitarian behaviors like rejecting students with weak foundations. It must be clear that the primary function of VAA is diagnosis and improvement, not reward, punishment, and ranking.

5) Challenge of Balancing Cost and Benefit. Implementing a complete VAA system requires significant investment in time, manpower, and technology. For vocational colleges with relatively limited resources, a balance must be sought between the fineness of evaluation and the feasibility of implementation.

4. The Path Forward: Optimization Paths and Future Vision for Value-Added Assessment in Vocational College English

Facing these challenges, we should not stop but actively explore optimization paths to promote the deepening and maturation of VAA.

1) Technology Empowerment: Constructing a Smart Assessment Ecosystem. Future efforts should focus on vigorously developing or introducing integrated "smart assessment platforms." Utilizing technologies like Artificial Intelligence and Big Data learning analytics can enable the unintrusive collection of student learning behaviors, automatic data analysis, visualization of growth trajectories, and intelligent generation of personalized reports. This will greatly liberate teachers, allowing them to return to their fundamental role as "instructional guides" rather than "data porters."

2) Standards First: Developing Authoritative and Unified Evaluation Scales. It is advocated that educational authorities or industry guidance committees take the lead, organizing experts, frontline teachers, and enterprise representatives to jointly develop nationally guiding "Vocational English Ability Value-Added Assessment Level Standards" for different major categories in vocational colleges. This would provide a scientific and unified basis for institutional practices, enhancing the reliability and validity of evaluations.

3) Deepening Co-Evaluation: Promoting the Implementation of Dual-Subject Evaluation by Schools and Enterprises. Strengthen the voice of enterprises in evaluation. Collaborate with enterprises to develop assessment tasks and scales, inviting enterprise mentors to deeply participate in project assessments, internship evaluations, and other links. This makes the evaluation results more reflective of real workplace needs, achieving seamless integration between "teaching" and "employment."

4) Deepening Research: Expanding Samples and Introducing Advanced Models. Encourage more institutions and researchers to conduct cross-institutional and cross-regional collaborative research, expand sample sizes, and undertake long-cycle (e.g., three-year) longitudinal studies to enhance the generalizability of conclusions. Simultaneously, organize training to promote the application of more advanced statistical models like HLM, improving the scientific rigor and precision of evaluation results.

5) Constructing a Closed Loop: Strengthening the Feedback and Application Mechanism for Evaluation Results. Establish institutionalized and structured feedback procedures to ensure that evaluation results are fed back to students, teachers, and management promptly and effectively. These results should be used to revise curriculum standards, optimize instructional design, and provide personalized tutoring, truly forming a quality improvement closed loop of "evaluation - diagnosis - feedback - improvement," thereby maximizing the benefits of VAA.

5. Conclusion

The application of Value-Added Assessment in English academic quality evaluation in vocational colleges represents a profound paradigm shift. It moves from "Prove" to "Improve," from "Selection" to "Growth," from "Singular" to "Multiple," fully embodying the core spirit of educational assessment reform in the new era. Although the road ahead is fraught with challenges, its immense potential in stimulating student potential, optimizing the teaching process, and serving talent cultivation is already evident.

In the future, we need to continue advancing the theoretical research and practical exploration of VAA with a more open, cautious, and scientific attitude. Through the deep integration of technology and education, and the collaborative efforts of schools and enterprises, we can ultimately construct a new ecosystem for English education assessment in vocational colleges that is student growth-centered, scientifically equitable, and full of humanistic care, injecting strong momentum into the high-quality development of vocational education in China.

Acknowledgments

This research is a phased achievement of Jiangsu Maritime Institute Teaching Reform Projects "Reform and Practice of Value-Added Evaluation System for Higher Vocational English Academic Quality (2023)" and "Research and Practice on English Teaching Evaluation of Cruise and Art Design Majors in Higher Vocational Colleges Based on the OBE (2024)". We extend our gratitude to the project team members and all participating students for their support and contributions.

References

[1] Central Committee of the Communist Party of China & State Council. (2020). Overall Plan for Deepening the Reform of Educational Evaluation in the New Era [Z].
[2] State Council. (2019). National Implementation Plan for Vocational Education Reform [Z].
[3] Wang, Q., & Li, L. (2019). Promoting the integration of teaching, learning, and assessment in English classes under the background of core competencies: Significance, theory, and methods. Curriculum, Teaching Material and Method, 39(05), 68–74. (In Chinese)
[4] Zhao, D. C. (2011). Value-added assessment: Concept, principles, and main models. Basic Education Reference, (11), 14–18. (In Chinese)
[5] Zhang, W. Q., & Zhao, D. C. (2010). Value-added assessment: A new perspective on school evaluation. Educational Science Research, (11), 35–38. (In Chinese)
[6] Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement. University of Tennessee Value-Added Research and Assessment Center.
[7] Braun, H. I. (2005). Using student progress to evaluate teachers: A primer on value-added models. Educational Testing Service.
[8] Li, T., & Shen, J. L. (2013). Research progress and implications of value-added assessment abroad. Studies in Foreign Education, 40(08), 88–96. (In Chinese)