

Construction and Practice of Teaching Quality Evaluation System in Higher Vocational Colleges and Universities: Based on Big Data Technology

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Abstract: With the rapid development of information technology, digital governance of education reform and development is an important issue for universities and colleges to consider. To digitally empower high-quality development, it is imperative to build a scientific and fair and standardized teaching quality evaluation system that is suitable for the modernization of vocational education governance. This paper takes representative typical colleges and universities as the research object, and discusses in depth the current situation of the construction of higher vocational teaching quality evaluation system, difficult factors, practice paths and practice case models under the digital vision of education. Aiming at the current problems in the evaluation of teaching quality in vocational education, combining education theory and big data analysis technology, the path of the teaching quality evaluation system based on education digitalization is constructed, so as to continue to promote the high-quality development of education in the wave of digitalization.

Keywords: Digitization; Higher Education Institutions; Teaching Effectiveness; Evaluation Criteria; Practice Paths

1. Introduction

In the report on the development of vocational education in China from 2012 to 2022, it is stated that China's vocational education should "gather a consensus on digital vocational education, put into practice the concept of digital vocational education, accelerate digital transformation, and take digital transformation as an important drive." With the rapid development of information technology, digital transformation in the field of education has

become an important way to improve the quality of education and realize educational equity. And as an important part of China's higher education [1], the improvement of its teaching quality is of great significance in serving national development, promoting student employment and advancing social progress. Therefore, it is of great significance for higher vocational institutions to construct a scientific and reasonable teaching quality evaluation system. Based on the existing research foundation, this paper adheres to the systematic thinking and explores the construction and practice of the teaching quality evaluation system of higher vocational colleges under the perspective of education digitization, so as to enhance the adaptability of teaching digitization in higher vocational colleges and promote the high-quality development of vocational education with a view to promoting the modernization of the governance capacity of vocational education[2].

2. The Development Trend of Digital Governance Higher Vocational Teaching Quality Evaluation System

In existing research, many scholars have conducted in-depth discussions on the relationship between education digitalization and teaching quality improvement. Studies have shown that the digitalization of education can improve the personalization and differentiation of teaching, and through the analysis of big data, it can more accurately grasp the learning needs of students and the teaching effect, which provides a new way to improve the quality of teaching. However, some scholars believe that the digital economy in the era of big data empowers the cultivation of higher vocational digital skills talents to face the situation of difficulties and challenges coexisting , at the

same time, some scholars point out that in the process of education digitalization transformation, it is necessary to pay attention to issues such as the security of the data, the protection of privacy, as well as the operability of the technology, and the construction of the corresponding teaching quality evaluation system and the path of realization [3].

2.1 Current Status of the Construction of the Teaching Quality Evaluation System

Under the current digital vision of education, the status quo of teaching quality evaluation in higher vocational colleges and universities presents some new features and development trends, which are obviously different from the traditional teaching quality management. With the rapid development of information technology, the traditional teaching quality evaluation system is facing the challenges and opportunities of digital transformation [4].

The current teaching quality evaluation system of higher vocational colleges and universities mainly consists of two aspects: internal evaluation and external evaluation. In terms of internal evaluation, most higher vocational colleges and universities have established a two-level evaluation model consisting of schools and second-level colleges (departments and ministries). This evaluation system usually includes three subsystems: target evaluation, process evaluation and information evaluation. Objective evaluation focuses on the setting and achievement of teaching objectives, process evaluation focuses on various aspects of teaching implementation, and information evaluation focuses on the collection and analysis of teaching data. The three are mutually supportive and constraining, together constituting a relatively perfect internal quality evaluation system, which ensures the orderly development of teaching activities. In terms of external evaluation, the teaching quality evaluation system of higher vocational colleges and universities is gradually expanding to include the evaluation of third-party subjects such as employers, industry associations or social organizations. The advantage of this kind of third-party evaluation is that it can provide more objective and fair evaluation results because there is no direct interest relationship between the evaluator and the evaluated. At the same time, this kind of evaluation also provides

valuable social feedback for higher vocational colleges and universities, which helps to improve the quality of teaching and the level of schooling.

However, with the continuous innovation of teaching mode and the improvement of talent cultivation requirements, the internal evaluation system of higher vocational colleges and universities also needs to be further improved. Teaching quality evaluation in higher vocational colleges and universities presents new development trends in the digital perspective.

2.2 Digital Teaching Quality Evaluation System Posture and Evolution

The digitalization of education is an important trend in the development of modern education, which has changed the traditional teaching mode and learning mode through the application of information technology, and has had a far-reaching impact on the teaching quality evaluation system of higher vocational colleges and universities. The current digitalization of education has brought new development opportunities for teaching quality evaluation in higher vocational colleges and universities. The application of digital technology, especially the development of big data, artificial intelligence and other technologies, provides new technical support for the monitoring, evaluation and feedback of teaching quality. Through the establishment of a digital teaching platform, teaching data can be collected in real time and data analysis can be carried out, so as to more accurately assess the quality of teaching.

In terms of the application of evaluation methods and technologies, higher vocational colleges and universities should use information technology, especially artificial intelligence, to carry out the whole process, multi-dimensional and dynamic collection of teaching big data, in order to generate teachers' teaching portraits[5], and to realize the combination of process evaluation, value-added evaluation, comprehensive evaluation, result evaluation, qualitative and quantitative evaluation, which can help realize the digital transformation of teaching quality evaluation and improve the accuracy and effectiveness of evaluation. At the same time, a feedback mechanism for evaluation results should be established to provide decision-making support for teaching

administrators, improvement suggestions for teachers' professional development, and also support for students' personalized learning, so as to promote the continuous improvement of teaching quality.

2.3 Development Dilemma of Digital Teaching Quality Evaluation System

The construction of the current teaching quality evaluation system in higher vocational colleges and universities is still facing many challenges, and there are some limitations in the digital education quality evaluation system, such as the increasing importance of practical training teaching, the need to further deepen the cooperation between schools and enterprises, the need to achieve a balance between practical and theoretical teaching, and the need to strengthen the use of big data technology. At the same time, the digitalization of education has also brought new opportunities for the evaluation of teaching quality in higher vocational colleges and universities.

2.3.1 Teaching quality evaluation system indicators are not sound enough

The teaching quality evaluation system of higher vocational colleges and universities focuses on the evaluation of teachers' classroom teaching and students' learning effects, while the evaluation of practical teaching is weak, and there is also a lack of teaching quality evaluation system construction mechanism. Incomplete evaluation indexes and low evaluation weights directly lead to the result that it is difficult to collect and analyze teaching evaluation indexes, and it is impossible to make precise measures [6]. The construction of teaching quality evaluation system is a systematic project, and it is urgent to build a scientific and sound internal evaluation index system of teaching quality, so as to solve the problem of emphasizing theoretical classroom teaching and practical teaching, and emphasizing achievements and competence [7].

2.3.2 Insufficient data support for the teaching quality assurance system

Teaching quality evaluation in higher vocational colleges and universities requires a large amount of teaching and related data support, however, the data platform maintenance and data management of the teaching quality assurance system are not perfect enough [8], and there is a lack of analyzing data, and the

teaching quality evaluation is not supported by evidence of the status quo of the "castle in the air". Based on the fact that data construction is the foundation and core of teaching quality evaluation [9], it is the key to realize the construction of digital teaching quality evaluation system in higher vocational institutions to build big data center, "migrate" the offline data generated in the process of teaching quality supervision and implementation to electronic data, and analyze the all-around and multi-dimensional analysis of teaching quality data.

2.3.3 Data Enabled Teaching Quality Improvement Drivers to be Optimized

Data collection and data analysis application are the core factors in the construction of teaching quality evaluation system in higher vocational institutions. Most of the current higher vocational colleges and universities have built a data platform for the teaching quality evaluation system, but based on the lack of data analysis capabilities, as well as the source data can't all be automatically captured, rather than realizing the precise image of teaching quality evaluation, the construction of its data-driven enhancement of teaching quality evaluation system needs to be further optimized. Through big data, intelligent analysis and other technologies to build a closed-loop teaching quality assurance system, omni-directional collection of teaching process data, the establishment of a data analysis model, the reasonable collection and processing of massive amounts of teaching data, the results of the data analysis into a specific teaching improvement measures, in order to effectively utilize the digital resources and tools for teaching and evaluation, the formation of the teaching quality evaluation system of all the main bodies, the dimensions of the linkage of the policy-making ecology .

3. The Impact of Educational Digitization on the Construction of Teaching Quality Evaluation System in Higher Vocational Colleges and Universities

The impact of education digitization on the evaluation of teaching quality in higher vocational colleges and universities is multifaceted, which provides rich data support and technical means, but also brings new challenges. Higher vocational colleges and universities need to continuously improve their

informatization level, establish a scientific and reasonable data analysis model, and improve the digital literacy of teachers in order to realize the continuous improvement of teaching quality.

3.1 Providing New Technical Support and Data Bases

With the support of big data, cloud computing, artificial intelligence and other technologies, the digitalization of education can achieve a comprehensive record and analysis of the teaching process. Multi-dimensional data collection, including students' learning activities, teachers' teaching behavior, and the use of teaching resources, provides a rich and accurate data source for teaching quality evaluation. Through in-depth analysis of these data, teaching quality can be evaluated more scientifically and the objectivity and accuracy of evaluation can be improved.

3.2 Enhance the Real-Time and Dynamic Nature of Teaching Quality Evaluation

While traditional evaluation of teaching quality is often carried out at the end of teaching activities, digitalization of education allows us to monitor and dynamically track the teaching process in real time, which not only allows for timely identification of problems and intervention, but also allows for timely teaching improvement based on dynamic changes in the teaching process, thus improving the continuity and effectiveness of teaching.

3.3 Expanding the Dimension and Depth of Teaching Quality Evaluation

With the help of big data analysis technology, comprehensive evaluation can be carried out from multiple dimensions such as students' learning effectiveness, teachers' teaching methods, and teaching resource allocation, so as to realize a more comprehensive control of teaching quality. At the same time, through the construction of data portrait, individual learning characteristics can be accurately analyzed, so as to achieve personalized teaching quality improvement strategy.

4. Education Digitalization of Higher Vocational Colleges and Universities Teaching Quality Evaluation System Path

4.1 Developing Teaching Quality Evaluation Criteria Based on Big Data

Through data collection and analysis of a large number of teaching activities, objective evaluation criteria have been formed. These standards not only include quantitative indicators of teaching content and teaching methods, but also integrate diversified dimensions such as student learning effectiveness, utilization efficiency of teaching resources and student satisfaction. This standard-setting based on big data analysis effectively improves the validity of teaching quality evaluation.

4.2 Establishment of Traceable Digital Evaluation Tools

Traditional evaluation of teaching quality often relies on expert review or peer evaluation, which is susceptible to subjective factors. Digital evaluation ensures the objectivity and traceability of evaluation results through the analysis of objective data, such as data on students' online learning behaviors, analysis of grades, and the reasonableness of the allocation of teaching resources. In addition, the standardized operating procedures of digital evaluation tools highlight the repeatability and fairness of the evaluation process.

4.3 Presenting a Real-Time Data Monitoring Process

With the help of big data technology, teaching quality evaluation is no longer a static one-time activity, but a dynamic and continuous process. Through real-time data monitoring and analysis, teaching quality evaluation can dynamically reflect the problems in the teaching process and provide immediate feedback for teaching adjustment and optimization, presenting the dynamism and comprehensiveness of real-time data monitoring. At the same time, teaching big data analysis can cover the full range of teaching activities, including the whole process of students' learning, the whole process of teachers' teaching and the whole process of teaching management, realizing the panoramic coverage of teaching quality evaluation.

4.4 Reach Accurate Data Portrait of Teachers and Students

Through the data analysis of individual learning behavior, knowledge mastery and skill

application, student data profiles can be formed to customize personalized teaching quality improvement programs for each student. At the same time, teachers' teaching can also be adjusted and improved individually according to the results of data analysis, realizing the precise and personalized development of teaching.

5. Application and Practice of Educational Digitization in Teaching Quality Evaluation System

Diversified research methods were adopted, integrating literature analysis, case study, questionnaire survey and empirical analysis to ensure its breadth and depth, as well as the scientificity and accuracy of the research results. The source of data mainly relies on the data collection platform of talent cultivation status of typical schools, annual reports on talent cultivation quality and third-party evaluation reports, which takes into account both the accessibility of relevant data and the practical feasibility of the study.

5.1 Adaptation to Social Needs and Service Contribution

Table 1. Trends in Major Employment Cities for the Classes of 2021-2023

city name	2021 session (%)	2022 session (%)	2023 session (%)
Nanchang, Jiangxi Province, China	40.4	35.6	33.6
Ganzhou, Jiangxi Province, China	3.9	4.8	5.7
Jiujiang, Jiangxi Province, China	4.7	4.1	5.0
Shenzhen, Guangdong Province, China	4.8	4.7	4.7
Shangrao, Jiangxi Province, China	2.3	3.7	3.2
Yichun, Jiangxi Province, China	1.8	2.5	3.2

Under the general environment of overall economic downturn, it was found that the implementation rate of graduation destination of 2021-2023 graduates of typical higher vocational colleges and universities in the study showed an overall decreasing trend, respectively 89.6%, 85.7% and 84.2%, and the

phenomenon of delayed employment of graduates was more prominent. ; According to the data from the research, its graduates were mainly directly employed (47.7%), and the proportion of those who were studying for undergraduate degree reached 36.5%, and the phenomenon of "slow employment" was further highlighted. According to the research data, its graduates are mainly directly employed (47.7%), and the proportion of those who are studying for undergraduate degree is 36.5%, further highlighting the phenomenon of "slow employment" and "slow employment". Because of its efforts to open up the channel for cultivating talents from middle-vocational, higher-vocational, and vocational undergraduate degree to postgraduate degree, the proportion of its graduates who are going to graduate schools in the 2021-2023 graduating classes is on a rising trend. The percentages were 27.2%, 35.8% and 36.5% respectively, and the cultivation of high-level skilled talents was carried out well, and the diversion of graduates from higher education to graduate schools was expanded.

The analysis of big data shows that the service contribution of typical higher vocational colleges and universities is dominated by provincial employment and actively contributes to the development of key regions. The proportion of the 2021-2023 graduates employed in the province remains at about 60% (Table 1), contributing more talents to the local area; from the perspective of employment cities, the 2023 graduates are mainly distributed in Nanchang (33.6%), Ganzhou (5.7%), Jiujiang (5.0%) and other cities, and the direction of employment of graduates is in line with the service orientation of its "Insisting on basing on Jiangxi and facing the whole country", providing more powerful support for local social and economic development. The employment flow of the graduates is in line with the service orientation of "adhering to the principle of being based in Jiangxi and facing the whole country", which provides strong support for the development of the local society and economy.

5.2 Quality of Employment and Achievement of Competencies

The overall employment quality of graduates is more stable, the monthly income of graduates

of the 2021-2023 sessions is 4,321 yuan, 4,565 yuan and 4,433 yuan respectively, which is more stable on the whole, and their employment satisfaction is 81%, 84% and 82% respectively, which is more than 80%, and graduates feel better about their employment; more than 90% of graduates of the 2021-2023 sessions (93%, 94% respectively, 91%) of the graduates of the 2021-2023 graduates can adapt to the current workplace, graduates are more fully prepared for employment; high-level technical and skilled personnel cultivation is clearly oriented, the graduates' general ability and vocational ability are more stable, of which the degree of attainment of the general ability of the graduates of the last three classes reached 96% and above, and the degree of attainment of the vocational ability was above 80%; the graduates' quality of life is well attained, and the proportion of the graduates who added value to the moral education of the graduates of the last two classes was high (96%). The value-added ratio of the last two graduates is high (96%), and the effectiveness of their work in "three-pronged education" and other aspects is good.

5.3 Teaching Evaluation and Effectiveness of Core Curriculum Development

The overall quality of teaching is effective, with the satisfaction of the last three graduates with the teaching of their alma mater at 94%, 93% and 95% respectively, which is stable at a high level, and the overall teaching situation is good. Meanwhile, it is found that the demand for improvement of the last two graduates on insufficient internship and practice sessions (45%), inability to mobilize students' interest in learning (36%), and impractical or obsolete course content (32%) are all higher; the hardware facilities for internship and practice on and off-campus, and the promotion of the level of teaching, teaching content and teaching process on the cultivation of graduates' competence in internship and practice sessions have been further strengthened.

The core curriculum training can better meet the actual work demand of graduates, and the matching degree between its curriculum and the demand of actual application fields is high. The evaluation of the importance of the core courses for the 2021-2023 graduates' counterparts in employment reaches 88% and above, and the

effect of the core courses on the cultivation reaches more than 80%; at the same time, the evaluation of the importance of the core courses for the graduates in higher education reaches 90% and above, and the effect of the core courses on the cultivation reaches about 90%, and the curriculum of the core courses of the majors is more reasonable, and the effect of the curricula on the overall cultivation of talents is better. The core curriculum of the specialty is set up reasonably, and the overall support effect of the curriculum on talent cultivation is better.

5.4 Support Services Feedback and Profiling

Through the research and analysis, it is concluded that the feedback on support services of the practice schools is generally better, mainly presented in three aspects, namely, employment services, student work and campus environment. First, the satisfaction of employment services is high and the employment work has achieved better results. Employment guidance services can help students set up reasonable career expectations, improve job-seeking skills, and promote smooth employment. In the evaluation of employment guidance, the satisfaction of the graduates of the 2021~2023 graduates with the employment guidance service has reached more than 90%, respectively 94%, 92% and 92%, and the effectiveness of the employment service work of our university is obvious. Secondly, the satisfaction of student work is high, and the effectiveness of student work is obvious. The student work reflects the effect of guaranteeing the healthy growth and comprehensive quality improvement of students. Meanwhile, the satisfaction ratings of the 2021~2023 graduates on student work (95%, 93% and 93% respectively) are stable at a high level, indicating that the student work is carried out effectively. Thirdly, the library, classrooms and other facilities better meet the students' needs, while the stadium and art venues need to be strengthened. 2023 graduates' satisfaction ratings of the library with library materials, classrooms and teaching equipment (95%, 92%, respectively) are higher, while their satisfaction ratings of the art venues, stadiums and sports facilities (83%, 88%, respectively) are lower, but they have risen compared with the previous years. It is necessary to continue to improve the relevant facilities to better meet the needs of

students.

5.5 Conclusion of Empirical Analysis of Digital Teaching Quality Evaluation

Under the current background of education digitalization, the evaluation and empirical analysis of teaching quality in higher vocational colleges and universities is a key link in improving the quality of education and teaching and realizing connotative development. Under the digital vision of education, teaching quality evaluation and empirical analysis of higher vocational colleges and universities need to be constructed and implemented from multi-dimensions and multi-levels to realize the modernization, informatization and intelligence of education and teaching and to continuously improve the overall level of education and the social service function of education.

5.5.1 Teaching quality evaluation system centered on students

Under the perspective of digitalization of education, the evaluation of teaching quality should not only consider students' academic performance, but also need to comprehensively evaluate students' non-intellectual factors such as practical ability, innovative spirit, teamwork and professional ethics, and pay attention to the all-round development of their learning outcomes. Through the establishment of a three-dimensional assessment index system, we can comprehensively monitor the learning process of students from both the process and outcome dimensions, and provide effective prediction and feedback on their learning outcomes, so as to realize the continuous improvement of education and teaching.

5.5.2 Establishment of incentives for teaching quality monitoring system

The use of modern information technology, the establishment of real-time monitoring and feedback system of the teaching process, effective supervision and guidance of teachers' teaching behavior; at the same time, the establishment of incentive mechanisms, recognition and rewards for teachers with significant teaching results, not only to enhance the enthusiasm of teachers and the quality of teaching of great significance, but also to stimulate the intrinsic motivation of teachers to promote their continuous improvement of teaching level.

5.5.3 Building a comprehensive monitoring and

evaluation system

Including multi-dimensional assessment of students' evaluation of teaching, listening to lectures by teaching supervisors, and social needs and personal development. Utilizing modern information technology such as big data and cloud computing, a platform for collecting, analyzing and sharing teaching quality data is established to provide a scientific basis for continuous monitoring, analysis and improvement of teaching quality.

6 Insights into the Construction of a Digital Governance-based Higher Vocational Teaching Quality Evaluation System

Teaching quality evaluation and empirical analysis is a complex but vital process. Under the current rapid development of digital governance in vocational education, its teaching quality evaluation and empirical analysis is not only an important way to improve teaching quality, but also a key step to realize the modernization of digital education. By constructing a comprehensive evaluation system, strengthening empirical analysis, increasing teacher participation, optimizing teaching resources and strengthening policy support, we can effectively enhance its teaching effectiveness and cultivate more professional technical and skilled talents who can meet the needs of future social development.

6.1 Building an Inclusive and Wide-Reaching Evaluation System

The teaching quality evaluation system of higher vocational education under the digital governance of education should comprehensively consider the quality of teachers, the situation of students, the allocation of teaching resources, the innovation of teaching methods and other dimensions. Through digital means, real-time monitoring and dynamic assessment of these dimensions can be realized, and provide practical safety and effective reference for the improvement of local vocational education teaching quality.

6.2 The Irreplaceable Role of Data Processing for Empirical Analysis

Practical cases show that digitalization and data processing technologies have an irreplaceable role in teaching quality evaluation, presenting their critical and dominant nature. Through the

establishment of digital teaching resource library, curriculum platform and the use of big data analysis technology, the digital integration of educational resources, the data management of teaching process, the precise implementation of teaching evaluation, and the data-driven function of teaching decision-making can be realized. And by collecting and analyzing data from all aspects of education and teaching, it is possible to gain a more in-depth understanding of the problems and challenges in the teaching process, thus providing specific and actionable recommendations for the improvement of teaching quality. It can be seen through practice cases that integrating and processing students' learning data and teachers' teaching behaviors can identify deficiencies in teaching methods, and thus promote the innovation and improvement of teaching modes and teaching methods.

6.3 Strengthening Teacher Engagement and Optimizing Instructional Resources as Cornerstones of Teaching Effectiveness

In the process of evaluation and empirical analysis of higher vocational digital governance-based teaching, teachers are the main body of teaching, and their teaching ideas, teaching ability, and teaching attitudes and behaviors will largely affect teaching effectiveness. Therefore, establishing an evaluation system that can fully mobilize teachers' enthusiasm and encouraging them to participate in the self-assessment and improvement of teaching quality is the key to improving the overall teaching effectiveness. Moreover, it is necessary to make full use of digital technology to optimize teaching resources, and to expand students' learning resources and platforms through online courses, space learning halls, virtual laboratories, Super Star Learning Pass, and high-quality online resources.

6.4 Policy Support is an Important Guarantee to Promote Teaching Quality Improvement

Local governments and education authorities should introduce corresponding policies to support the full embedding of teaching digital governance information technology, and provide the necessary technical and financial support for higher education institutions in

order to promote the digital transformation of education and the continuous improvement of teaching quality.

7 Conclusion and Outlook

7.1 Conclusions of the Study

The current teaching of higher vocational education is in the background of the digital governance-style era, and the construction system of its teaching quality evaluation has stepped into a completely new stage, and educational big data provides a new perspective and method for the evaluation of teaching quality in vocational education. By collecting and analyzing a large amount of data on teaching activities, including but not limited to students' learning behavior, teachers' teaching behavior, the use of teaching materials, etc., it is possible to establish a comprehensive monitoring system for the teaching process, which can not only more accurately grasp the effect of classroom teaching sessions, but also point out the existing problems in a timely manner and provide targeted strategies for improvement; the big data-based teaching quality monitoring system includes data collection, data analysis, problem diagnosis and intelligent decision-making, which can effectively improve the efficiency and accuracy of teaching quality management.

7.2 Research Limitations and Perspectives

First, the development of assessment tools needs to be strengthened. The current assessment system is more adequate for the assessment of basic digital skills, but more comprehensive assessment tools need to be developed for the assessment of higher-order digital skills, such as digital comprehensiveness. This may include, but is not limited to, situational simulations, game-based tasks, etc., to comprehensively assess students' digital innovation and digital vocational skills.

Second, there are deficiencies in the depth and breadth of empirical analysis. In the future, the method of quasi-experimental research can be used to empirically analyze different teaching modes and explore the actual impact of different teaching modes on enhancing students' digital skills, with a view to providing more specific and practical suggestions for the cultivation of digital skills of higher vocational

students.

Finally, there are some technical barriers in the application of big data technology. It is mainly manifested in the weak application of data integration, data organization and data analysis technology.

Based on the above analysis, the later research needs to further explore and improve the construction of the evaluation system, the development of assessment tools, the application of big data technology and the deepening of empirical research, in order to build a scientific, comprehensive and effective evaluation system of the teaching quality of higher vocational colleges and universities, and to provide a strong support for the enhancement of high-quality education.

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References

- [1] Zhao Yan, Wu Shenggang. The Path of Constructing Teaching Quality Evaluation System of Higher Vocational Colleges and Universities under the Perspective of Digital Governance. *Research on Vocational Education*, 2024(10):45-51.
- [2] Hu XG, Shen Lu. Research Analysis and Countermeasure Suggestions on Digital Transformation of Teaching in Higher

Vocational Colleges. *China Vocational and Technical Education*, 2024(2):12-19.

- [3] Gong Fanghong. Research on the direction and strategy of digitalization and upgrading of vocational education. *China Vocational and Technical Education*, 2023(7):26-33.
- [4] Wang Yunchang. Teaching Quality Assessment Techniques in Higher Vocational Colleges and Universities. *Educational Theory and Practice*, 2010(7):18-19.
- [5] Zhang Guoli, Yao Bo. Research on the construction of practice teaching quality monitoring system in higher vocational colleges supported by big data. *Education Science Forum*, 2024(30):32-36.
- [6] Liu M. Dilemma and Countermeasures of Teaching Quality Assurance System Construction in Higher Vocational Colleges and Universities. *Fuyang vocational and technical college*, 2021(4):33-36.
- [7] Wang Yingyan, Yang Gang, Zeng Rui. Strategies for improving the quality of higher vocational teaching under the background of education big data. *China Vocational and Technical Education*, 2020(14):61-66.
- [8] Xiao Huaiqiu, Li Yuzhen et al. Status quo and strategy construction of teaching quality assurance system in higher vocational colleges and universities. *Vocational Education*, 2024(16):48-51.
- [9] Ma Dongxiao, Bao Dongjie, et al. Construction and implementation of "five vertical, five horizontal and five deep" internal quality assurance system based on smart campus. *Education and Career*, 2020(5):46-50.