

# Sukhomlinskii's Evaluation Theory and Attribution Perspective — Research on Innovation of Digital Evaluation Method for Classroom Quality in Chinese Vocational Colleges

Cui Liang<sup>1</sup> Shen Jiang<sup>2</sup>

<sup>1</sup> Education Supervision Office of Academic Affairs Department, Beijing Information Technology College, Beijing 100070, China

<sup>2</sup> China North Energy Conservation and Environment Protection Co., Ltd, Beijing 100070, China

## ABSTRACT

The history of classroom quality evaluation in Chinese vocational education is a dynamic development process of promoting improvement through evaluation. In 2022, the supervision and analysis of classroom activity data from a digital teaching platform in a certain vocational school in China revealed that value-added data from classroom activities is the quantitative basis for evaluating the participation of college students in digital classrooms. This article studies the historical characteristics of Sukhomlinskii's educational evaluation theory, explains its practicality in evaluating the quality of digital classrooms in modern vocational schools in China, and uses attribution method to analyze the classroom participation and value-added cases of vocational college students in the context of modern digital education. Innovative research on digital evaluation methods for classroom quality in vocational colleges is implemented, providing strategies for sustainable improvement of digital classroom quality.

**Keywords:** *Sukhomlinskii's educational evaluation theory, Chinese vocational supervision, Quantitative and qualitative evaluation, Classroom participation group image, Value-added cases of classroom activities, Digital classroom quality and digital evaluation methods.*

## 1. INTRODUCTION

Looking back at the development history of classroom quality evaluation theory in Chinese vocational education, it can be seen that classroom quality evaluation in Chinese vocational education is a dynamic process of promoting classroom quality construction and continuous improvement through evaluation. The Sukhomlinskii's evaluation theory of the effectiveness of classroom teaching and learning in the former Soviet Union has triggered the historical process of innovative methods for evaluating typical cases of vocational education in China (hereinafter referred to as vocational education), and also revealed the importance of research on the effectiveness evaluation of digital classroom teaching and learning to promote the improvement of college

students' ability to apply what they learn. China's vocational education bears the responsibility of cultivating high-quality technical and skilled talents needed for Chinese path to modernization.[1] It is necessary to implement the new development concept, take evaluating the effectiveness of teacher teaching and student learning as the guiding principle for classroom quality value judgment, promote the quality construction and reform innovation of teaching and learning in the context of modernization of Chinese vocational education classrooms, and improve the sustainable improvement of digital classroom quality is a realistic topic and objective historical requirement that keeps pace with the times. The digital teaching platform provides an objective basis for data analysis for the implementation of digital classroom quality evaluation in Chinese vocational colleges

and supervisors (full-time personnel involved in classroom quality monitoring and evaluation). How to qualitatively evaluate the pertinence and effectiveness of classroom teaching and learning recorded in data, and promote the improvement of students' learning and practical abilities, is a problem that needs to be faced and solved. In 2022, a supervision and analysis of classroom activity data from a digital teaching platform in a certain vocational college in China showed that value-added data from classroom activities is the basis for quantitatively evaluating the participation of college students in digital classrooms. Based on the historical characteristics of Sukhomlinskii's educational evaluation, it can be concluded that: The conclusion of classroom teaching evaluation is based on the promotion of students' ability to apply knowledge to solve practical situations by teachers through on-site observation by dedicated personnel. Sukhomlinskii pointed out that "when I listen to and analyze classroom teaching, I draw conclusions about the teaching level of teachers based on the characteristic that teachers strive to stimulate students' thinking enthusiasm and develop knowledge through application." [2] The innovation of qualitative evaluation methods for the effectiveness of digital classrooms in higher vocational education in China provides practical theoretical guidance and practical methods. Digital classrooms simplify the transmission and sharing of information through information encoding, laying a solid practical foundation for supervisors to combine online live streaming and on-site listening practice on the basis of filtering real-time data of classroom activities. With the combination of quantitative and qualitative evaluation, and the support of attribution analysis, this study investigates the participation of vocational college students in the classroom against the background of modern digital education, implements value-added case evaluation of classroom activities, and achieves objective and fair evaluation of teacher and student classroom activities. Based on this, drawing on Sukhomlinskii's educational evaluation theory, combined with typical practices of digital classroom supervision and evaluation, and digital teaching platform data, it is of great practical significance to study innovative methods for digital evaluation of classroom quality, providing strategies for sustainable improvement of digital classroom quality.

## **2. THE HISTORICAL CHARACTERISTICS AND REALISM OF SUKHOMLINSKII'S EDUCATIONAL EVALUATION THEORY**

The historical analysis method points out that using history to learn from the present is an important method of learning from the modern classroom of historical research. It provides an overview of the development process of vocational education evaluation theory in China, and the history of educational evaluation theory development is a dynamic development process. It also provides important theoretical prerequisites and practical foundations worth learning from for studying modern educational evaluation theory to guide evaluation practice. Sukhomlinskii believed that in classroom teaching, the ability of teachers to guide students to raise questions is the foundation of educational evaluation, and guiding students to use learned theories to solve practical problems is the foothold. In the evaluation of classroom teaching quality, teachers apply the principles and methods of applying what they have learned to promote the improvement of students' abilities is the cornerstone of their educational evaluation theory. Specifically, the evaluation of teachers' teaching level should be based on the dimension of mobilizing students' enthusiasm for mental labor and promoting the resolution of practical problems. "There is a lot of discussion about the enthusiasm of students for mental labor, but there may be various types of enthusiasm. Students who have memorized the books they have read or memorized the content taught by the teacher can quickly answer questions, which are a kind of enthusiasm, but this enthusiasm may not necessarily promote intellectual development. Teachers should strive to stimulate students' enthusiasm for thinking, so that knowledge can be developed through application." [2] The reflection of evaluating a teacher's high teaching level is to enable students to independently acquire new knowledge on the basis of old knowledge they have already learned, that is, to enable students to review and learn new things. This starts with students being able to actively ask questions, that is, teachers can guide students to ask questions as the basis of evaluation. If only questions are asked, it only indicates that students can think about new problems based on existing knowledge, but not necessarily solve actual problems. "Acquiring knowledge means discovering truth and being able to answer

questions." However, achieving this is not easy, as it requires generating problems from causal relationships. [2] Only by answering questions and proposing practical problem-solving ideas and methods can the development of thinking can be achieved in the practical application of knowledge. Therefore, problem-solving should be the starting point of evaluation. As the key point of evaluation, Confucius said, "I will not enlighten him until he ponders hard but still cannot think hard and stay in confusion. I will not enlighten him until he is unable to speak out what he is thinking." [3] Only when students seek understanding but fail to achieve it, is it "confusion". When there are difficult problems, and after careful consideration, they still cannot figure them out, that is because they know very little. Being eager to learn and work hard to guide, but unable to speak, is a feeling of "speechless". When students want to express a question, have already learned a clear idea, and have entered the door, but cannot express the profound meaning and exact center of what they want to say, they need to be inspired. This requires teachers to spend time and energy studying the time and scale of students' "confusion" and "speechless", and have a full understanding of their knowledge foundation, reception ability, and learning attitude. Only then can they be good at accurately grasping the thinking time and stage of "enlightenment" and "development". Premature inspiration can make students feel that the problem is too simple and boring, losing the enthusiasm for positive thinking, and too late guidance can make students feel that the problem is too difficult and boring, losing the enthusiasm for positive thinking. The control of the time and "confusion" and "speechless" will be used as the evaluation point. The student learning data recorded by the digital teaching platform provides a quantitative evaluation basis for supervisors and teachers to conduct in-depth research on the time and degree of student anger and frustration. At the same time, it is necessary to combine the actual situation of students using the theories they have learned to propose problems and solve problems in live teaching and on-site teaching, and timely and moderately use inspiring and guiding teaching methods to conduct discussions and practical situations, in order to qualitatively evaluate the degree to which students apply what they have learned. The large amount of data information provided by digital teaching platforms has important practical significance and practicality for supervisors to combine quantitative and qualitative evaluation, and to innovate the methods of digital

classroom quality supervision and listening evaluation.

### **3. ATTRIBUTIVE ANALYSIS OF VALUE-ADDED CASES OF VOCATIONAL COLLEGE STUDENTS PARTICIPATING IN GROUP IMAGES AND DIGITAL CLASSROOM ACTIVITIES IN THE CLASSROOM**

#### ***3.1 Group Image Analysis of Classroom Participation of Vocational College Students in Modern Digital Education***

Against the background of modern China's higher vocational digital education, college students have various channels to obtain information by using the convenient ways provided by the Internet and mobile devices. There are various means and ways to communicate at anytime, anywhere and at any time. In the choice of diversified information, ways and means, the means and ability to obtain and process information have been greatly developed. In general, when college students participate in online classroom learning, they are able to take online classes, search for information, ask or answer questions, chat or play games at the same time. This simultaneous development of information acquisition and processing abilities is the norm. However, the lack of ability to organize and summarize information has brought time constraints to the in-depth exploration of the same problem by college students. Their time allocation is in a disorderly and disorderly state, and there may also be a state of general browsing, indifference, idleness, or addiction to games that affect learning. It presents a state of knowing everything as long as you want to know, but it is superficial. Moreover, due to differences in individual professional backgrounds, life experiences, study habits, ways of making friends, and self-control, it presents great limitations. College students who are able to concentrate on their studies can be said to be rare, wasting time and feeling a lot of academic pressure. In addition, the rapid development of mobile IoT allows them to obtain the convenience they need without leaving their dormitories or homes, which further enhances their self-management and independent living abilities, as well as their lack of social experience and practical experience. These make it more difficult for college students to apply their theoretical knowledge to raise questions, analyze

and solve practical problems, resulting in a lack of independent problem-solving strategies and methods despite asking multiple questions.

According to attribution theory, the analysis of classroom participation among vocational college students reveals that modern vocational college students actively participate in classroom learning but lack self-management of time and control, actively collect data but lack organization and summarization, obtain information from multiple sources but lack scientific screening and discrimination methods, acquire information and methods from various channels but lack social and life practice, and even lack the ability to analyze society and solve practical difficulties and problems in life using the obtained theories. As the saying goes, obtaining information online is shallow, and knowing this matter requires practice. Therefore, it is of great practical significance to strengthen the cultivation and improvement of the ability of college students to apply what they have learned in the context of modern vocational digital education.

### ***3.2 Case Analysis and Evaluation of Value-added Digital Classroom Activities***

In 2022, a certain vocational college supervised and screened the basic data of the operation of the digital teaching platform. By selecting the online global learning space, synchronous live classroom, course analysis, and learning situation analysis data constructed by the Beixin online platform, attribution analysis method was used to analyze the real-time data of vocational college students participating in classroom learning and activities. The results showed that in class learning and activities achieved added value. The analysis of this value-added case and the digital evaluation of the classroom quality supervision listening is as follows:

Firstly, the active online interaction between teachers and students has broken through time constraints, highlighting the advantages and characteristics of digitalization and real-time in the online global learning space. The supervision conducted a spot check on the statistical data of Beixin Online and Xuexuetong, and the results showed that the excellent course 1 in online course construction. The classroom teaching case of the course teacher were taken as examples: Course 1 (Teacher Wang from Class 2078101) Task Point (As of 08:22 on May 31, 2022, 93 chapter task points will be released, and students will complete

19 task points from May 31 to June 1 at 00:08, with a completion rate of 17.2%) activity. The online learning of teachers and students has broken through time limitations, actively participating in task learning based on individual student situations, breaking through traditional classroom teaching and learning methods and time limitations, and has real-time advantages, highlighting the digital and mobile characteristics of the online global learning space; Secondly, it has achieved value-added changes in classroom learning and activities, highlighting the innovation and interactivity of online classroom teaching models. Taking the example of Course 1 and the teacher (Class 2078101, Teacher Wang), the supervision conducted spot checks on Beixin Online and Xuexitong, and the statistical results showed that: As of 08:22 on May 31, 2022, the total number of videos was 139 (video resources accounted for 62.61%), the total duration was 45:24, the total number of documents was 80 (other resources accounted for 36.04%), the total number of images was 3 (other resources accounted for 1.35%), and from May 25 to May 31, the number of chapter learning sessions was 126 (May 31 11:12 was 158, achieving 32 value-added sessions). The average number of completed tasks was 19, and a total of 27 (10:15 was 28) were signed in, with an average sign in rate of 92%. A total of 12 assignments were published (9:39), divided into 13 releases, achieving 1 increase in value), with an average completion rate of 88%. A total of 4 chapter quizzes were released, 1 exam was released, 2 discussion topics were released (divided into 3 at 10:01, achieving an increase in the number of teacher posts by 1), and 8 reply topics (divided into 12 at 10:01, achieving an increase in the number of student replies by 4). This class achieved a value-added change in the number of learning chapters and the completion of task points, chapter tests, check-in activities, and discussion activities in the classroom, highlighting the interactivity and innovation of the online classroom teaching model. It reflects the continuous improvement and enhancement of the pre-class plan (releasing 10 activities) and post class feedback (completing assignments, chapter tests, and exam releases) of online remote teaching classroom activities during class implementation (chapter learning, task point completion, check-in activities, publishing and replying to discussion topics), as well as the strict planning and timely implementation by teachers and their serious and responsible dedication. Thirdly, the supervision and evaluation of Course 1 (Class 2078101, Teacher Wang) and the classroom teaching case of the course teacher were as follows:

the online live teaching can strictly organize the entire live teaching according to the "schedule arrangement", sign in on time, combine teaching and practice, explain the teaching content clearly, effectively control the pace of classroom teaching, use the demonstration teaching method and case teaching method appropriately, design the electronic blackboard reasonably, the teacher's adaptability is strong, the basic teaching skills are solid, and the method of motivating students to learn online through the first place sign in is unique and effective. Teachers demonstrate and explain algorithms that use natural language to describe and solve specific problems, and guide students in exercise exercises. They use electronic blackboard writing to demonstrate the conversion of algorithms to program sentences using three types of sentences. The demonstration shows clear problem-solving steps, and the knowledge explanation of algorithms and program diagrams is clear. The live classroom teaching has good online interaction between teachers and students, and the ability of students to apply mathematical thinking methods to solve problems is trained. The improvement effect of students' ability to apply what they have learned is significant.

In short, teachers are generally dedicated and dedicated to their work, actively exploring the effective integration of synchronous live streaming classrooms, learning situation analysis, and traditional teaching models. With a student-centered approach, live streaming classroom teaching is organized in an orderly manner, with appropriate teaching rhythm control. Teaching is based on learning, and case teaching and task driven teaching methods are used appropriately. Teacher demonstration demonstrations are combined with individual guidance, and theoretical explanations are moderate and sufficient to guide practical applications. Teaching and practice are combined, and learning and doing are integrated to care for students and solve their practical problems, promoting the improvement of students' ability to apply what they have learned. Teaching evaluation is integrated, and it can meet the requirements of talent cultivation goals, exerting the quality education function and skill enhancement role of digital classroom teaching.

### ***3.3 Innovative Research on Digital Evaluation Methods for Classroom Quality in Modern Higher Vocational Colleges***

Digital classroom is a place and organization that relies on online teaching platforms, supported by digital technology, uses computers and mobile devices, and implements teaching and learning without time and space limitations through video conferencing systems. The digital evaluation method for classroom quality in vocational colleges is a method for vocational college supervisors to rely on digital classrooms, screen and analyze basic operational data, combine live streaming classrooms, and evaluate the value of classroom teaching and learning based on classroom quality listening evaluation standards. Through the analysis of the group images of vocational college students participating in the classroom and the value-added cases of vocational college students participating in classroom activities under modern digital education, it is found that there is still significant room for innovation in the digital listening evaluation methods of classroom quality supervision in Chinese higher vocational colleges. Modern digital education provides digital technology support for its innovative practice methods, and further practical requirements are put forward. The typical digital evaluation of classroom learning and activity value-added cases provides a practical basis for its innovative research.

#### ***3.3.1 Enhancing the Teaching Concept of Digital Classroom for Teachers and Students and Achieving a Learning Concept of "Promoting Application through Evaluation"***

The digital teaching platform has laid the foundation and prerequisite for the transformation and innovation of digital classroom teaching and learning methods. It is necessary to improve the digital teaching platform, comprehensively enhance the teaching concept of teachers in digital classrooms, establish an open, democratic, and harmonious teacher-student relationship. Teachers should implement an instant response digital classroom interaction concept, teach students how to scientifically use digital platform course teaching resources, help students learn to construct theoretical frameworks from the logical structure diagram and mind map of the course, organize course content by visiting chapters and completing

task points, activate thinking by posting reply topics, select participants for signing in activities, submit questionnaires, practice in class to participate in interaction, and complete learning feedback by submitting homework tests and exams. Teachers teach college students to follow the principle and method of applying what they have learned in digital form, starting from sorting out theoretical frameworks, and then moving up to selecting materials and participating in classroom activities before guiding classroom exercises, in order to enhance their ability to apply what they have learned.

It is a must to comprehensively enhance students' views on digital classroom learning. On the one hand, the digital teaching platform enables students to achieve real-time and on-site learning revolution, and on the other hand, it puts forward higher requirements for the methods and abilities of college students to apply digital technology to participate in digital classroom learning. College students need to learn how to plan online hours by visiting the course portal multiple times, read chapters, lesson plans, notices, and other paths to learn how to quickly browse, record important knowledge points, and control the progress of self-directed learning through practical application of important skill points, and participate in discussions and live classes to learn the methods of functional use and communication and discussion. It is not necessary to discuss for the sake of discussion, but to discover problems through discussion and "borrow the stones of other mountains to carve out one's own jade"<sup>1</sup>; Students need to submit assignments and exams to achieve self-examination of learning outcomes and plan for the next stage of learning; Then, higher requirements should be placed on students' time management abilities. College students should learn to apply the important emergency four line rule of Pareto time management, and manage their study time reasonably and effectively. They should avoid wasting time just to see and wasting time just to learn. Effective planning of independent learning time can improve the efficiency of independent learning and lay a solid foundation for the improvement of students' ability to apply what they have learned.

---

1. URL: Use the stones of others to carve your own. [https://wenku.baidu.com/view/f4c0544fc181e53a580216fc700ab668a982adb5.html?\\_wks\\_ =1709710425552&bdQuery=%E4%BB%A5%E4%BB%96%E5%B1%B1%E4%B9%8B%E7%9F%B3%E7%90%A2%E5%B7%B1%E8%BA%AB%E4%B9%8B%E7%8E%89](https://wenku.baidu.com/view/f4c0544fc181e53a580216fc700ab668a982adb5.html?_wks_ =1709710425552&bdQuery=%E4%BB%A5%E4%BB%96%E5%B1%B1%E4%B9%8B%E7%9F%B3%E7%90%A2%E5%B7%B1%E8%BA%AB%E4%B9%8B%E7%8E%89)

It is necessary to comprehensively enhance the teaching and learning perspectives of teachers and students in digital classrooms, and achieve the role of using evaluation to promote the improvement of the ability to apply what is learned. Digital evaluation is aimed at adapting to the new form of digital education, achieving the goal of "promoting application through evaluation", scientifically screening value-added data, and playing the role of supervision oriented evaluation in promoting the improvement of students' ability to apply what they have learned. It is the necessary meaning of modern higher vocational education to serve the comprehensive development of college students, enhance their skill level, serve the high-quality development of regional economy and society, and serve the strategy of building a strong education country, [4] in order to achieve sustainable development. Digital classroom is a way of remote teaching and learning that connects teachers and students through the Beixin online digital teaching platform. As long as there is an internet connection, whether students are at home or at school, using mobile devices or computers, sitting at their desks in the early morning or in the library during sunny hours, they can break through time and space limitations and learn constantly. They can also choose learning resources that suit their learning progress and interests, and choose content and methods that suit their learning abilities and habits to improve the effectiveness of applying what they have learned.

### 3.3.2 *Combining Quantitative and Qualitative Evaluation to Innovate the "Digital Evaluation" Method*

Using evaluation to promote application is the foundation, and using evaluation to promote reform is the direction. Digital evaluation is aimed at promoting reform through evaluation. Quantitative evaluation is the foundation, while qualitative evaluation is the guidance. Combining quantitative evaluation with qualitative evaluation, innovating the "digital evaluation" method, and playing the guiding role of "promoting reform through evaluation", it serves to promote the improvement of students' ability to apply what they have learned, and helps promote the high-quality development of modern digital classrooms in higher vocational education.

Taking the case of supervising the implementation of digital evaluation of classroom quality in a certain vocational school in 2022 as an

example, firstly, the basic evaluation is as follows: Teachers insist on organizing live teaching according to the "schedule" of online teaching, with each teaching class as a unit, and assisting corresponding online learning resources to achieve remote teaching and learning. This reflects the strict adherence of teachers to basic teaching standards, their professional ethics of being serious, responsible, and striving for excellence, their original intention of teaching and educating students, their professional ethics and style of being a role model, caring for and caring for students, and their real-time release of online course learning guidelines and important tips, with a focus on paying attention to students' online learning status. Through a variety of classroom activities, they promote the effective improvement of students' ability to apply what they have learned, and play a positive and effective role in promoting the continuous improvement of online classroom teaching quality in certain vocational college in China. Secondly, the qualitative evaluation of the case is as follows. After conducting spot checks on the supervision of class attendance, the quality evaluation of the well-constructed course 2 (2121031 class week teachers) is as follows: The live classroom teaching has a good effect on online interaction between teachers and students, with clear ideological and political goals in the course. The new course nature was introduced in the form of a survey conducted by Xuexitong Online, which stimulated the enthusiasm of students for online learning. The teacher serves as a role model, leads by example, and encourages students to actively participate in sports to enhance their physical health through personal exercise and practice (teaching in both Chinese and English). The explanation session combines English recordings and Chinese demonstrations with teacher demonstrations of English pronunciation and analysis of Chinese semantics. The online recordings of impromptu English conversations between teachers and students, as well as the playback of bilingual campus life scenes and small theater videos, have been carried out to cultivate and exercise students' ability to apply impromptu English. Teachers should promptly correct students' inaccurate English pronunciation, guide them in learning and applying vocabulary and key sentence structures, learn English vocabulary and key sentence structures, and practice bilingual dialogue between Chinese and English. Teachers should guide students to use the daily English syntax learned in campus life to solve scene and sentence application problems, and organize live classes in an orderly

manner. Teachers can strengthen the management of teaching activities. Online classroom learning activities are rich and diverse, with a focus on paying attention to the details of students' online learning and dialogue exercises, which is conducive to supervising and guiding students to learn online. Live online teaching can sign in on time, combine teaching and practice, explain teaching content clearly, and effectively control the pace of classroom teaching. The teaching language is standardized and humorous, with affinity and infectiousness. English word formation and knowledge explanation are gradual, and emphasis is placed on inspiration and guidance. Teachers have strong organizational skills in online classroom teaching, use role simulation and experiential teaching methods appropriately, adhere to the correct political direction, internalize ideological and political education into English curriculum content, and focus on cultivating morality and talent. Remote online live teaching provides in-depth and effective interaction between teachers and students, creating a relaxed, natural, and effective English learning atmosphere in online classrooms. Students have achieved good results in learning English online, and their ability to apply English to solve real-life problems on campus has been significantly improved. Thirdly, taking the quantitative evaluation of the supervision and listening of the well-constructed course 2 (2121031 class week teachers) as an example, the statistical results of the course's Beixin Online and Learning Pass analysis show that: As of 07:48 on May 30, 2022, the total number of videos released was 223 (video resources accounted for 94.89%), the total duration was 278:56, the total number of documents was 12 (other resources accounted for 5.11%), and the number of chapter learning sessions was 26 from May 24 to May 30 (30 at 10:06, achieving 4 value-added), task points (a total of 70 were released), with an average completion count of 1, and a total of 12 (13 at 10:06) were signed in with an average attendance rate of 75%. Homework (13 in total) was released with an average completion rate of 68%. A total of 1 was released for exams, and 8 topics were discussed and published (10 at 10:06, achieving an increase in the number of questions posted by teachers by 2). 72 topics were replied to (83 at 10:06, achieving an increase in the number of topics replied by students by 11). These have achieved value-added changes in the number of learning chapters and the learning and detection of classroom task points, as well as check-in and discussion activities, highlighting the innovation and interactivity of the online classroom

teaching mode. They reflect the continuous improvement and enhancement of pre-class planning (publishing 5 activities), in class implementation (chapter learning, task point completion, check-in activities, publishing and replying to discussion topics), and post class feedback (completing homework, exam publishing) in online remote teaching. They also reflect the original intention of teachers to not forget to teach diligently, remember the mission of educating people for the Party and the country, and the responsibility of diligently cultivating digital classrooms.

#### 4. CONCLUSION

The digital classroom has brought about the modernization of convenient technologies and means for information transmission and sharing, providing broad development prospects for the innovation of classroom quality, evaluation, and methods that adapt to the modernization of higher vocational education. Sukhomlinskii believed that "being good at selecting, synthesizing, and analyzing facts" [2]. This method of elevating intuitive knowledge to rational knowledge is a way to evaluate the improvement of students' skill level. "Students should be good at consciously applying knowledge conclusions to practical life, and must independently collect a large number of facts to understand, synthesize, compare, and analyze these facts." [2] This method of guiding practice with rational understanding is one of the important methods for evaluating the improvement of students' ability to apply what they have learned. In the context of digital education, the above evaluation methods have important practical significance for improving the digital learning and application ability of college students and promoting the modernization of vocational education. The modernization of higher vocational education should be based on the practical needs goal [5] proposed by UNESCO at the turn of the century, which aims to cultivate specialized talents who can adapt to and promote modernization to lead the modernization construction of social production and life.[5] There is a must to learn from Sukhomlinskii's educational evaluation theory and methods, promote the excellent evaluation tradition of "learning for application" in Chinese vocational education, innovate the digital classroom quality evaluation method guided by the ability of learning for application, implement the requirements of the "Overall Plan for Deepening Education Evaluation Reform in the New Era", and

improve the scientificity, professionalism, and objectivity of educational evaluation. Guided by Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, there is also a must to adhere to the path of education development with Chinese characteristics, follow the laws of education, stick on reform and innovation, accelerate the modernization of education, build a strong education country, focus on improving the quality of education, and provide strong support for achieving the goal of developing socialism with Chinese characteristics in the new era. [6]

When applying value-added data for quantitative evaluation, Chinese vocational colleges and supervisors should also consider the rationality of data value-added, screen and analyze data based on data analysis theory, so as to comprehensively play the role of education evaluation guidance and improvement. [7] Numerous experimental studies have shown that it is also necessary to provide suitable environmental conditions for students' brains, such as the learning and communication styles that children enjoy, and activate student brain cells from different receptors and their neural channels to develop their brain potential. [7] The digital classroom provides strong environmental conditions and learning experience technical support for developing students' brain potential through audio and video technology, rich visuals, interactive communication, intelligent technology, etc. The digital teaching platform also provides a convenient channel for collecting data information. The main body of classroom quality evaluation in Chinese vocational colleges implements: screening data, deriving new evaluation ideas, combining quantitative and qualitative evaluations, analyzing new evaluation facts, comprehensively applying new conclusions to guide new practices in evaluation, promoting the improvement of digital learning and application abilities of teachers and students in digital classrooms, and innovating digital evaluation methods are a long and arduous task that requires exploration and practice.

#### REFERENCES

- [1] Vocational Education Law of the People's Republic of China [EB/OL]. <http://www.npc.gov.cn/npc/c30834/202204/04266548708f44afb467500e809aa9cf.shtml>
- [2] (Soviet Union) B.A. Sukhomlinskii, Suggestions for Teachers [M]. Zhou Qu, Wang Yigao, Liu Qixian, Dong You, Zhang Deguang, trans., Shen Qiang ed., Wuhan:



- Changjiang Literature and Arts Press, 2014, p41+69+71.
- [3] Yao Shichuan, Recognition of the Analects [M]. Shanghai: Xuelin Press, 1999, p218.
- [4] Deepen the reform of modern vocational education system construction and continuously optimize the positioning of vocational education types — Interview with Chen Ziji, Director of the Department of Vocational Education and Adult Education of the Ministry of Education. [EB/OL]. [http://www.moe.gov.cn/jyb\\_xwfb/xw\\_zt/moe\\_357/2023/2023\\_zt05/zjsy/202305/t20230511\\_1059244.html?eqid=df4cbe750012b50e000000046489d32d](http://www.moe.gov.cn/jyb_xwfb/xw_zt/moe_357/2023/2023_zt05/zjsy/202305/t20230511_1059244.html?eqid=df4cbe750012b50e000000046489d32d)
- [5] Pan Maoyuan, Chen Chunmei, Theoretical Design of Quality Construction in Higher Education [EB/OL]. <https://fzghc.hqu.edu.cn/info/1029/4305.htm>
- [6] The Central Committee of the Communist Party of China and the State Council have issued "China's Education Modernization 2035" [EB/OL]. <https://jsj.moe.gov.cn/n2/7001/12107/1255.shtml>
- [7] The Central Committee of the Communist Party of China and the State Council have issued the "Overall Plan for Deepening the Reform of Education Evaluation in the New Era" [EB/OL]. [https://www.gov.cn/zhengce/2020-10/13/content\\_5551032.htm?eqid=e8c0feb6000d2a0000000664918682](https://www.gov.cn/zhengce/2020-10/13/content_5551032.htm?eqid=e8c0feb6000d2a0000000664918682)
- [8] Tian Hanzu, Communicative Pedagogy [M]. Hunan: Hunan Normal University Press, 2002, p93.