

Study on the Generative Logic and Practical Path of Network-based Education in Higher Vocational Education Institutions

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Abstract: With the rapid development of information technology, the internet has become a crucial domain for students in Higher Vocational Education Institutions to study, live, and socialize. Consequently, network-based education has emerged as a key link for Higher Vocational Education Institutions to fulfill the fundamental task of “fostering virtue through education”. This paper first analyzes the generative logic of network-based education in Higher Vocational Education Institutions from three dimensions: the times’ development, policy requirements, and educational needs, clarifying its implementation inevitability and urgency. It then identifies current problems, including outdated concepts, low-quality content, weak team construction, lack of collaboration, and insufficient evaluation. In response, a “five-in-one” practical path is proposed, aiming to provide references for Higher Vocational Education Institutions to enhance network-based education effectiveness and cultivate high-quality technical talents.

Keywords: Higher vocational education institutions; Network-based education; Generative logic; Practical path; Fostering virtue through education

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1. Introduction

In the era of deep digitalization, networking, and intelligentization, the internet has reshaped social production and life, and profoundly influenced young people’s values, thinking, and behaviors. As the main front for cultivating technical talents, students in Higher Vocational Education Institutions are characterized by active thinking and strong practical abilities, yet some lack self-discipline and are vulnerable to external interference in value judgment. According to the *Statistical Report on Internet Development in China* (December 2024), China has 1.18 billion internet users, with the 18-24 age group accounting for 19.2%—a group that includes a large number of students from Higher Vocational Education Institutions. Against this backdrop, how to use network platforms to innovate education, resist harmful information, and turn cyberspace into a “fostering virtue”

front has become an urgent issue for Higher Vocational Education Institutions. Thus, in-depth research on the generative logic and practical path of network-based education in Higher Vocational Education Institutions is of great theoretical and practical value.

2. Generative Logic of Network-based Education in Higher Vocational Education Institutions

The emergence of network-based education in Higher Vocational Education Institutions is not accidental but a result of the times, policies, and educational needs. Its generative logic lies in multi-dimensional changes and demands^[1].

2.1. The Times' Development: Internet as “Second Space” for Students' Growth

With the wide application of 5G, AI, and big data, the internet has integrated into the daily study and life of students in Higher Vocational Education Institutions. For learning, students use online platforms (e.g., MOOCs, Xuexitong) to acquire knowledge and virtual simulation platforms for practical operations. For life, social software (WeChat, QQ) and short-video platforms (Douyin, Kuaishou) are main channels for communication and information access. Ideologically, diverse online values and complex content directly affect students' worldviews, outlooks on life, and values.

Traditional education focuses on physical fields (classrooms, offline activities), which cannot cover students' online scenarios. Without effective guidance, students in Higher Vocational Education Institutions facing value confusion or information identification difficulties online are prone to misleading by harmful content. Thus, extending education from physical to cyber space and building an online-offline collaborative system is an inevitable choice for Higher Vocational Education Institutions.

2.2. Policy Requirements: A Key Measure for “Fostering Virtue through Education”

In recent years, the state has issued multiple policies to promote network-based education in colleges, incorporating it into “all-round education” and “five-sphere integrated education”. In 2020, the Ministry of Education (MOE) released *Opinions on Accelerating the Construction of the Ideological and Political Work System in Colleges*, proposing to “vigorously promote network-based education, build an ideological and political work network, and create high-quality online ideological and political projects”. In 2023, *Notice of MOE and Other Ten Departments on 2023 Vocational Education Activity Week* emphasized “strengthening students' ideological and political education in Higher Vocational Education Institutions, innovating network-based education methods”^[2].

As part of higher education, Higher Vocational Education Institutions shoulder the mission of cultivating all-round socialist builders and successors. Intensive policies not only provide guidance but also make network-based education a mandatory political and educational task. Thus, implementing network-based education is the inevitable response of Higher Vocational Education Institutions to national policies.

2.3. Educational Needs: Solving Students' Growth Puzzles

Students in Higher Vocational Education Institutions are in a critical growth period, facing academic pressure, career planning, and interpersonal issues. In the internet era, they tend to seek solutions and emotional support online. However, mixed online information—such as utilitarian values, false employment information, and

online fraud—may exacerbate anxiety or induce wrong behaviors instead of helping^[3].

For example, online hype about “high-paying, easy jobs” leads some students in Higher Vocational Education Institutions to have unrealistic career expectations and neglect professional skills. Cyberbullying and “fan culture” affect their interpersonal concepts and cause communication barriers. Additionally, issues like internet addiction and poor information identification require effective network-based education. Thus, carrying out network-based education to guide students’ internet concepts and improve literacy is a practical choice for Higher Vocational Education Institutions.

3. Current Problems of Network-based Education in Higher Vocational Education Institutions

Although Higher Vocational Education Institutions have gradually valued network-based education and conducted explorations, problems remain that restrict its effectiveness^[4].

3.1. Outdated Concepts: Insufficient Attention and Cognition

Some Higher Vocational Education Institutions regard network-based education as a “supplement” to traditional education rather than a “core field”. They lack systematic planning and only respond passively (e.g., intervening in online public opinion incidents instead of proactively building a healthy environment).

Some educators misunderstand network-based education: either overemphasizing control over students’ online behaviors while neglecting guidance, or lacking internet thinking and simply transferring offline ideological and political course content online—leading to disconnection from students’ needs in Higher Vocational Education Institutions and low resonance.

3.2. Low-quality Content: Lack of Targeting and Attractiveness

Educational content is the core, but current content has flaws. On the one hand, it lacks targeting: too macroscopic, ignoring the professional and career needs of students in Higher Vocational Education Institutions, and failing to integrate ideological and political education with professional/vocational education—resulting in “generalized” content that is useless for students.

On the other hand, it lacks attractiveness: single forms (mainly text and pictures) instead of student-preferred short videos, live broadcasts, or interactive games; rigid language style that is not close to students’ online discourse in Higher Vocational Education Institutions—leading to low participation and poor communication.

3.3. Weak Team Construction: Insufficient Staffing and Professionalism

The network-based education team is key but has shortcomings. In staffing: most Higher Vocational Education Institutions have no dedicated team; counselors and ideological and political teachers take part-time roles but are too busy to invest enough time. Some have network technicians but lack educational experience, failing to combine technology with content.

In professionalism: the team lacks systematic training in online public opinion analysis, content creation, and new media application. Some educators know little about online culture and the online behaviors of students in Higher Vocational Education Institutions, making it hard to grasp students’ ideological trends—resulting in “inability to perform” network-based education.

3.4. Lack of Collaboration: Insufficient Linkage and Joint Force

Network-based education involves multiple departments (publicity, student affairs, academic affairs, youth league committee, IT) in Higher Vocational Education Institutions, but there is no effective collaboration mechanism. For example, the publicity department guides public opinion but disconnects from student management; the academic affairs department builds online courses but fails to integrate ideological and political elements with teachers; the IT department maintains platforms but lacks content support.

Moreover, the school-family-society collaborative mechanism of Higher Vocational Education Institutions is imperfect. Schools fail to feedback students' online behaviors to parents; parents neglect online education; society (e.g., relevant departments) fails to clean up harmful information—leading to “separate operations” and inability to form a joint education force.

3.5. Insufficient Evaluation and Guarantee

A scientific evaluation system is essential, but current evaluation in Higher Vocational Education Institutions only uses quantitative indicators (platform visits, content reposts) and ignores qualitative ones (changes in students' ideology and behaviors)—failing to reflect real effectiveness.

Guarantee mechanisms are also imperfect: insufficient funds for platform construction, content creation, and team training in Higher Vocational Education Institutions; lack of assessment and incentives for network-based education—lowering educators' enthusiasm.

4. Practical Path of Network-based Education in Higher Vocational Education Institutions

To solve the above problems, a “five-in-one” practical path is constructed based on generative logic, covering concept, content, team, collaboration, and evaluation, for Higher Vocational Education Institutions^[5].

4.1. Conceptual Guidance: “Student-centered, Integration and Innovation”

Concept is the forerunner. First, establish a “student-centered” concept: understand the online behaviors, ideology, and needs of students in Higher Vocational Education Institutions through questionnaires and symposiums, and take students' needs as the starting point to ensure “accurate connection”.

Second, establish an “integration and innovation” concept: break online-offline boundaries, integrate network-based education with classroom teaching, practical teaching, and campus culture of Higher Vocational Education Institutions to build an “online + offline” system. Innovate thinking by integrating internet thinking (user, traffic, interactive thinking) and carry out education in student-preferred ways to enhance attractiveness.

4.2. Content Innovation: “Ideological and Political + Professional + Vocational” System

High-quality content is core. First, strengthen “ideological and political +” integration: integrate ideological and political elements (e.g., “craftsman spirit” in mechanical courses, “integrity” in accounting courses) into professional/vocational education of Higher Vocational Education Institutions. Combine hot topics (e.g., rural revitalization, technological innovation) to create timely ideological and political content (short videos, graphics) to guide students' values.

Second, enrich “vocational-oriented” content: produce career planning guidance, employment skills training, and industry dynamic analysis tailored to students in Higher Vocational Education Institutions. Invite

enterprise experts for online lectures; build an “online career experience hall” using virtual simulation to improve students’ career cognition.

Third, innovate presentation forms: use short videos, live broadcasts, interactive games, and VR/AR. For example, develop “Party History Knowledge Challenge” games; hold “technical masters’ live classes” to enhance the professional identity of students in Higher Vocational Education Institutions.

4.3. Team Strengthening: “Full-time + Part-time, Competent” Team

A high-quality team is key for Higher Vocational Education Institutions. First, optimize structure: build a “full-time + part-time” team. Full-time members (publicity, student affairs, ideological and political teachers, IT staff) are responsible for planning and implementation; part-time members (professional teachers, enterprise mentors, outstanding student cadres in Higher Vocational Education Institutions) participate in content creation and public opinion guidance—forming a “full participation” pattern.

Second, improve professionalism: formulate training plans for public opinion analysis, content creation, and new media application. Build an exchange platform to invite experts to share experience; encourage team participation in research and project applications to enhance theoretical and practical abilities.

Third, improve incentives: incorporate network-based education into teacher assessment of Higher Vocational Education Institutions; reward outstanding individuals/collectives; set up a special fund to support content creation and platform construction—stimulating enthusiasm.

4.4. Collaborative Linkage: “School + Family + Society” Mechanism

Collaboration is essential for Higher Vocational Education Institutions. First, strengthen internal school collaboration: establish a leading group led by school leaders to coordinate departments. Clarify responsibilities (publicity for public opinion, student affairs for behavior management, academic affairs for online ideological and political courses) to ensure close cooperation.

Second, strengthen school-family collaboration: build a platform to push students’ online behaviors and education content to parents of students in Higher Vocational Education Institutions. Organize online parent classes to improve parents’ online education ability; establish a communication mechanism to jointly solve problems.

Third, promote school-society collaboration: cooperate with government departments (e.g., cyberspace administration) to clean up harmful information and crack down on fraud/cyberbullying around Higher Vocational Education Institutions; cooperate with enterprises to introduce high-quality resources (vocational training courses); cooperate with social organizations to carry out public welfare activities (e.g., “online civilization volunteers”) to guide students’ online civilization awareness.

4.5. Evaluation and Guarantee: “Quantitative + Qualitative” System

Scientific evaluation and guarantee are supports for Higher Vocational Education Institutions. First, build a comprehensive evaluation system: combine quantitative indicators (visits, reposts, participation) and qualitative indicators (ideology, behavior, professional literacy of students). Use questionnaires, interviews, and observation for evaluation; introduce third-party institutions to ensure objectivity^[6].

Second, improve guarantees: increase funds for platform construction, content creation, training, and evaluation in Higher Vocational Education Institutions; formulate systems (e.g., *Management Measures for*

Network-based Education in Higher Vocational Education Institutions, Online Public Opinion Emergency Plan) to standardize processes; strengthen technical support to ensure platform safety and normal operation.

5. Conclusion

Network-based education in Higher Vocational Education Institutions is driven by the times, policies, and educational needs, with profound generative logic. Currently, problems like outdated concepts and weak teams exist. Thus, Higher Vocational Education Institutions should adopt the “five-in-one” path to enhance effectiveness.

In the future, with the development of information technology, Higher Vocational Education Institutions need to pay attention to technology trends and students’ needs, innovate methods, and build an online-offline, school-family-society collaborative pattern. This will support the cultivation of all-round technical talents and fulfill the fundamental task of “fostering virtue through education”.

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