


CONFUCIUS'S PRAGMATIC EDUCATIONAL PHILOSOPHY: INSIGHTS FOR HOLISTIC INNOVATION IN VIETNAMESE EDUCATION IN THE DIGITAL ERA¹

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ABSTRACT:

In the digital era, Vietnam education is transforming profoundly, requiring a flexible, modern educational philosophy suitable for social needs. Technological advances, especially artificial intelligence and online learning, are strongly impacting teaching and learning, requiring education not only to impart knowledge but also to be equipped with creative thinking, adaptive thinking skills, and digital ethics. Confucius's educational philosophy, although it comes from a feudal context, still carries core values that can be applied in modern education. Principles such as lifelong learning, moral education, character development, and social responsibility still play an essential role in building a well-rounded education system. Combining the quintessence of tradition with technological innovation will help improve the quality of education and create human resources with capacity, ethics, and the ability to adapt to the rapid changes of the times.

KEYWORDS: Lifelong learning; Ethics education; Digital technology; Digital transformation; Vietnam.

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1. Introduction

The strong development of information technology, artificial intelligence (AI), and globalization has profoundly impacted all areas of life, especially education. People's approach to knowledge is no longer limited to traditional education models but is increasingly shifting to flexible, learner-centered teaching methods. Technological advances help expand learning opportunities and pose challenges regarding human resource training, creative thinking development, and social responsibility.

In this context, Viet Nam is implementing education reform comprehensively, focusing on knowledge transfer and aiming to equip independent thinking skills, creativity, and a sense of responsibility. This requires an appropriate educational philosophy to guide the development of the education system in the digital era. One of the essential sources of inspiration that can be referred to is the educational philosophy of Confucius (Bergen, T. J., & Mi, H. F., 1995). Although it originated from the feudal period, Confucius' educational thought still has many sustainable values, which can be applied in the modern education system. He emphasizes lifelong learning, constantly cultivating knowledge and ethics to improve himself. In the digital age, continuous learning through online platforms, soft skills training programs, and professional development is essential to help learners adapt to the ever-changing society.

In addition, Confucius emphasized the role of ethics and social responsibility in education (Low, K. C. P., & Ang, S. L., 2013). He said that learning does not stop at knowledge but also helps people train their personality, know how to behave with the community, and contribute to society. In the digital era, when information is widely and rapidly transmitted, moral education and critical thinking skills have become even more urgent. Learners must be equipped to analyze and evaluate information and apply technology responsibly. Applying Confucius' educational philosophy to modern education does not mean keeping the conservative or limited elements of Confucianism. Still, it needs to be selected and adjusted to suit the development needs of the times. For example, in the digital education model, personalization of learning, the use of big data to optimize teaching content, or the development of online learning platforms can all be combined with the principles of "self-learning" and "learning to be human" of Confucius (Tan, C., 2020). This article will analyze Confucius's core principles of educational thought and propose how to integrate them into Vietnam's education system in the digital era. Combining the quintessence of tradition with technological innovation will help Vietnam's education improve the quality of training and create generations of citizens with knowledge, ethics, and high adaptability in the context of globalization.

2. Confucius' educational philosophy and its application in digital education

Confucius' educational philosophy emphasizes that learning never stops. According to him, knowledge is not only accumulated in schools but is a lifelong process, helping individuals constantly develop themselves and adapt to societal changes. Confucius' thought reflects the spirit of active learning, continually practicing to improve knowledge and perfect personality.

In today's context, when digital technology, artificial intelligence (AI), big data (Big Data), and automation are changing the way people access and process information, lifelong learning is more important than ever (Duan, Y., Edwards, J. S., & Dwivedi, Y. K., 2019). Vietnam's education system must be strongly innovated, applying flexible methods to help all citizens access knowledge easily, proactively, and effectively. Learning is no longer limited to the traditional classroom with a one-way teaching model, but has expanded to many different forms of learning. Learners can absorb knowledge anytime, anywhere through digital technology

platforms, helping individuals improve their level without being bound by space or time (Friedman, R.S., & Deek, F. P., 2003).

Lifelong learning in the digital age offers many benefits, including continuous updating of knowledge, helping individuals not fall behind in the face of rapid technological changes. At the same time, it helps to enhance adaptability, especially in the labor market, which AI and automation have drastically transformed. Continuous learning also helps individuals develop creative, critical, and innovative thinking, thereby improving their ability to solve problems in practice. In addition, educational technology also helps expand learning opportunities, narrow the gap between urban and rural areas, and help everyone have equal access to knowledge.

One of the key ways to promote lifelong learning is to develop online learning platforms. In recent years, MOOC (Massive Open Online Courses) platforms and learning management systems (LMS) such as Moodle, Coursera, Udemy, and edX have become essential tools in modern education (Eynon, R., & Malmberg, L. E., 2021). They offer thousands of courses from various fields, making it possible for students to study without needing a traditional classroom. In Vietnam, investing in the development of domestic online learning systems will help students and workers have the opportunity to access high-quality courses, thereby improving their skills and professional qualifications.

In addition to online learning, the Blended Learning model is becoming a trend to help optimize educational effectiveness. Instead of just learning through books or face-to-face lectures, students can access electronic materials before class, then spend time discussing, practicing, and solving practical problems. This method helps students understand the lesson more deeply and promotes critical thinking and teamwork skills. Flipped Classroom is also an effective model, assisting students to actively study materials at home and use class time to exchange and apply knowledge in practice (Hwang, G. J., Lai, C. L., & Wang, S. Y. 2015).

Another essential element of lifelong learning is personalization, thanks to artificial intelligence (AI). Today's AI systems can analyze each individual's capacity, interests, and acquisition rate, building an appropriate learning path (Makridakis, 2017). This allows each student to learn in their own way, optimizing time and improving the efficiency of knowledge acquisition. AI can also assist teachers in monitoring students' learning progress, making appropriate recommendations to improve the learning process.

Applying Confucius' lifelong learning philosophy to Vietnamese education in the digital era is necessary. To achieve this, the education system needs a long-term strategy, including developing educational technology infrastructure, teaching methods innovation, and teacher training in technology application. Lifelong learning helps individuals develop themselves and improves the quality of human resources, meeting the requirements of an ever-changing world.

2.2. Character and moral education

Confucius' philosophy of education emphasizes that education is not merely the process of transmitting knowledge but also must train human character and morality. According to him, a society that wants to develop sustainably needs citizens who are ethical, honest, responsible, and know how to behave appropriately. Therefore, education aims to train professional capacity and must focus on developing personal qualities, helping people live in harmony with the community, and having a spirit of dedication to society. This is an essential principle in education that needs to be maintained and promoted even in the age of digital technology.

In the context of strong technological development, artificial intelligence (AI) and big data (Big Data) are rapidly changing the way people work, learn, and communicate (Obschonka, M., & Audretsch, D. B., 2020). Many traditional tasks are gradually automated, making individuals

need to be equipped with more digital skills to adapt to this change. However, besides technological skills, a significant challenge is ensuring that education retains its role as a character and moral development in a world where machines and algorithms have more and more decision-making power. As technology can create content, analyze data, and support decision-making, people's ability to think ethically and perceive right and wrong becomes even more critical.

One of the most pressing issues today is digital ethics – principles that help individuals behave responsibly online. As the digital world expands, people not only access and share information more quickly but also face risks from fake news, misinformation, and irresponsible behavior on social networks. Therefore, education cannot only focus on training technological skills, but also needs to be combined with moral education to help individuals develop comprehensively.

In Vietnam, the new general education program has integrated many contents related to civic education and digital ethics, helping students understand how to use technology responsibly. The teaching not only focuses on theory but also aims to practice ethical situations in the digital environment, assisting students to have the skills to distinguish between real and fake information online, behave civilly on online platforms, and understand the impact of technology on personal life as well as society. These contents play an essential role in building healthy technology habits, limiting the adverse effects of the digital environment, and contributing to forming a generation of responsible citizens.

In addition to the formal curriculum, some modern teaching methods, such as values-based education and experiential learning, are also being applied to help students develop their personalities through practice and reflection. Value-based learning helps students recognize moral principles such as honesty, responsibility, respect, and compassion. Meanwhile, experiential learning allows students to engage in real-life situations, practice problem-solving skills, and develop social awareness more realistically.

In addition, extracurricular activities, career programs, and community projects also play an essential role in training students in ethics and social responsibility. Through these activities, students learn how to cooperate, work in a team, and understand the meaning of contributing to the community, developing a sense of responsibility to society. Students can participate in volunteer projects, protect the environment, and support disadvantaged communities, forming personality and compassion (Frey, N., Fisher, D., & Everlove, S., 2009).

However, character and moral education are the school's responsibility and require close cooperation between the family, the school, and society. Parents and teachers must act as role models for students, create a healthy educational environment, and encourage a spirit of respect, responsibility, and compassion. Adults must also be equipped with digital knowledge and skills to teach children how to use technology responsibly and adequately. In the digital age, education cannot only focus on equipping technological skills but needs to be combined with moral and personality education, helping learners develop comprehensively, be socially conscious, and know how to use technology responsibly. Integrating core values from Confucius' educational philosophy into the modern education system will contribute to building a generation of citizens with good moral qualities, ready to face the challenges of the new era.

2.3. Flexible teaching methods

In modern education, flexible teaching methods are a prerequisite to meet learners' increasingly diverse learning needs. When technology drastically changes the way knowledge is acquired, education cannot only be encapsulated in the traditional teaching model but needs to be innovated to combine traditional methods and digital technology. The application of

technology optimizes the teaching process and promotes students' self-learning, creative thinking, and problem-solving skills. Confucius's philosophy of "self-learning" – emphasizing perseverance and self-discipline in learning – is entirely in line with the current trend of personalized learning (Low, K. C. P., 2016). Personalized education is a model in which each student has a unique learning path, tailored to their abilities, interests, and learning pace. This helps learners maximize their potential without being constrained by the rigid framework of traditional teaching methods. Digital technology plays a vital role in realizing this model, through artificial intelligence (AI) and big data (Big Data) to track learning progress, analyze the needs of each individual, and make appropriate learning recommendations. To promote flexible teaching methods, many modern education models are being widely applied in the world and Vietnam, helping to improve teaching efficiency and enhance learners' initiative.

Modern teaching methods

Blended Learning is a method that combines face-to-face learning in class and online learning, helping students actively absorb theory before coming to class, thereby optimizing learning time in class to discuss, practice, and solve practical problems. This method allows students to learn at their own pace, while allowing teachers to personalize the teaching content to suit each student. In addition, a learning management system (LMS – Learning Management System) such as Moodle, Blackboard, or Google Classroom helps track each student's learning process, provides learning materials, tests, and feedback immediately. This makes learning more flexible while reducing reliance on traditional teaching (Knezovic, A., 2024).

Flipped Classroom is a teaching model in which students actively approach the lesson's content at home first, and then use the time in class to discuss, practice, and solve in-depth problems. Instead of teachers lecturing directly in class, students will watch lecture videos and read materials first, helping them be better prepared when coming to class. The benefits of this model are that it encourages critical thinking, enhances initiative, and helps students develop teamwork skills. With the help of technology, teachers can use video lectures, online tests, and digital learning platforms to help students master knowledge before class.

Project-Based Learning (PBL) is a learning method through participation in real-life projects in which students must know, research, and develop creative solutions to a specific problem. This method helps students develop teamwork, critical thinking, creativity, and problem-solving skills, and combines theory and practice. With the help of technology, students can connect with experts, collect data, use analysis software, and present research results visually. For example, in STEM (Science, Technology, Engineering, Mathematics) education, students can work on projects on science simulation, applied programming, or digital model design, helping them better understand scientific concepts and develop practical skills.

The role of teachers in flexible teaching methods

In the traditional education model, teachers impart knowledge, while students absorb passively. However, with modern teaching methods, the role of teachers also needs to change, becoming instructors and mentors to help students discover and build their knowledge. Teachers must know how to use digital technology to support teaching, including smart interactive whiteboards, mobile learning apps, and online learning platforms. These tools help teachers personalize their teaching methods, track student progress, and provide feedback quickly. In addition, teachers also need to encourage critical and creative thinking, assisting students in

absorbing knowledge and knowing how to ask questions, solve problems, and apply them in practice.

The direction of Vietnam's education in the digital era

In general, the application of flexible teaching methods not only helps to improve learning efficiency but also creates a positive, creative, and proactive educational environment. This is especially important because Vietnamese education is moving towards a digital transformation model, combining tradition and technology to build an advanced education. Combining Confucius' spirit of learning – emphasizing self-discipline, perseverance, and responsibility – with technological advances will help students access knowledge proactively, develop creative thinking, and adapt to modern society's changes. This helps improve the quality of education and prepares the young generation well for the future knowledge economy requirements.

2.4. Adaptive and creative skills education

Confucius emphasized that learning is not only about knowing but also about acting and becoming beneficial to society. According to him, education is not merely a process of acquiring knowledge but must also be combined with moral training, skill development, and practical application. This idea becomes even more critical in the digital era when people need to know and adapt to rapid technological changes, the working environment, and modern society. Modern education cannot only focus on theoretical teaching but should also train adaptive skills, creative thinking, and problem-solving ability. The digital world has changed the structure of the workforce, as many traditional jobs are gradually being replaced by artificial intelligence (AI), automation, and big data (Tschang, F. T., & Almirall, E., 2021). This requires education to equip students with academic and work flexibility, helping them to be ready to face the challenges of the modern labor market.

Besides professional knowledge, soft skills such as critical thinking, teamwork, intercultural communication, and innovative thinking become essential. As digital technology develops, students need to understand technology and know how to apply it creatively to solve practical problems. Practicing lifelong learning, proactively adapting to changes, and developing creative thinking will help learners develop sustainably in the future.

One of the advanced educational methods that helps improve students' applicability is STEM (Science, Technology, Engineering, Mathematics) and STEAM (STEM + Arts) education (Kang, N. H., 2019). This is an integrated education model, helping students not only master scientific knowledge but also apply it in practice flexibly. STEM helps students develop scientific, technical, and practical thinking, from which they can use their knowledge to solve real-world problems, develop technology, and create new solutions. STEAM expands STEM by integrating the arts, which enhances creativity and aesthetic thinking. This helps students not only master technology but also know how to apply it to the fields of design, art, communication, and creative product development. The combination of science and art helps learners to think holistically and develop both analytical and creative skills at the same time.

The implementation of STEM and STEAM education in Vietnam can contribute to promoting the spirit of innovation, giving students more opportunities to practice instead of just learning theory passively. These methods also help connect knowledge with practice, helping students see the application of what they know to life and work later. In addition to STEM and STEAM, experiential learning is essential in modern education. This teaching method helps students develop skills through practice and real-life application. Instead of just learning theory

in books, students can participate in practical projects, conduct case studies, conduct experiments, and solve problems in a real environment. This helps students develop the ability to think creatively, work in teams, and analyze information effectively.

Experiential learning enhances learning motivation and equips learners with the skills they need to succeed in modern society, including communication, problem-solving, time management, and critical thinking. For example, in business education, students can participate in practical business planning projects and experience simulated business operations. In environmental education, students can participate in programs such as tree planting, forest protection, and research on the impacts of climate change. These practical experiences help students better understand the meaning of knowledge and apply skills in life.

In general, education in the digital era does not stop at acquiring knowledge; it must also focus on developing action capacity, adaptability, and innovation. Confucius's educational thought on learning to be a human still retains its value in the modern context, but needs to be adjusted to suit the requirements of the digital age.

Vietnam needs to continue to innovate its education to encourage creativity in learning and teaching and help students develop the ability to think independently. At the same time, integrating essential skills into the curriculum, including digital, soft, and problem-solving skills, is critical. In addition, the development of STEM education, STEAM, and experiential learning will help students have more opportunities to practice and see the application of knowledge in practice.

The combination of Confucius' educational philosophy and modern educational innovation will help Vietnam build an advanced education system, equipping the younger generation with knowledge and the capacity to act, be creative, and adapt to a changing society (Ruhal, M., et al., 2024). Only when students can turn knowledge into action can they truly master their future and contribute effectively to the development of society.

3. Challenges and opportunities in applying Confucius' educational philosophy

Applying Confucius' educational thought to digital education is not an easy process. Some of his views are conservative and influenced by the context of feudal history, so they are no longer entirely relevant to modern society. However, suppose we know how to select and adjust. In that case, the core values of Confucius' educational philosophy can still contribute to educational innovation in Vietnam, helping to build a humane, flexible, and creative education in the digital era.

The challenge of applying Confucius' educational philosophy to modern education. Confucius' educational philosophy emphasizes respect for tradition, moral obedience, and strict discipline. This can create several obstacles when applied to contemporary education, where creative thinking, innovation, and the freedom to develop individuals are becoming essential factors. In today's education, encouraging critical thinking and personal development plays a core role, while Confucian ideology sometimes emphasizes adherence and tradition rather than innovation and creativity.

Education in the digital age requires flexibility and constant updates to keep up with technological development (Ng, W., 2015). The traditional education model, focusing on stereotypical learning and teacher-listening, is no longer suitable for the modern learning environment. The application of Confucius' philosophy to digital education needs to be adjusted to combine the preservation of moral values and the promotion of innovation in the approach to knowledge. One of the biggest challenges of educational innovation in Vietnam is the quality of teachers. The application of technology to teaching requires teachers not only to master their

expertise but also to know how to use technology effectively. Meanwhile, some teachers are still used to traditional teaching methods and are not ready to adapt to the new learning environment. In addition, teachers need to change from the role of knowledge transmitters to instructors and mentors, helping students develop independent thinking and self-learning ability. This requires the teacher training program to be drastically improved, combining traditional educational philosophy with modern teaching methods. Although digital technology opens up many new learning opportunities, not everyone can access modern educational tools. The digital divide between urban and rural areas, between different economic groups, remains a matter of concern. Without reasonable policies to universalize digital education, inequality in education will increase.

Opportunities for educational innovation in Vietnam from the perspective of Confucius philosophy

One of the core values of Confucius' educational philosophy is moral education and social responsibility. In the age of digital technology, when information is spread rapidly, it is more important than ever to equip yourself with critical thinking skills and digital ethics. Vietnamese education can integrate traditional ethical principles into the curriculum to help students develop a sense of responsibility when using technology, and at the same time develop skills in analyzing and evaluating information and protecting themselves in the digital environment. Confucius emphasized that learning never stops; people must constantly improve their knowledge to establish themselves (Tu, W. M., 1998). This is entirely in line with the trend of lifelong learning in the digital age. Educational Technology (EdTech) has made learning easier through MOOC platforms, LMS, and online learning systems, making it possible for anyone to learn anywhere. Confucius' philosophy attaches great importance to the spirit of self-learning, which aligns with today's personalized learning model. With the help of technology, education can be customized to each student's needs and abilities, helping them learn at their own pace and promoting their strengths. Artificial intelligence (AI) systems can analyze learning data and offer appropriate curricula, assisting students to learn more effectively. Another critical factor in education innovation is the cooperation between the state, businesses, and social organizations to improve the quality of education and train human resources to meet practical needs. The development of programs in collaboration with businesses helps students have theoretical knowledge and practice valuable skills, increasing their ability to adapt to the labor market in the digital era.

Strategies for implementing sustainable education innovation

Vietnam needs a long-term and comprehensive strategy to take advantage of the opportunities and overcome the challenges of applying Confucius' educational philosophy to modern education. First, the renewal of the teacher training program is a prerequisite, helping the teaching team to have the ability to apply advanced technology and educational methods. At the same time, investing in digital education infrastructure is essential, ensuring that all students, whether in urban or rural areas, can access online learning, narrowing the education gap. In addition, it is necessary to develop policies to support lifelong learning, encouraging workers and students to constantly improve their knowledge and skills to adapt to rapid technological changes. In particular, combining traditional moral education with modern technological skills will help learners have a solid foundation and learn how to behave responsibly in the digital environment. The harmonious combination of the quintessence of Confucius education and technological innovation will help Vietnam develop a flexible, humane, and

creative education system, meet the needs of the digital era, and prepare well for the future of global integration.

4. Conclusion

Confucius' educational philosophy, with a focus on lifelong learning, moral education, and flexible learning methods, still has a lot of value in modern education. Combining the quintessence of tradition with technological innovation will help Vietnam improve the quality of teaching and create human resources to meet the requirements of the digital era. Learning is about acquiring knowledge and developing thinking, ethics, and skills to integrate and thrive in a changing world.

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