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The Return of Life in Primary School Education in the Intelligent Era: Reflection and Practice Based on Educational Philosophy

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Abstract. With the integration of artificial intelligence into primary school classrooms, while bringing conveniences such as personalized teaching, some worrying phenomena have emerged: teaching has become overly utilitarian, children's nature of play has been suppressed, and teacher-student relationships have been alienated due to screens. The root cause of these problems lies in the fact that technological application has outpaced educational reflection, neglecting care for "humans" themselves. From the perspective of educational philosophy, this paper points out that the root of the current predicament is the lack of a life perspective and the lag of philosophical reflection in the process of technological application. Based on life growth theory, Zhuangzi's theory of human nature, and the "homo ludens" hypothesis, this paper examines the realistic dilemmas of primary school education in the intelligent era, and proposes that education should return to the ontology of life. By highlighting the practical character of teaching, integrating the "spirit of play", adhering to "people-oriented" principles, and constructing a life-oriented evaluation system, we can safeguard the integrity and uniqueness of children's lives, and realize the harmonious unity of technological empowerment and life growth.

Keywords: Intelligent Era, Primary School Education, Educational Philosophy, Life Care

1. Introduction

In the function of education, technological changes of the times profoundly influence educational reform. Since the Industrial Revolution, a standardized classroom model has emerged—teachers hold chalk to repeat blackboard writing, and students recite knowledge in unified textbooks and classrooms. This large-scale teaching has indeed enabled more children to access education, but it has also quietly laid hidden dangers: the cultivated children are more like standard parts on an assembly line than unique living individuals, and human value has gradually been instrumentalized in the pursuit of efficiency.

Since the 21st century, the wave of intelligent technology represented by artificial intelligence has swept across all fields of society. Entering today's primary school classrooms, smart blackboards

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can synchronously display animated courseware, transforming abstract mathematical formulas into dynamic graphics; adaptive learning systems automatically adjust the difficulty of exercises according to students' answering speed and accuracy; AI teaching assistants can even immediately mark grammatical errors in compositions after class and push personalized reading materials. These technologies seem to be fulfilling the ancient promise of "teaching students in accordance with their aptitude", making personalized education no longer a privilege of a few.

However, as technology extends its reach further, new educational puzzles have emerged. Some teachers have found that the AI systems originally used to assist teaching have gradually become the "protagonists" of the classroom—to make the "accuracy rate" on data reports look better, some classrooms repeatedly train on high-frequency test points pushed by AI, ignoring children's sudden questions and curiosity; parents have also noticed that their children spend more and more time on AI learning machines after returning home, but talk less and less with their families. Even recess games have become online virtual interactions, and face-to-face chasing and playing have gradually disappeared; more worrying is that the learning ability labels attached to each child by AI are quietly defining their value. Those children who temporarily cannot keep up with the rhythm of algorithms gradually lose confidence in learning.

Behind these phenomena is the dislocation between technological use and the essence of education—we should have let technology serve children's growth, but unconsciously let children adapt to the logic of technology. At this time, it is particularly important to re-examine current education from the perspective of educational philosophy. Educational philosophy does not dwell on specific issues such as "how to operate AI systems", but focuses more on fundamental questions such as "what kind of people do we want to cultivate" and "how can technology help children's comprehensive growth". In my opinion, the current educational dilemma is not the fault of technology itself, but that when embracing technology, we forget to think from the children's perspective: what they need is not cold data feedback, but warm growth support.

Against this background, it is particularly urgent to reflect on these issues from the perspective of educational philosophy. Educational philosophy is concerned with the essence, purpose, and value of education. It forces us to transcend operational issues such as "how to use technology more effectively" and reflect on meta-questions such as "what constitutes a good educational life" and "what kind of life ideal should technology serve". This study holds that the current predicament stems from the lack of a life perspective and the lag of philosophical reflection in the application process, rather than the fault of technology itself. As scholars such as Zheng Gang have warned, the integration of artificial intelligence and education must be a "marriage between life value and technological change", not the usurpation of life value by technology [1]. Therefore, based on life growth theory, combined with the core ideas of Zhuangzi's theory of human nature and the "homo ludens" hypothesis, this paper attempts to clarify the life dilemma of primary school education in the intelligent era, explore the practical path for education to return to the ontology of life, and hope to provide theoretical reference and practical guidance for realizing the harmonious coexistence of intelligent technology empowerment and children's life growth.

2. Technological usurpation: the life dilemma of primary school education in the intelligent era and its philosophical crux

The in-depth penetration of artificial intelligence technology is reconstructing the practical field of primary school education. From intelligent interactive blackboards to adaptive learning systems, technology claims to promote a personalized and efficient educational revolution. While this "revolution" brings convenience, it also triggers a series of profound "modernity dilemmas". From

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the perspective of educational philosophy, when the instrumental rationality of technology overrides value rationality and becomes the dominant logic, education will encounter a crisis that contradicts its essence of promoting human life growth. This study holds that the current dilemmas are not problems of technology itself, but stem from the lack of a life perspective and the lag of philosophical reflection in its application process.

2.1. Alienation of teaching objectives: from "cultivating people" to "adapting to technology"

Guided by the concept of efficiency first, some educational practices have transformed into blind pursuit of technical indicators. The number of uses of intelligent devices, the accuracy of online answering, and the degree of data visualization of learning paths have become criteria for measuring teaching success. To meet these standards, teaching content has been broken down into fragmented knowledge segments that are easy for machines to identify and process, and the complete knowledge structure and logical beauty have disappeared. On a deeper level, the core educational values that cannot be quantified, such as the training of critical thinking, the experience of aesthetic perception, and the nurturing of moral emotions, have been systematically marginalized in this process.

Pi Wu accurately pointed out that in this model, technology has reversed the roles from a tool serving education to becoming the purpose of education itself [2]. The philosophical root of this alienation lies in the oppression of "value rationality" by "instrumental rationality" as warned by Max Weber. Education is no longer a cause of "cultivating people", but has alienated into a large-scale, sophisticated, and indifferent process of adaptation and preparation for the "social machine". Children's vivid and holistic life experiences are ruthlessly split in this process.

2.2. Suppression of children's "playful" existence: from "creators" to "users"

For primary school children, their cognitive style and state of existence are essentially "playful". As Gadamer said, the mode of existence of play is self-expression; players are fully engaged in it and fulfill themselves in this engagement [3]. Children explore the world, build social relationships, and release life vitality through independent, free, and imaginative play. However, the stylized interaction of intelligent technology is compressing this space of authentic existence.

Electronic screens have replaced sandboxes and fields, and preset virtual interactions have replaced peer interactions full of uncertainty. Children have been reduced from "creators" and "leaders" of play to "users" and "respondents" of technology. The "homo ludens" hypothesis proposed by Zou Haiyan is particularly urgent in this context, as she emphasizes that education must respect human beings' instinct for play [4]. When technological application only pursues precise control of behavior and standardized output of answers, it fundamentally eliminates the free spirit, open structure, and creative potential of play, making children's life experiences passive and poor.

2.3. "Digital alienation" of teacher-student relationships: from "I-Thou" to "Human-Machine-Human"

The essence of education is a profound intersubjective activity, which is the "I-Thou" encounter as referred to by Martin Buber—a teacher-student relationship full of trust, care, and spiritual collision [5]. The intervention of intelligent technology is reconstructing the temporal and spatial structure of this relationship. Teachers "understand" students through data analysis reports, but have no time to perceive the confusion and joy in their eyes; students are accustomed to seeking immediate answers from AI, but gradually lose the courage and willingness to ask real questions to teachers.

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Liu Xudong emphasizes that the essence of education is emotional interactive communication between people [6]. When technology expands infinitely as an intermediary, teacher-student relationships face the risk of degenerating from a warm "I-Thou" relationship to a cold, instrumental "Human-Machine-Human" connection linked by data. This digital alienation not only weakens teachers' educational function as "engineers of the soul", but also deprives children of the most real and precious practical field for emotional development and social learning.

All the above dilemmas point to a key philosophical crux: in the practical operation of educational technology, we have focused too much on "how to use technology to teach better", but ignored the reflection on meta-questions such as "what constitutes a good educational life" and "what kind of life ideal should technology serve". Therefore, we need to draw wisdom from the tradition of educational philosophy to re-anchor the value orientation of primary school education in the intelligent era.

3. Theoretical foundation: educational philosophical basis for the return of life

Faced with the complex challenges brought by technology, any piecemeal strategies are insufficient. We must return to the origin of education for systematic thinking. This not only requires us to examine the ethical boundaries of technological application [7], but also to seek a solid philosophical foundation in teleology, ethics, and human nature theory. Life growth theory, Zhuangzi's theory of human nature, and the "homo ludens" hypothesis respectively provide us with three solid philosophical cornerstones of teleology, ethics, and human nature theory, jointly forming a complete theoretical framework for examining and guiding educational practice in the intelligent era.

3.1. Life growth theory: the essence of education is the purposeful generation of life

Life growth theory emphasizes that the growth of life is not a purely natural maturation stage [6], but a purposeful generative process involving the collaborative intervention of technology, culture, and the environment. In the current intelligent era, it requires us to redefine the role of technology: instead of being controllers of the trajectory of life growth, we should be creators of nutrient-rich "soil" and "environment".

For primary school children, their physical perception, emotional growth, and social development are in a critical period. Progressive education also holds that true education should regard children as "living individuals with infinite possibilities" rather than "products to be processed". The value of technology lies in providing support for the realization of this possibility. Virtual Reality (VR) technology can break the walls of classrooms, allowing children to "visit" the age of dinosaurs and deep-sea scenes, stimulating their most primitive curiosity and sense of wonder; AI-supported social stories can help children with special needs conduct social skills training in a safe environment. All these interventions must follow a core principle: respect the natural rhythm and internal vitality of life development, safeguard children's right to trial and error, exploration, and self-discovery, and avoid the "optimal solution" of algorithms stifling the richness and diversity of life growth.

3.2. Zhuangzi's theory of human nature: the educational ethics of "people-oriented"

The ideas of "following nature" and "cultivating spirit" excavated by scholars Liu Lei and Yu Bowen from Zhuangzi's philosophy present ancient Eastern wisdom for us to adhere to "people-oriented" principles in the technological era. Zhuangzi said, "Human nature is the essence of life", holding that

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the essence of human nature is reflected in its natural and authentic characteristics. The supreme mission of educators is to realize "not losing the true feelings of life", that is, to protect and nourish this inherent nature.

When examining this idea in the intelligent era, we find that many technological applications are moving in the opposite direction. Compulsory learning check-ins, precise supervision of learning time down to the second, and competitive incentives based on rankings—all these use external technical logic to control or even change children's natural instincts, which are examples of "destroying nature for the sake of human will" and "undermining destiny with artificial arrangements" in Zhuangzi's critical discourse. True wisdom lies in adhering to the principle of "using things without being enslaved by them", allowing technology to become a tool for expressing rather than suppressing nature. Use AI painting tools to encourage children to express their whimsical imagination, rather than requiring them to draw images that conform to adult aesthetic standards; rely on intelligent story platforms to let children create their own fairy tales, not just repeat classics as they are. The sense of community expressed by Zhuangzi's "Heaven and Earth coexist with me, and all things are one with me" also requires us to use technology to create a warm, cross-cultural communication space, allowing children to experience a sense of coexistence and compassion in virtual connections, and cultivating a "supreme virtue" that transcends instrumental calculation.

3.3. "Homo ludens" hypothesis: the human nature foundation of primary school education

The "homo ludens" hypothesis proposed by Zou Haiyan regards "play" as the basic mode of human existence, believing that humans are essentially free, creative, and pleasure-seeking "players". This hypothesis does not advocate equating education with play, but emphasizes that education should contain the spirit of autonomy, equality, creation, and pleasure inherent in play. For children, this playfulness is the most direct manifestation of their life vitality.

From the perspective of educational history, Friedrich Froebel named the early childhood institution he founded "Kindergarten" (children's garden), intending to emphasize that education should care for the natural laws of children's internal growth like a gardener, and "play" is the most important nutrient [8]. If intelligent technology can carry this kind of "spirit of play", it can approach the ideal state of "education as play". For example, design math adventure games based on Augmented Reality (AR), allowing children to gain the joy of breaking through levels while solving math problems in the real world; develop historical role-playing apps, enabling children to deeply understand the complexity of history through simulating the choices of historical figures. On the contrary, if technology narrows learning down to endless question brushing, check-ins, and standardized tests, it is a fundamental suppression of children's "spirit of play", leading to the extinction of their learning interest and the withering of creativity, ultimately deviating from the fundamental purpose of education based on human nature and developing human nature.

4. The path of return: practical strategies for the life-orientation of primary school education in the intelligent era

The value of theory lies in reflecting on reality. Based on the above philosophical examination, we propose the following four interrelated and progressive practical paths, aiming to transform the concept of the return of life into operable educational actions.

DOI: 10.54254/2753-7048/2025.30622

4.1. Highlight the "practical character" of teaching: construct embodied intelligent teaching scenarios

Liu Xudong emphasizes that the essence of education is "practical communication between people". Embodied cognition theory further reveals that cognition is not an abstract symbolic operation occurring in the brain, but a product derived from the interaction between the body and the environment [9]. Therefore, education in the intelligent era is not about separating from the body, but using technology to create richer embodied learning experiences.

Example of Chinese Teaching: In ancient poetry teaching, to break away from the limitations of simple audio playback and text annotations, AI speech synthesis and VR technology can be used to jointly create an "immersive classic recitation" scenario. When children put on VR devices to "enter" the virtual scene of "Viewing the Lushan Waterfall", they will not only see the cascading waterfall, but also feel the water vapor in the air through environmental simulation devices. They can also use body movements to gesture the shape of the waterfall with peers appearing as virtual images and discuss the artistic conception of "steam rising like purple smoke". Technology expands children's perceptual boundaries, while the core of teaching revolves around in-depth participation at the physical, social, and emotional levels, transforming abstract poems into tangible and empathetic life experiences.

Example of Physical Education: Use intelligent wearable bracelets, but their purpose is not to monitor and discipline children's physiological data. Design them as game props for "team challenge competitions". Children form teams by themselves, use the bracelets to record data such as the total number of group rope skipping and average running time, and compete interestingly with other teams. The role of teachers is to guide children to understand the spirit of rules, cooperation, strategy, and fair competition in the competition. Technology appropriately serves the integration of physical activities and social development, allowing physical education to return to the essential level of improving physical fitness and nurturing the spirit.

4.2. Integrate the "spirit of play": develop life-oriented intelligent educational resources

Based on the "homo ludens" hypothesis, the development of intelligent educational resources should go beyond the initial stage of "online exercise books" and strive to integrate the design concepts and spiritual essence of games into the learning process. Such resources should have three core characteristics: autonomy, openness, and emotionality. That is, to give students the right to choose, allow multiple answers and explorations, and focus on students' experiences and resonance.

Example of Science Courses: Based on the unit "Plant Growth", an "My AI Ecological Garden" project can be developed. Children plant a plant themselves at school or at home, use the APP to take photos and record regularly. AI image recognition technology automatically analyzes the growth status of the plant and pushes personalized inquiry tasks at the appropriate time, such as "Why is your bean seedling growing towards the window? Turn the flower pot and see what happens?". At the same time, the "ecosystem simulator" embedded in the APP allows children to plant other plants virtually and observe the competition and symbiosis between different species. This not only conveys scientific knowledge, but also cultivates children's sense of responsibility, patience, and systematic thinking.

Example of Moral and Legal Courses: Design a virtual simulation game "Moral Dilemma Laboratory" to overcome the drawbacks of moral preaching. In the game, students will face dilemmas such as "If a good friend cheats in a competition, should I report it?". Each choice will trigger complex plot feedback generated by AI based on moral development theory, thereby guiding

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children to think about the chain consequences of their actions on others and collective rules. This situational and experiential learning internalizes moral norms into a profound empathy ability and prudent judgment ability, achieving the spiritual nurturing of "moistening things silently" advocated by Zhuangzi.

4.3. Adhere to "people-oriented" principles: reshape teachers' role as "life guides"

Amidst the noise of technology, we must reaffirm Kant's categorical imperative that "human beings are ends in themselves, not means to an end" [10]. The core value of teachers lies in their irreplaceable role as "life guides". Intelligent technology can excellently complete information transmission and skill training, but it can never replace teachers' emotional care, personality edification, and value guidance for children.

Institutional Guarantee: Schools should establish a regular technical ethics review and discussion mechanism. Regularly organize teachers to analyze cases, such as: to what extent can AI learning situation analysis reports be used as a reference for teaching decisions? How to protect children's privacy and dignity while using intelligent monitoring? Through these discussions, help teachers establish a sense of the boundaries of technology, learn to be "critical users" of data rather than "passive submitters", and be able to combine their long-term observation and understanding of children to interpret and intervene in cold data with humanistic warmth.

Practical Actions: Teachers should take the initiative to use technology to strengthen rather than replace emotional connections. For example, use class blogs or WeChat groups to share touching moments in the classroom in the form of "educational narratives"—how one child helped another, how a failed experiment triggered a heated discussion. What these stories convey is the temperature of life that data cannot capture. In addition, use functions such as voice messages to provide children with personalized and encouraging voice feedback, so that children can clearly feel the recognition and care from teachers in the digital age.

4.4. Construct a life-oriented evaluation system: transcend the logic of "data supremacy"

Educational evaluation is the baton of educational practice. The return of life in primary school education in the intelligent era requires the construction of a life-oriented evaluation system that transcends the logic of "data supremacy" and shifts from "focusing on quantitative results" to "focusing on the process of life growth". This evaluation system should be based on life growth theory, taking into account children's knowledge mastery, ability development, and the cultivation of emotions, attitudes, and values, reflecting the educational philosophical connotations of integrity, development, and personalization.

Diversify evaluation content and add non-data indicators. For example, when evaluating a child's Chinese learning level, in addition to the total number of characters recognized and the score of compositions, equal importance should be attached to the breadth of their reading, the fluency and confidence of oral expression, and the critical thinking shown in discussions; in the context of art evaluation, the originality and emotional expression of works, as well as the degree of engagement in the creative process, should take priority over technical proficiency. Teachers should use qualitative methods such as detailed observation records, portfolio assessment, and structured interviews to evaluate these literacy skills.

Diversify evaluation subjects and adopt a model of participation by different subjects. Break the traditional practice of teachers being the sole evaluators, and add student self-evaluation, peer evaluation, and parent participation. At the end of a unit study, teachers can guide students to create

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a "my growth map" to reflect on their gains and confusions; after the completion of a group project, guide peers to evaluate each other's performance in team cooperation. This not only reflects the appearance of children's growth more comprehensively, but the process itself is also a manifestation of metacognitive ability and an opportunity for social learning.

Humanize feedback methods, focusing on encouragement and guidance. Teachers' feedback skills are crucial. Intelligent technology can provide immediate score feedback, but teachers need to transform these data into life-oriented suggestions. For example, when facing a child with poor math test results, the feedback should not be "you failed", but combined with the error analysis provided by AI, give constructive and hopeful suggestions: "I found that you have some difficulties in solving 'travel problems'. This is normal because it requires imagining words as a picture. Tomorrow we can draw diagrams to analyze together, and I believe you will master it soon!". This kind of feedback protects children's desire for knowledge, transforming evaluation from a final judgment into a developmental support, truly reflecting the original purpose of evaluation to improve learning and promote growth.

5. Conclusion

In short, primary school education in the intelligent era is in a dilemma: on the one hand, there is the superficial efficiency fog dominated by technology; on the other hand, there is the return to the value of life care. As for the direction to take, this study clearly shows that the ultimate value of technology is not reflected in how exquisitely it can "transform" education, but in whether it can "serve" the enrichment and growth of life in a correct and effective way.

As educators, we must maintain "technological humility", recognizing that although algorithms can optimize paths, they cannot determine the ultimate goal of life; although data can depict behaviors, they cannot measure the depth and meaning of life. We should adhere to the teleology guided by life growth theory, the ethics based on Zhuangzi's theory of human nature, and the methodology taking the "homo ludens" hypothesis as the starting point of the process. With the support of this philosophical triangle, we can prudently control technology.

We should creatively explore the "middle way" between technology and life: make intelligent systems an empowering force for supporting embodied learning, not a shackle that shields physical experience; let digital resources become a paradise containing the spirit of play, not a cage that suppresses nature; let data analysis become a lens for teachers to understand children, not a label to define children. Only in this way can we truly safeguard the life core of primary school education full of infinite possibilities in the wave of technology, and make it a great journey that promotes every unique life to flourish towards truth, goodness, and beauty.

References

[1] Zheng, G., Yang, Y. R., & Zhang, W. J. (2021). The realistic "marriage" between the value of life and technological change: A philosophical reflection on the educational application of artificial intelligence. e-Education Research, 42(03), 12-17+26. https: //doi.org/10.13811/j.cnki.eer.2021.03.002

[2] Pi, W. (2023). The risk of teaching alienation in the digital age: An examination from the perspective of life. Contemporary Education Sciences, (12), 36-43.

[3] Gadamer, H. G. (2007). Truth and method (Rev. trans.). Translated by Hong, H. D. The Commercial Press.

[4] Zou, H. Y., & Ding, L. T. (2007). Examining students in physical education from the perspective of human nature. Higher Agricultural Education, (10), 73-75.

[5] Buber, M. (2002). I and thou. Translated by Chen, W. G. SDX Joint Publishing Company.

[6] Liu, X. D., & Ni, J. M. (2024). Educational philosophical reflections on artificial intelligence promoting life growth. Educational Research, 45(06), 77-87.

DOI: 10.54254/2753-7048/2025.30622

[7] Liu, L., & Yu, B. W. (2024). How is "people-oriented" possible in the era of intelligent education: Based on Zhuangzi's philosophical thought of human nature. Educational Science, 40(06), 16-22.
[8] Froebel, F. (2001). The education of man. Translated by Sun, Z. F. People's Education Press.
[9] Ye, H. S. (2015). Body and learning: Embodied cognition and its educational implications. Educational Research, 36(04), 104-114.
[10] Kant, I. (2013). Groundwork of the metaphysics of morals. Translated by Yang, Y. F. People's Publishing House.