

Exploration of Practical Paths for Empowering the Value Shaping of Accounting Courses with Artificial Intelligence

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Abstract: Under the background of the new era, major universities are committed to promoting a significant issue - how to deeply integrate the value-driven educational concept into the professional teaching system. However, the current traditional teaching model still has the problem that "professional teaching" and "value guidance" have not been fully integrated. Based on this, taking the accounting course as an example, this article proposes a three-in-one implementation path of "intelligent collection, intelligent recognition, intelligent presentation and intelligent evaluation" from the perspective of artificial intelligence technology, to achieve the organic embedding of artificial intelligence. Meanwhile, the article also reveals the challenges of data security and technological reliance during the reform process. This research provides practical guidance for the deep integration of artificial intelligence and value-driven teaching in courses, which has positive significance for promoting the teaching reform of accounting courses and improving teaching quality.

Keywords: Artificial Intelligence; Accounting Courses; Implementation Path; Ethical Issues

1. Introduction

In recent years, China has elevated the development of education to a higher strategic position in its national development. The "Guiding Outline for the Construction of Ideological and Political Education in College Courses" issued by the Ministry of Education further clarifies the requirement that "all colleges and universities, all teachers and all courses should undertake the responsibility of educating people well", elevating course construction to a key link in the moral education and talent cultivation of colleges and universities. However, there are still many problems in the current

practice of course value guidance construction, such as the inability of course value guidance to reflect professional characteristics, the lack of value guidance teaching content in professional course teaching, the relatively weak moral education awareness and ability of professional teachers, the single evaluation object of course value guidance, and the subjective assessment method, etc. It is evident that in professional teaching, how to organically integrate value-driven teaching and evaluate its effectiveness and quality is an urgent issue to be addressed in the teaching reform of colleges and universities. In the face of these problems, the rapid development of artificial intelligence technology has provided a new breakthrough for the reform of curriculum value guidance. In the context of digitalization, how to break through the above-mentioned predicaments by leveraging modern technologies such as artificial intelligence and achieve innovative development led by the value of accounting courses is an important research direction at present. Therefore, this paper takes accounting courses in colleges and universities as an example to explore the construction of a multi-dimensional collaborative education model of "AI+ education + accounting", and designs the value guidance framework of courses with artificial intelligence technology, explores the moral education elements contained in professional courses, builds teaching scenarios, and evaluates the teaching process. To explore the challenges faced in promoting the construction of curriculum value guidance education under the background of the new era, with the aim of making contributions to the reform of ideological and political education in courses in the new era [1].

2. The Implementation Predicament and Breakthrough of Value Guidance in Accounting Courses

2.1 The Predicament of Implementing Value

Guidance in Traditional Accounting Courses

Firstly, "professional teaching" and "value guidance" have not yet been fully integrated. The construction of course value guidance aims to break down the barriers between professional education and value guidance education, and achieve the organic integration of nurturing people and cultivating talents. However, in the current value guidance construction of accounting courses in colleges and universities, talent cultivation is still the main focus, and it has not been fully integrated with moral education. There exist to varying degrees the problem of the disconnection between accounting professional teaching and value guidance. This phenomenon is mainly due to the fact that teachers do not delve deeply enough into the exploration of value guidance elements in the professional teaching process, do not know how to skillfully integrate value guidance elements into the curriculum, and also find it difficult to determine which complete key points of value guidance education should be covered in one course. Especially for courses like accounting that lean towards professional technical knowledge points, teachers' practical abilities are insufficient, making it difficult for them to find the convergence point between value guidance elements and professional knowledge. How to skillfully integrate value guidance elements into professional knowledge during the teaching process is still in the exploratory stage. Secondly, the evaluation of the quality and effectiveness of course value guidance lacks scientificity [2]. How to evaluate the educational effect and construction achievements of course value guidance is also a complex problem, which requires the construction of an index system from multiple levels, dimensions and aspects for comprehensive evaluation. The evaluation of the educational effect and construction achievements of traditional curriculum value guidance mostly relies on subjective experience judgment, making it difficult to precisely assess and intervene in the transformation of students' values. In addition, the evaluation behavior of traditional curriculum value guidance is short-termized and fails to track and assess the entire teaching process of teachers. For a course like accounting, which is highly practical and

operational, the construction of its course value guidance is not an independent module. Instead, value guidance elements are scattered and integrated into it through case analysis, group discussions, and other means. This full-process value guidance coverage requires real-time evaluation of the value guidance effect. However, the current value-guided evaluation lacks detailed observation of teachers' teaching processes. How to introduce modern methods such as digital technology and big data analysis into the evaluation system of curriculum value guidance to achieve an objective assessment of the effectiveness of value guidance education remains an urgent problem to be solved [3].

2.2 The Advantages of Artificial Intelligence Empowering the Value Guidance of Accounting Courses

Artificial intelligence technology refers to the use of new algorithms to mine useful knowledge from big data. It can have the ability to understand and learn like humans and assist humans in solving problems efficiently. With the upgrading and iteration of artificial intelligence technology in the analysis and processing of complex data such as audio, video and text, new opportunities have been provided for the value guidance reform of accounting courses. Empowered by artificial intelligence technology, teachers' teaching, students' learning and absorption effects have all taken on a new look. Firstly, artificial intelligence technology promotes the precise supply of value guidance elements in accounting courses and improves teachers' "teaching". In the value guidance teaching of traditional accounting courses, teachers often rely on personal experience, subjective judgment and exploration of value guidance elements, making it difficult to precisely match students' cognitive characteristics and acceptance abilities. With the help of artificial intelligence technology, teachers can optimize the supply of value guidance elements from the three aspects of "efficiency, time and degree". First, with the help of intelligent search technology, teachers can quickly and precisely match high-quality value guidance materials from a vast case library. For instance, when teaching accounting professional ethics, teachers can

precisely screen out financial fraud cases such as Dangzhi Island and Kangmei Medicine through intelligent search technology, providing students with vivid cases and guiding them to think about the importance of professional ethics. Secondly, with the help of data analysis technology, teachers can promptly and dynamically grasp the ideological trends of students, accurately identify the timing for integrating value guidance into accounting courses, and avoid students' aversion. Thirdly, with the help of the intelligent teaching management system, teachers can dynamically grasp the proportion of value guidance content in accounting courses, assist them in controlling the supply of value guidance content in courses, avoid excessive concentration of value guidance in courses, and upload professional courses to value guidance courses. Secondly, artificial intelligence technology meets the personalized learning needs of students for value guidance in accounting courses and improves their "learning"^[4]. The value guidance of traditional accounting courses adopts a uniform teaching method, ignoring the differences in cognitive foundation and acceptance ability among different students, and is difficult to meet the individualized learning needs of students. Each student's value-guided learning cognition and thinking in the accounting course are unique. Artificial intelligence technology can precisely analyze and construct a student's learning profile based on a set of data such as the student's accounting course learning behavior data, preference characteristics, and cognitive level, thereby formulating a value-guided learning plan that matches the student's cognitive level and learning style. This is equivalent to artificial intelligence acting as a teacher's assistant. The two work collaboratively in multiple ways, enabling real-time dialogue with students, immediate feedback on individual doubts, and allowing students to enjoy the learning experience. Finally, artificial intelligence technology improves the evaluation mechanism for the value guidance effect of accounting courses, enhancing the scientificity and comprehensiveness of the evaluation of the value guidance effect of courses. The evaluation of the value guidance effect of traditional accounting courses mainly relies

on the subjective judgment of teachers to assess students' mastery of knowledge. This assessment method is one-sided and lacks a comprehensive assessment of the entire teaching process. The development of artificial intelligence technology has enabled a comprehensive assessment of the entire process of value guidance teaching in accounting courses by teachers. Through the massive data analysis technology of artificial intelligence, the performance of teachers in multiple links, such as whether they implement value guidance, how they integrate value guidance, and students' responses to the content of value guidance, is tracked and recorded. At the same time, analyze the change trajectory of students' values after learning the value guidance content, and form multi-dimensional evaluation materials. It has achieved a shift from result-oriented to full-process oriented, and from a single dimension to multiple dimensions, effectively enhancing the scientificity and comprehensiveness of the evaluation [5].

3. Implementation Strategies for Empowering the Value Guidance of Accounting Courses with Artificial Intelligence

Based on the implementation predicament of value guidance in accounting courses and the advantages of artificial intelligence technology, guided by the construction of new liberal arts, and in combination with the knowledge system of the accounting discipline and the professional talent cultivation plan, this paper constructs an implementation framework for the intelligent upgrade of value guidance in accounting courses that integrates "intelligent collection - intelligent recognition - intelligent evaluation", as shown in Figure 1. This framework is based on the value guidance element library, supported by an intelligent platform, and guaranteed by an evaluation system, forming a closed-loop implementation path for course value guidance [6].

3.1 Intelligent Collection: Optimizing the Value Guidance Element Library of Accounting Courses

The implementation of value guidance in accounting courses aims to cultivate practitioners who are honest, rule-abiding and realistic. This requires instructors to master rich value guidance content and places high demands

on their knowledge acquisition and learning abilities. With the help of artificial intelligence technology, teachers can optimize the value guidance materials of accounting courses from both timeliness and content richness. First, teachers can use artificial intelligence technology to quickly and accurately extract policy documents, mainstream media information and other resources related to the field of accounting from massive data, improving the efficiency of obtaining value guidance elements. Secondly, teachers utilize the word vector algorithm (Word2Vec) for semantic expansion, rapidly expanding the limited value-leading keywords into a rich value-leading vocabulary library. For instance, the value guidance keyword "honesty" can be automatically expanded by artificial intelligence technology to related terms such as "authenticity, fairness, and transparency", enriching the connotation and extension of value guidance elements and broadening the scope of students' evaluation of the learning effect of value guidance in courses. Furthermore, the value-leading element library should not be a static collection of resources, but rather a dynamically updated knowledge system. Especially, the legal and regulatory content in accounting courses is frequently updated, which requires the value guidance element library to be updated in real time. This kind of update demand has limitations and lags in the manual screening of individual teachers. However, artificial intelligence technology, through natural language processing (NLP), machine learning and other technologies, can monitor and analyze in real time the cutting-edge cases and mainstream media information and other hot events related to accounting, and update the value guidance element library in real time and dynamically [7]. It ensures the cutting-edge nature of laws and regulations in the value guidance of accounting courses. It can be seen from this that artificial intelligence technology has achieved the automatic collection and dynamic update of accounting value guidance materials, significantly improving the efficiency and quality of value guidance element collection, and breaking the limitations of traditional manual screening.

3.2 Intelligent Recognition: Achieve the Precise Integration of Value Guidance Elements in Accounting Courses

How to organically integrate the elements of

value guidance into the teaching of accounting courses is the core link in the implementation of course value guidance and also a major difficulty in its implementation. Through deep learning algorithms, artificial intelligence systems can analyze the content of accounting textbooks, courseware and lecture notes, identify the convergence points of value orientation and value guidance contained therein, help teachers accurately find the intersection of course value guidance and disciplinary professional knowledge, and clarify the specific value guidance content that can be integrated into specific knowledge points. For instance, when teaching accounting professional ethics, the system can automatically identify the relevant chapter content and recommend the integration of value guidance elements such as "honesty and trustworthiness". When explaining the attributes of accounting measurement, the system incorporates suggestions into the value concept of "seeking truth from facts"^[8]. This intelligent recognition and recommendation mechanism makes the integration of value guidance elements more precise and natural. Secondly, artificial intelligence can evaluate the integration effect of classroom value guidance content by analyzing multi-dimensional data such as teachers' language, body language and expressions, and provide improvement suggestions for teachers. Through emotional analysis technology, artificial intelligence can assess the emotional tendencies and appeal of different value guidance contents, helping teachers select materials with high emotional resonance, enhancing the appeal of value guidance education, ensuring that what is integrated is salt, avoiding students' aversion, and achieving the integration of value guidance that disintegrates salt into water, nourishing things imperceptibly.

3.3 Intelligent Assessment: Building a Multi-Dimensional and Three-Dimensional Evaluation System for Guiding the Value of Courses

The transformation of students' values and emotions is latent. The traditional evaluation method of curriculum value guidance cannot directly observe and record the cognitive transformation of students after learning curriculum value guidance. This means that the traditional way of evaluating the effect of curriculum value guidance is difficult to

determine whether the educational goals of curriculum value guidance have been achieved. Artificial intelligence technology, by leveraging multi-source data collection and intelligent algorithm analysis, establishes large-scale data for tracking students' learning processes, providing full-process data support for the evaluation of the effectiveness of course value guidance [9]. For instance, by leveraging technologies such as speech recognition and computer vision, real-time monitoring of key indicators like teacher-student interaction and students' discussions and speeches during the teaching process can be conducted, and full-process data on students' acceptance of knowledge imparting, value guidance, and ability enhancement can be collected. By using artificial intelligence algorithm technology to identify and evaluate the collected process data of students, the degree to which students absorb and identify with value guidance elements is analyzed. This multi-dimensional data collection and analysis with the aid of artificial intelligence technology provides scientific and full-process evidence for the evaluation of the value guidance effect of courses. This evaluation mechanism based on artificial intelligence breaks through the limitation of traditional evaluation that relies on subjective judgment, achieving a transformation from result evaluation to process evaluation and from single evaluation to multi-dimensional evaluation, providing a scientific basis for the continuous improvement of value guidance in accounting courses.

4. Ethical Issues in the Value-Driven Reform of Accounting Courses Empowered by Artificial Intelligence

With its technological advantages of precision and intelligence, artificial intelligence drives educational transformation from both teaching and learning dimensions, helping educational entities open up new perspectives and form a new "AI+" educational ecosystem. However, while the breakthroughs in artificial intelligence technology bring potential, the ethical issues that come with them are also becoming increasingly prominent. This article explores the ethical issues of the value guidance reform of accounting courses empowered by artificial intelligence from two aspects: the technical application level and the social impact level.

4.1 Ethical Issues at the Level of Technical Application

Firstly, the concealment and allure of artificial intelligence applications can easily lead to deviations in the application of technology in educational practice, giving rise to potential ethical risks in artificial intelligence education. For instance, the risks of data security and privacy leakage caused by data collection. In the process of promoting the value guidance teaching of accounting courses with the help of artificial intelligence, teachers need to ensure that students fully understand the purpose and use of their learning behavior data being collected and obtain clear authorization. Secondly, there is still a lack of unified norms and standards in the management of the obtained data, which leads to the risk of data leakage, abuse or unauthorized use of student data for commercial purposes on the intelligent teaching platform. For this reason, when teachers design the value guidance reform of accounting courses assisted by artificial intelligence, they have put forward higher requirements for data cleaning and management. In addition, algorithmic fairness is another important ethical consideration. Although artificial intelligence technology can collect data on students' absorption of classroom course value guidance throughout the entire process and from multiple dimensions, when using large-scale data to analyze students' learning outcomes of value guidance, there may be system algorithm biases. For instance, the differences in students' different expression methods may lead to unfair results in the evaluation of value guidance effects, which is a realistic reflection of the inherent risks of technology. This requires teachers to pay attention to the transparency of algorithms when designing the value guidance reform of accounting courses with the assistance of artificial intelligence, ensuring that the evaluation criteria are explainable and traceable, thereby avoiding algorithmic bias.

4.2 Ethical Issues at the Level of Social Impact

Artificial intelligence technology is a human possession. When teachers make use of artificial intelligence technology, they should

pay attention to the degree of interdependence between humans and technology to avoid technology dependence inhibiting the development of subjectivity. When engineers design artificial intelligence platforms, their design concepts must always be consistent with the quality and effect of value guidance in accounting courses. However, the policy-oriented part of the course value guidance content is cutting-edge, especially the value guidance elements of the accounting course, which are either cutting-edge or highly thought-provoking. Engineers failed to cover them during the initial algorithm design. For instance, the increasing number of financial fraud or financial malpractice cases in the accounting course and the continuous update of financial reporting standards Artificial intelligence technology may not be able to effectively identify and make appropriate evaluations. At this point, teachers need to intervene promptly, provide guidance and make decisions based on their own knowledge and judgment, build a people-oriented ethical consensus, and prevent teachers or students from overly relying on technology to complete various tasks. By leveraging artificial intelligence technology, teachers can precisely integrate the value guidance of accounting courses and evaluate students' learning outcomes. This not only improves the process of "teaching" and "learning" in the value guidance of accounting courses but also promotes the optimized development of teaching effect evaluation. The accuracy of the content generated by artificial intelligence technology will directly affect the effectiveness of teaching and learning. When the value guidance content of accounting courses generated based on artificial intelligence is actually fabricated or false content lacking data support, such misinformation will have a negative impact on students' knowledge system construction and cognitive development. Therefore, when engineers develop intelligent systems for value guidance in accounting courses, they must carefully embed ethical frameworks that conform to the core values to avoid the illusion of technological neutrality [10].

5. Summary

The reform of value guidance in accounting

courses empowered by artificial intelligence is a systematic exploration of great significance. With the help of artificial intelligence technology, there have been significant breakthroughs in both the teaching quality of teachers and the learning outcomes of students, which are mainly reflected in three aspects: "time, efficiency and degree" First, by leveraging intelligent teaching tools and personalized learning platforms and other technological means, teachers can precisely design the integration model and presentation method of value guidance in accounting courses, achieving effective integration of course value guidance. Second, by leveraging artificial intelligence technology, accurately record and analyze students' learning outcomes, formulate personalized learning plans for each student, and achieve individualized teaching. Thirdly, by leveraging artificial intelligence technology for multi-dimensional data collection, it provides scientific and full-process evidence for the evaluation of the value guidance effect of accounting courses. However, during the implementation process, a series of practical challenges are still faced, such as data security and privacy protection, algorithmic bias, and the suppression of subjectivity by technological dependence. To address these challenges, it is necessary to establish and improve data management norms, pay attention to the degree of control of the interdependent relationship between people and technology, strengthen the construction of technical support teams, and optimize relevant policies and evaluation mechanisms to provide institutional guarantees for reforms.

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