Artificial Intelligence Education Studies

Challenges and Strategies for Legal Education Reform in the Age of AI

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Abstract

With the rapid development of artificial intelligence (AI) technology, its penetration into the field of higher education has profoundly impacted the paradigm of legal education. This paper systematically explores the multidimensional challenges faced by law teaching reform in universities in the AI era: traditional teaching models are being challenged by intelligent teaching tools and urgently need to be restructured; the accelerated update of legal knowledge systems has put forward higher requirements for the timeliness of course content; the widespread use of AI-assisted decision-making systems has posed new questions for the cultivation of students' legal thinking. In response to the above challenges, this paper proposes corresponding reform paths from the dimensions of teaching model innovation, curriculum system optimization, and practical ability cultivation, aiming to build a legal talent training system that meets the needs of the intelligent era.

Keywords AI Era; University Law Teaching; Teaching Reform Path

1 Introduction

The rapid development of artificial intelligence (AI) technology is reshaping human society at an unprecedented speed and scale, and the field of education is no exception. As an important part of higher education, legal education, with its special requirements for logical thinking, value judgment, and practical ability, is facing unprecedented opportunities and challenges in the AI era. In recent years, AI technologies such as machine learning and natural language processing have shown great potential in legal research, document generation, and case prediction, which have not only changed the ecological pattern of the legal industry but also put forward new requirements for traditional legal education models^[1]. However, in the face of the changes brought about by AI, current university legal education still seems unprepared. There is a clear gap between traditional teaching models, curriculum settings, and talent training goals and the needs of the intelligent era. On the one hand, the application of AI technology puts forward new requirements for the legal knowledge system, legal way of thinking, and legal practice ability; on the other hand, legal educators also face dual challenges in terms of technology application and curriculum reform. This contradiction not only restricts the improvement of the quality of legal education but also affects the effectiveness of legal talent training. Against this background, it is of great theoretical and practical significance to explore the real difficulties and optimization paths of university law teaching reform in the AI era. This study aims to systematically analyze the impact of AI technology on legal education, deeply explore the main problems existing in the current reform process, and propose feasible optimization strategies on this basis, in order to provide references for building a legal education system that meets the needs of the intelligent era.

2 The Necessity of Law Teaching Reform In Universities In the Ai Era

2.1 The Impact of AI Technology on the Legal Industry

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Intelligent Legal Information Retrieval and Analysis

In the era of big data and artificial intelligence, the scale of data in the legal industry is growing exponentially, and traditional manual legal information retrieval and analysis methods can no longer meet the increasing practical needs. AI algorithms, with their powerful computing and data processing capabilities, can efficiently and accurately handle a large amount of legal data. The machine learning algorithms used by AI, through learning and training on a large number of legal texts such as legal provisions, judicial precedents, and academic literature, can accurately identify key information, legal concepts, and legal relationships within them. In practical applications, AI-driven legal information retrieval systems can quickly respond to user queries, not only performing simple keyword matching but also conducting in-depth searches based on semantic understanding. At the same time, AI algorithms can also conduct in-depth analysis of the retrieved legal information, such as summarizing and comparing the findings of cases, the application of law, and the reasons for judgment, helping legal practitioners better understand and apply legal knowledge and providing strong support for legal decision-making.

2.1.2 Automated Contract Review and Generation

AI technology, with its advanced algorithms and powerful data processing capabilities, has brought revolutionary changes to the field of contract review and generation. In automated contract review, AI mainly uses key technologies such as natural language processing (NLP), machine learning, and knowledge graphs. NLP technology can deeply parse the natural language in contract texts, identifying the semantics, grammatical structure, and logical relationships of contract clauses. Through learning and training on a large amount of historical contract data and relevant laws and regulations, machine learning algorithms can accurately identify potential risk points in contract clauses.

At the same time, knowledge graph technology can structurally represent the various entities in a contract (such as parties, subject matter, time, place, etc.) and the relationships between entities, thereby more clearly presenting the overall logical structure of the contract, facilitating the discovery of potential risks and loopholes. In contract generation, AI can automatically fill in and generate contract texts based on predefined contract templates and specific information entered by users. These predefined templates are usually carefully designed by legal experts and combined with a large amount of practical experience and industry standards to ensure that the generated contracts meet legal requirements and business needs in terms of format and content.

The application of AI automated contract review and generation technology has significantly improved the efficiency of contract processing. Compared with traditional manual contract review and generation methods, AI can handle a large number of contract texts in a very short time, greatly reducing the contract processing cycle. At the same time, its accurate risk identification capability reduces human-induced oversights and errors, improving the quality and compliance of contracts. This technology not only saves a lot of human, time, and economic costs for enterprises, law firms, and other entities but also provides strong support for the digital transformation and intelligent upgrading of the legal industry, promoting the development of contract processing business towards a more efficient, precise, and intelligent direction.

2.1.3 Application of Judicial Adjudication Assistance Systems

Judicial adjudication assistance systems mainly rely on machine learning, deep learning, and other AI algorithms to deeply mine and analyze a large number of historical cases to build powerful knowledge models. These algorithms can carefully parse and extract features of key elements in cases, such as findings of facts, evidence acceptance, application of law, and results of adjudication, thereby discovering potential patterns and regularities. When judges face new cases, judicial adjudication assistance systems can quickly process and analyze case-related information based on the learned knowledge models. The system can automatically compare the similarities between new cases and historical cases, screen out the most similar cases from a large number of existing adjudication cases, and present the adjudication highlights, reasons for the application of law, and final results of these cases to judges as intuitive and valuable references for adjudication. The application of judicial adjudication assistance systems effectively reduces the workload of judges and improves the efficiency and quality of judicial adjudication^[2]. It provides important references and support for judges when dealing with complex cases, helps reduce the subjectivity and arbitrariness of adjudication, and promotes the fairness and consistency of judicial adjudication. At the same time, the system also provides strong technical support for judicial reform and the construction of modernized judiciary, promoting the development of the judicial system towards a more intelligent and scientific direction.

102

2.2 New Demands for Legal Talents in Society

2.2.1 Knowledge of AI-related Law

In the current situation where AI technology is deeply embedded in all fields of society, the ecosystem of the legal industry has undergone significant changes, which has also led to new requirements for legal talents in society. AI technology covers multiple fields such as machine learning and natural language processing, and its application generates many complex legal issues. The training of machine learning algorithms involves a large amount of data processing, which has sparked controversies over data privacy and security. Issues such as data ownership, protection of the rights and interests of the subjects, and the compliance of cross-border data transmission all require professional legal knowledge for regulation and adjustment. Legal talents without knowledge of AI-related law will find it difficult to deal with these emerging data-related legal issues and will be unable to provide effective legal support for enterprises and individuals in data processing activities. From an industry development perspective, the integration of AI and the legal industry is a trend. Many enterprises use AI to improve the efficiency of legal work, such as intelligent contract review and legal information retrieval. This requires legal talents to be familiar with traditional legal business and to master the application patterns and potential risks of AI in the legal field, using relevant legal knowledge to help enterprises operate in compliance and prevent legal risks.

2.2.2 Interdisciplinary Comprehensive Ability

In the digital age, legal practitioners need to be proficient in legal professional knowledge and also possess interdisciplinary comprehensive abilities, especially in the fields of computer science and data science. Knowledge of computer science can help legal practitioners apply modern technological tools. Mastering the basics of programming languages such as Python and R can automate the processing of legal documents and improve work efficiency. Understanding database management and network security principles helps protect client data in legal practice and prevent information leakage. Data science skills are increasingly being applied in the legal field. With the help of data analysis and machine learning technologies, legal practitioners can extract valuable information from a large number of case data, predict case outcomes, and optimize legal strategies. Data visualization tools such as Tableau and Power BI can intuitively display complex data and enhance persuasiveness. In addition, interdisciplinary comprehensive abilities also include an understanding of emerging technologies such as AI and blockchain. The application of AI in legal research, contract review, and legal consulting is increasing. Understanding its working principles and limitations helps legal practitioners use these technologies more effectively. The application of blockchain technology in areas such as smart contracts and intellectual property protection also requires legal practitioners to have the corresponding technical background to provide more comprehensive legal services.

3 Challenges Faced by Law Teaching Reform in Universities in The Ai Era

3.1 Teaching Model

3.1.1 Limitations of Traditional Lecture-based Teaching

In the AI era, the reform of university law teaching models is imminent, and the limitations of traditional lecture-based teaching are becoming increasingly evident. Traditional teaching models are teacher-centered, focusing on the one-way transmission of knowledge, with students often in a passive receiving state. Although this model has certain advantages in the systematic teaching of theoretical knowledge, it has obvious shortcomings in cultivating students' practical skills, innovative thinking, and adapting to the rapidly changing legal environment.

Firstly, traditional lecture-based teaching is difficult to meet students' needs for practical skills training. Law is an extremely practical discipline that requires students to not only master theoretical knowledge but also have the ability to solve practical legal problems^[3]. However, traditional classrooms mainly focus on teaching legal provisions and case analysis, and students lack opportunities to participate in real legal practice, making it difficult to transform theoretical knowledge into practical operational skills. For example, in practical skills such as contract review, legal document writing, and litigation strategy formulation, students often lack systematic training and practical experience. Secondly, traditional teaching models have obvious shortcomings in cultivating students' innovative thinking. In the context of the rapid development of AI technology, many problems in legal practice require innovative solutions, but traditional lecture-based teaching focuses on standard answers and fixed thinking patterns, restricting

students' creative thinking. Finally, traditional teaching models are difficult to adapt to the new requirements of the AI era for legal talents. With the popularization of legal technology, legal practitioners need to master skills such as data analysis and the application of AI tools, but traditional lecture-based teaching lacks the integration of these emerging technologies. For example, students need to learn how to use legal research tools and how to analyze big data to support legal decision-making, but these contents are often ignored in traditional classrooms.

3.1.2 Difficulties in Integrating Technology into Teaching

In the wave of educational transformation in the AI era, integrating AI technology into university law teaching has become an inevitable trend to improve teaching quality and cultivate legal talents who meet the needs of the times[4]. However, in the actual implementation process, integrating technology into teaching faces many practical difficulties, among which the insufficient mastery and application ability of AI technology by teachers and the imperfect construction of teaching software and platforms have a significant negative impact on teaching effectiveness.

From the teacher's perspective, AI technology, as an emerging cutting-edge technology, covers multiple complex fields such as machine learning, natural language processing, and data analysis. For teachers who have long been engaged in traditional law teaching, it requires a lot of time and energy to learn and practice to master these technologies. At present, the group of university law teachers generally lacks systematic AI technology training, resulting in limited understanding and application ability of AI technology. In the teaching process, teachers may not be able to fully leverage the advantages of AI technology, such as not being able to effectively use intelligent teaching tools for personalized teaching, not being able to use big data to analyze students' learning behaviors and effects, and thus failing to achieve deep integration of teaching content and AI technology. In addition, some teachers have cognitive biases about AI technology, considering it only as an auxiliary means of teaching, rather than an important driving force for teaching reform, lacking the enthusiasm and initiative to actively learn and apply AI technology, which further hinders the effective application of AI technology in law teaching.

The imperfect construction of teaching software and platforms is also a key factor restricting the integration of technology into teaching. High-quality teaching software and platforms are important carriers for the deep integration of AI technology and law teaching. However, there is a relative shortage of AI teaching software and platforms specifically designed for university law teaching in the current market, and existing products have many shortcomings in terms of functions and performance. On the one hand, some teaching software has limited functions and can only realize basic functions such as online teaching and homework assignment, failing to meet the needs of practical teaching links in law teaching such as case analysis and mock court. On the other hand, there is a lack of effective data sharing and interaction mechanisms between teaching software and platforms, making it difficult to integrate and optimize the allocation of teaching resources, and failing to provide convenient and efficient teaching experiences for teachers and students.

The Curriculum System Needs to Be Optimized

In the AI era, the knowledge update speed in the field of law has significantly increased, especially with the emergence of numerous legal issues related to artificial intelligence. This poses a severe challenge to the knowledge system of university law teaching. The rapid development and widespread application of AI technology have given rise to many new legal issues, such as data privacy protection, algorithmic discrimination, and liability determination for autonomous driving. These emerging issues not only involve traditional legal fields but also span multiple disciplines such as computer science, ethics, and sociology. They require legal practitioners to have interdisciplinary knowledge reserves and the ability to learn quickly. However, the knowledge system of university law teaching often fails to keep pace with this rapidly changing rhythm in a timely manner, resulting in a disconnection between teaching content and real-world needs^[5].

From the perspective of curriculum system construction, law, computer science, and ethics each have their own unique knowledge systems, theoretical frameworks, and research methods. Law focuses on the study of legal norms, legal principles, and legal practice, with its curriculum settings centered around the interpretation of legal provisions, legal reasoning, and the application of law. Computer science, on the other hand, emphasizes technical knowledge such as algorithm design, data structures, and programming languages, highlighting the understanding and application of computer systems and technologies. Ethics mainly focuses on moral principles, value judgments, and ethical norms, aiming to cultivate students' ability to analyze and solve moral issues. Integrating this significantly different disciplinary knowledge into a single curriculum system requires breaking down the barriers between disciplines and reorganizing and integrating the knowledge threads.

In practice, determining the proportion and sequence of each disciplinary knowledge in the curriculum system is a major challenge. On the one hand, if too much emphasis is placed on legal knowledge, it may lead to students' insufficient grasp of computer science and ethics knowledge, preventing them from fully understanding the technical principles and ethical issues involved in the application of AI technology in the legal field. On the other hand, if too much emphasis is placed on computer science and ethics knowledge, it may deviate the law education from its core goal, weakening students' in-depth study of legal professional knowledge. In addition, the connection and transition between courses also need to be carefully designed to ensure that students can smoothly transfer and integrate their knowledge. For example, in courses involving the legal regulation of AI algorithms, how to combine the algorithm principles in computer science with the legal norms in law so that students can understand the operating mechanism of algorithms and regulate them reasonably with legal knowledge is an urgent problem to be solved in curriculum system construction. Regarding teaching content, interdisciplinary integration also faces numerous challenges. First, the update speed of teaching content is difficult to keep pace with the development of disciplines. The rapid iteration of AI technology leads to the continuous emergence of related legal issues and ethical controversies, such as data privacy protection, algorithmic discrimination, and the determination of legal liability for AI systems^[6]. These new issues need to be promptly included in the teaching content. However, due to the complexity and professionalism of disciplinary knowledge, teachers often face significant difficulties in integrating and updating teaching content. Second, the lack of appropriate teaching cases and textbooks is also a prominent problem. Interdisciplinary teaching requires rich and representative cases to support students in applying theoretical knowledge to practical problems. However, there is currently a relative shortage of teaching cases that can integrate law, computer science, and ethics, and the content of textbooks often has one-sidedness, failing to comprehensively cover the key points of interdisciplinary knowledge.

Moreover, the choice and application of teaching methods also have an important impact on the integration of interdisciplinary knowledge. Traditional law teaching methods mainly focus on lectures, emphasizing the explanation and analysis of legal provisions. Computer science teaching, on the other hand, emphasizes practical operations and project training. Ethics teaching often adopts case analysis and discussion methods. In interdisciplinary teaching, how to integrate these teaching methods to adapt to the characteristics of different disciplinary knowledge and teaching objectives is another challenge faced by teachers^[7]. For example, when explaining the ethical issues of AI technology, teachers need to use the case analysis method of ethics to guide students in moral thinking, while also combining the legal analysis method of law to let students understand relevant legal responsibilities. They may also need to rely on the technical knowledge of computer science to explain the operating principles of AI technology. This poses higher requirements for teachers' teaching abilities and overall quality.

3.3 Challenges in Cultivating Students' Legal Thinking

3.3.1 Students' Over-reliance on AI Tools

In the AI era, the widespread use of legal technology tools has brought great convenience to legal practice, but it also brings the risk of students over-relying on AI tools. AI tools can quickly provide results in legal information retrieval, case analysis, and legal document writing, significantly improving efficiency. However, this convenience may lead students to neglect the cultivation of their own legal thinking and logical reasoning abilities in the learning process, thereby affecting their long-term career development. Specifically, in legal information retrieval, students may overrely on AI-driven legal research tools (such as Westlaw, LexisNexis, etc.). These tools can quickly locate relevant legal provisions, precedents, and academic literature, but if students are only satisfied with the results provided by the tools without understanding the retrieval logic and legal background, it will be difficult to form a systematic legal knowledge system. For example, AI tools may generate retrieval results based on keyword matching, but students need to have the ability to independently judge and analyze the relevance and authority of these results to select the most valuable legal information. At the same time, in case analysis, AI tools can help students quickly extract case facts, legal issues, and judgment results, but this automated analysis may weaken students' critical thinking abilities. Legal case analysis not only requires an understanding of the surface facts and rules but also requires a deep exploration of the legal principles, policy considerations, and social impacts behind the case. If students over-rely on AI tools, they may neglect in-depth thinking about case details, leading to superficial analysis and difficulty in forming independent legal opinions. In addition, in legal document writing, AI tools can automatically generate contracts, complaints,

legal opinions, and other documents, but if students completely rely on these tools, they may neglect the refinement of legal logic and language expression. Legal document writing not only requires accurate citation of legal provisions but also requires rigorous logical reasoning and clear expression. For example, the design of contract terms needs to fully consider the rights and obligations of all parties, and AI-generated contracts may not fully meet the personalized needs of specific cases. If students lack independent thinking and writing abilities, they will find it difficult to deal with complex legal practice problems.

3.3.2 Challenges in Cultivating Ethical and Value Judgment Abilities

In the AI era, the complexity and technicality of legal issues have significantly increased, and many emerging legal issues not only involve the application of legal provisions but also involve deep ethical and value judgments. How to cultivate students' correct ethical views and value judgment abilities has become a major challenge for university law education.

On the one hand, the application of AI technology often involves the balance of multiple interests, which puts higher demands on students' ethical judgment abilities. For example, in the field of data privacy protection, legal practitioners need to find a balance between individual privacy rights and corporate data utilization. Students need to not only master relevant laws and regulations but also understand the ethical principles behind privacy protection, such as respecting individual autonomy and preventing data abuse. However, traditional law education often focuses on the interpretation of legal provisions and lacks systematic discussions on ethical issues, making it difficult for students to make reasonable value judgments when facing complex ethical dilemmas. On the other hand, algorithmic discrimination highlights the importance of ethical judgment in the AI era^[8]. The application of AI algorithms in fields such as recruitment, credit, and justice may exacerbate social inequality and even lead to discrimination. For example, some algorithms may make unfair decisions based on sensitive factors such as race and gender. Students need to have the ability to identify and correct algorithmic biases, which requires not only technical understanding but also value judgments from an ethical and social fairness perspective. However, existing law courses often lack systematic explanations of algorithmic ethics, making it difficult for students to fully understand the legal and ethical impact of algorithmic discrimination.

In addition, the rapid development of AI technology has also brought many new ethical challenges, such as the liability determination of self-driving cars and the ownership of intellectual property rights created by artificial intelligence. These issues not only involve the application of legal rules but also involve the weighing of technical ethics and social values. For example, in the event of an accident involving an autonomous vehicle, who should bear the responsibility: the manufacturer, the software developer, or the user? Students need to think from an ethical perspective about how to allocate responsibility in a way that reflects fairness and justice. However, traditional law education often lacks in-depth discussions on these emerging ethical issues, making it difficult for students to form independent ethical judgments when facing complex problems.

Specific Paths for Law Teaching Reform in Universities in the Ai Era

AI-empowered Innovation in Teaching Models

Adoption of Blended Teaching Methods

In the context of the AI era, innovating teaching models has become a key focus of university law teaching reform, and combining AI technology with blended teaching methods provides a new effective way to improve teaching quality and student abilities. Blended teaching methods aim to organically integrate online teaching resources and offline classroom teaching to fully leverage the strengths of both to optimize teaching effectiveness^[9]. The integration of AI technology further enhances the efficiency of the blended teaching model.

In terms of online teaching resources, AI greatly enriches and optimizes learning content and methods. In today's highly developed digital information age, there is a vast amount of law teaching resources available online, and AI technology can intelligently screen, classify, and recommend these resources. For example, with the help of machine learning algorithms, the system can accurately push suitable law online courses, professional legal lecture videos, rich case libraries, and cutting-edge legal academic research results to each student based on their learning progress, knowledge mastery, and interest preferences. When students are learning knowledge in a specific area of law, AI can not only provide basic learning materials but also recommend related extended learning content through analyzing

students' learning behaviors, broadening students' knowledge horizons. At the same time, AI-driven intelligent tutoring systems can provide real-time answers to students' questions, just like having a personal tutor. Students can ask the intelligent tutoring system questions they encounter during the learning process, whether it is understanding legal concepts or analyzing complex cases. The system will provide detailed and accurate answers based on its existing knowledge reserves and algorithm models, effectively making up for the shortcomings of traditional online teaching that lacks real-time personalized guidance. In addition, AI-supported interactive forums and online communication platforms can achieve more efficient learning interactions. Through natural language processing technology, the system can intelligently analyze students' comments, automatically match relevant discussion topics and interested participants, and promote targeted intellectual collisions and knowledge sharing among students. For example, when a student posts a view on a certain legal hot issue in the forum, the system can quickly find other students who have in-depth research or different opinions on this issue, promoting in-depth discussion.

Offline classroom teaching is also revitalized with the help of AI. AI technology can provide teachers with detailed data analysis reports on students' online learning situations, helping teachers gain a more comprehensive and in-depth understanding of each student's learning characteristics and needs. In the classroom, teachers can adjust the teaching pace and methods in a targeted manner based on this data and provide personalized teaching guidance. For example, for students who have not mastered certain legal knowledge points well in online learning, teachers can provide key explanations and tutoring in the classroom; for students with faster learning progress and stronger abilities, they can be given more challenging learning tasks, such as in-depth analysis of complex cases or research discussions on cutting-edge legal issues. In summary, combining AI with blended teaching models can achieve deep integration and complementary advantages between online and offline teaching. AI technology not only enriches and optimizes online teaching resources, improves students' independent learning abilities and learning outcomes, but also provides strong support for offline classroom teaching, promoting the innovation and development of personalized and practical teaching. This combination fully mobilizes students' enthusiasm and initiative in learning, improves their learning participation, and lays a solid foundation for cultivating high-quality legal talents who meet the development needs of the AI era. Universities and teachers should actively explore and practice the combination of AI and blended teaching models, continuously optimize the teaching process, and improve teaching quality.

4.1.2 Conducting Practical Teaching Activities

The integration of AI technology has brought new opportunities and transformations to practical teaching links such as mock courts and law clinics, enabling students to better apply their knowledge in real legal situations and effectively improve their practical abilities. In the mock court teaching stage, with the help of AI-related technologies such as virtual reality (VR) and augmented reality (AR), more realistic and immersive legal practice scenarios can be created for students^[10]. Students feel as if they are in a real courtroom environment, interacting with virtual parties, witnesses, etc., greatly enhancing the realism and fun of the mock court and enabling students to better exercise their legal thinking, language expression, and team collaboration abilities in practice. At the same time, AI can intelligently generate a variety of simulated cases based on teaching objectives and students' learning progress. These cases not only cover various common legal fields such as civil, criminal, and commercial law but also simulate complex new legal issues, such as AI intellectual property disputes and data privacy infringement cases. AI can also simulate different characters, backgrounds, and demands of parties and witnesses. When students interact with these intelligent characters, they need to use their legal knowledge and communication skills to accurately grasp the intentions and demands of the other party and engage in effective legal debate and response.

AI can also empower law clinic teaching. Law clinics usually receive a large number of real legal cases, and AI can reasonably screen and assign cases to students based on their professional knowledge level, interest direction, and practical experience through intelligent analysis of case information. For example, for cases involving intellectual property law, AI will prioritize students who have certain research and interest in this field to ensure that students can better deal with case challenges and improve practical effectiveness. During the process of students handling cases, AI can act as a powerful legal assistant and provide professional legal support for students. AI can quickly search for and analyze relevant laws and regulations, judicial precedents, and academic research results to provide accurate and comprehensive legal information for students. When students encounter complex legal issues, AI can analyze and reason through intelligent algorithms to provide feasible solutions and suggestions.

4.2 Updating the Legal Knowledge System

4.2.1 Adding AI-related Courses

University law course settings should promptly incorporate AI-related legal knowledge. By increasing courses such as artificial intelligence law and data protection law, universities can provide students with more comprehensive and cutting-edge legal education, cultivate professional talents capable of meeting the legal challenges of the AI era, and make positive contributions to the construction and development of a law-based society.

Artificial intelligence law, as an emerging legal discipline, aims to regulate and guide the development and application of AI technology. The course covers various aspects of AI, including its legal status, liability determination, and ethical norms. For example, regarding the legal status of AI, it is necessary to explore whether AI systems should be granted certain legal personalities and under what circumstances AI systems can act as legal subjects to bear rights and obligations. In terms of liability determination, when AI systems cause damage, how to determine the responsible party, whether it is the developer, user, or other relevant party, requires in-depth legal analysis and research. Through the study of artificial intelligence law courses, students can gain a comprehensive understanding of the legal issues and challenges of AI technology and cultivate the professional ability to deal with legal problems in the AI era.

Data protection law is also an important legal field closely related to AI technology. The development of AI technology is highly dependent on the collection, storage, and analysis of data, which makes data privacy and security issues increasingly prominent. The course on data protection law mainly involves the protection of data subjects' rights, the obligations and responsibilities of data processors, and the legal regulation of cross-border data transmission. For example, students need to learn how to protect individuals' rights to be informed, to control, and to delete their data, as well as the principles of legality, propriety, and necessity that enterprises should follow when processing data. At the same time, with the development of globalization, cross-border data transmission has become the norm, and students also need to understand the differences in data protection laws in different countries and regions, as well as how to ensure the secure flow of data through international cooperation and legal coordination.

4.2.2 Promoting Interdisciplinary Knowledge Integration in Law

In the AI era, promoting interdisciplinary knowledge integration, strengthening cooperation between law and computer science, ethics, and other disciplines, and offering interdisciplinary courses have become key measures for university law education to cultivate students' comprehensive quality and adapt to the development of the times. As a cutting-edge field of computer science, AI technology has been widely applied in the legal industry, bringing many new legal issues. For example, in legal information retrieval, big data analysis and machine learning algorithms in computer science can achieve intelligent retrieval and analysis of legal information. However, this also raises legal issues such as data privacy and algorithmic bias. If law students do not understand the basic principles and technical applications of computer science, they will find it difficult to accurately understand and solve these problems. By strengthening cooperation with the computer science discipline and offering interdisciplinary courses such as "Law and Artificial Intelligence Technology" and "Data Law and Computer Science Fundamentals," students can learn about the operation mechanisms of computer algorithms and the storage and processing of data. Thus, they can deeply understand the legal issues arising from the application of AI in the legal field from a technical perspective and regulate them with legal knowledge. At the same time, computer science students can also learn law courses to understand the regulatory and guiding role of law on technological development, enhance their legal awareness and compliance awareness in the process of technological research and development, and promote the healthy development of AI technology.

The integration of ethics and law is also indispensable. Law, as an important means of maintaining social order and fairness and justice, is guided by ethical values in its formulation and implementation. In the AI era, a series of ethical issues have emerged with the development of technology, such as whether AI's autonomous decisionmaking conforms to human ethical and moral standards and the fairness impact of algorithmic discrimination on vulnerable groups. These issues need to be regulated from a legal perspective and deeply considered from an ethical standpoint. By offering interdisciplinary courses such as "Legal Ethics and Artificial Intelligence Ethics" and "Law and Applied Ethics," students can systematically learn the basic theories and principles of ethics and cultivate correct ethical values. When analyzing and solving legal problems, students can start from an ethical and moral perspective, comprehensively consider the social impact of legal decisions, and make the application of law more in line with the requirements of fairness and justice. For example, in discussing the liability determination of self-driving cars in the event of an accident, students need to determine the responsible party based on legal provisions while also

considering how to balance the interests of all parties from an ethical perspective, protect the rights of victims, and promote the development of autonomous driving technology.

In addition, the offering of interdisciplinary courses can also adopt a variety of teaching methods and models. For example, experts in the field of computer science and ethicists can be invited to teach together with law teachers to share different disciplinary views and research methods. Students can be organized to participate in interdisciplinary practical projects, such as forming teams to jointly solve a legal and ethical problem involving the application of AI technology. Through practical operations, students' team collaboration abilities and interdisciplinary thinking skills can be cultivated. Interdisciplinary academic exchange activities can also be carried out, such as holding academic seminars and lectures, to provide students with opportunities to communicate with scholars and peers from different disciplinary backgrounds and broaden their academic horizons.

4.3 Strengthening the Cultivation of Students' Legal Thinking

4.3.1 Guiding Students to Use AI Tools Correctly

The widespread use of legal technology tools (such as legal research systems, contract analysis software, case prediction tools, etc.) has brought great convenience to legal practice, but it also brings the risk of students over-relying on technology. In order to cultivate students' independent legal thinking and critical analysis abilities, university law education must guide students to use AI tools correctly, so that they can enjoy the convenience of technology while maintaining their ability to deeply analyze legal provisions and cases.

Firstly, universities should educate students to clarify the auxiliary nature of AI tools, emphasizing their role as "tools" rather than "replacements." For example, in legal research, AI tools can quickly locate relevant legal provisions and precedents, but students need to independently judge the accuracy and applicability of the search results. Teachers can use case analysis teaching to show how to combine the output of AI tools with their own legal knowledge to draw more comprehensive conclusions.

Secondly, cultivate independent thinking and judgment abilities. Set up critical thinking training sessions in the curriculum, requiring students to evaluate whether the results generated by AI tools are biased or erroneous. In addition, although AI tools can quickly provide information on legal provisions and cases, their analysis often stays on the surface and cannot reveal the deeper legal principles and policy considerations. Universities should guide students to deeply analyze legal provisions and cases and cultivate their solid legal foundation. In teaching, teachers can require students to interpret legal provisions article by article and discuss their applicability in combination with specific cases. Through case teaching methods, guide students to deeply analyze the legal issues, reasons for judgment, and social impact of typical cases. For example, when analyzing a case involving data privacy, students need to discuss how the court balances individual privacy rights with public interests, rather than relying solely on the judgment abstracts extracted by AI tools.

4.3.2 Strengthening Ethical and Value Education for Students

Law teaching in the AI era should fully integrate ethical and value education to cultivate students' sense of social responsibility and professional ethics. To this end, in the curriculum setting, specialized courses closely related to AI ethics should be offered, such as "Frontiers of Legal Ethics in the AI Era." In this course, various ethical controversies caused by AI technology in legal practice are systematically analyzed, discussing from multiple dimensions such as data privacy protection, algorithm fairness, and the determination of legal liability of artificial intelligence. Guide students to deeply think about the ethical roots and value conflicts behind these issues and cultivate their keen insight into emerging legal ethical issues. At the same time, in the teaching of traditional law courses such as civil law, criminal law, and administrative law, AI elements should be skillfully integrated to explore ethical values. For example, when teaching tort liability in civil law, introduce cases of AI products causing harm to people, and let students analyze how to balance the value relationship between innovation and development and rights protection in determining liability, and consider the ethical responsibilities that technology developers, users, and regulators should bear respectively.

In mock court practical activities, introduce cases of copyright disputes over AI-created works, requiring students not only to debate based on legal provisions but also to elaborate on the rationality of protecting and restricting AI-created results from an ethical perspective, and cultivate their awareness of adhering to legal professional ethics and maintaining social fairness and justice in practice. By fully integrating ethical and value education into the entire process of law teaching, students can continuously strengthen their understanding and practice of social responsibility

and professional ethics in theoretical learning, classroom discussions, and practical operations. In law clinic teaching, when students handle real cases involving AI-related legal issues, instructors should guide students to pay attention to the ethical impact behind the cases. For example, when providing legal aid to clients whose rights and interests have been damaged by data leakage, consider how to protect clients' rights and interests while promoting the formation of good ethical norms in the data processing industry.

By fully integrating ethical and value education into the entire process of law teaching, students can continuously strengthen their understanding and practice of social responsibility and professional ethics in theoretical learning, classroom discussions, and practical operations. In this way, legal professionals can be cultivated to have a solid foundation of legal professional knowledge, uphold correct ethical values, and prudently deal with various legal issues in the AI era, contributing to the construction of a fair, just, and orderly law-based society.

5 Conclusion

The AI era has brought many challenges to university law teaching, but it also provides opportunities for teaching reform. By innovating teaching models, updating knowledge systems, and strengthening the cultivation of students' legal thinking, these challenges can be effectively addressed. In the future, university law teaching should further deepen reforms, strengthen cooperation with the legal industry, continuously adapt to the development needs of the AI era, and cultivate more high-quality legal talents with innovation and practical abilities, making greater contributions to the construction of a law-based society.

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