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RESEARCH ARTICLE

On Constructing an Experimental Teaching System for Digital Jurisprudence Courses*

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Abstract

Developing digital jurisprudence, strengthening the practical teaching of law, and developing a practical teaching system of digital jurisprudence in colleges and universities based on the new era and in line with the law of scientific development are major issues of reforming and developing higher legal education in contemporary China. Taking XI Jinping Thought on the Rule of Law as the fundamental guide, focusing on the global cutting-edge topic of comprehensive and profound cross-integration of digital technology and legal education, and proceeding in line with the general law of law experimental courses in colleges and universities, we discuss how to construct the experimental teaching system for digital jurisprudence courses, and put forward a set of new ideas. An experimental teaching system for digital jurisprudence courses replenishes and improves the traditional law teaching mode, and innovates the mode of law talent cultivation under the new social form and new educational environment.

Keywords digital jurisprudence; experimental teaching; law laboratory; interdisciplinarity

The beginning of the internet, big data, and artificial intelligence (AI) era is profoundly changing the higher education system and teaching mode of law. In February 2023, the General Office of the Communist Party of China (CPC) Central Committee and the General Office of the State Council issued the *Opinions on Strengthening Legal Education and Theoretical Research in the New Era* (hereinafter referred to as the "*Opinions*"), to drive emerging disciplines, such as digital jurisprudence, and "integrate law with natural sciences and other disciplines, so as to cultivate high-quality composite rule-of-law talents."[1] The *Opinions* emphatically puts forward the vision to update and improve the curriculum system of law major, construct theoretical and practical teaching courses of law major as a whole, adapt to the new form and new requirements of "internet + education," innovate teaching methods and means, strengthen legal practice teaching, deepen collaboration in talent cultivation, deeply connect law schools and law enforcement departments on personnel training program formulation, curriculum and textbook construction, student internship, etc.,[2] and provide guiding ideology for legal practice teaching in colleges and universities in the new era. Constructing a practical teaching system of digital jurisprudence in colleges and

[1] General Office of the CPC Central Committee and the General Office of the State Council, 关于加强新时代法学教育和法学理论研究的意见 (Opinions on Strengthening Legal Education and Theoretical Research in the New Era), 人民日报 (*People's Daily*), p. 1, Feb. 27, 2023.
[2] Id.

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universities based on the new era and in line with the law of scientific development is a major topic of reforming and developing higher legal education in contemporary China. For this reason, this article takes XI Jinping Thought on the Rule of Law as the fundamental guide to discuss how to construct an experimental teaching system of digital jurisprudence courses based on general law experimental courses in colleges and universities.

I Status of Experimental Teaching in Digital Jurisprudence Courses

In recent years, digital jurisprudence has received widespread attention in universities worldwide. In foreign countries, especially in Europe and the United States, digital legal education is gradually developing. Students learn both legal theory and how to use technological tools to deal with legal issues. In China, digital jurisprudence is also increasingly valued, and many universities offer courses related to digital jurisprudence.

A Domestic Universities

The Law School of Renmin University of China has incorporated experimental practice teaching into its core research and education system, and delved into the intersection of law, science, and technology.[3] The "digital jurisprudence" minor degree program provides law courses closely related to computer technology. "Legal data analysis practice" highlights the characteristics of experimental teaching. Students conduct experiments based on laboratory research, which is no longer limited to basic data extraction. They are encouraged to extract valuable research data based on their own understanding and gain meaningful results. This teaching mode trains their experimental operation capacity and research and innovation abilities.[4] The "internet court virtual simulation experiment" also provides valuable practical opportunities. This experimental project simulates the litigation interface and functions of the internet court, so that students can practice in an all-round and multi-angle way and learn its operational skills and litigation process. It offers rich resources and platforms, and a learning environment of experimental practice and research. Such educational ideas and models undoubtedly set the goal for legal research and education.

In 2018, the School of Law, Tsinghua University launched a full-time Juris Master program in "Computational Law," aiming to cultivate high-end interdisciplinary talents who can comprehensively apply law and information technology and have cross-field integration thinking.[5] The program not only imparts theoretical knowledge, but also helps improve practical ability. The School of Law offers a series of special experimental elective courses in "Computational Law," including AI Practical Course, Big Data Practical Course, and Fundamentals of Computer Programming (Python). It teaches corresponding theoretical

[3] WANG Yi, SHEN Weixing & LONG Weiqiu, et al., "新时代复合型法治人才的培养" 大家谈（笔谈）(Seminar on Interdisciplinary Law Education in the New Era [Journal Papers]) , 2 西北工业大学学报（社会科学版）(*Journal of Northwestern Polytechnical University* [*Social Sciences*]), 106–123 (2022).

[4] ZHANG Jiyu, 大数据时代中国司法面临的主要挑战与机遇——兼论大数据时代司法对法学研究及人才培养的需求 (Major Challenges and Opportunities for China's Judicial System in the Era of Big Data: On Needs of Judicial System for Legal Research and Talent Training in the Era of Big Data), 6 法制与社会发展 (*Law and Social Development*), 52–61 (2016).

[5] See WANG, et al., fn. 3.

knowledge, and provides opportunities for practices, so that the students can really experience the cross-integration of information technology and legal knowledge, master the skill to carry out legal practice and research, and better adapt to the progress and needs of the law in the new era.

The Center for AI Governance and Law at Shanghai Jiao Tong University actively integrates the cutting-edge knowledge of AI and big data into law, and initiates a new direction to innovate the social governance model and the paradigm of law research.[6] Through interdisciplinary research, the Center provides new ideas and solutions for the governance framework in AI and big data, and actively constructs a pluralistic rule system of policies, ethics, and laws and regulations. Its research directions, such as AI governance, legal big data applications, and institutionalized data governance, are the most urgent and important topics nowadays. They build a bridge among industries, universities, research institutions, and application entities, quickly apply research results, and innovate science, technology, and rules in an integrated manner. These in-depth studies have laid a solid foundation for experimental teaching activities.

The School of Law, Xi'an Jiaotong University attaches great importance to experimental practice teaching.[7] The School of Law owns a first-class international law library in the Asia-Pacific region and a law workshop. The law workshop includes a moot court laboratory, a moot arbitral court laboratory, and a computer teaching laboratory center, known as a professional practice venue. Here, the students could learn about the law, experience its real operating process, and exercise their practical legal skills. Combined with the interdisciplinary doctoral and master's degree programs of Legal Governance, interdisciplinary courses are offered in several advantageous disciplines. The emphasis is placed on compound knowledge background and interdisciplinary knowledge of law.[8]

Relying on China's first judicial big data research base for people's courts set by the Supreme People's Court, the School of Law of Southeast University has deeply integrated the resources and pioneered the postgraduate personnel training direction of legal big data and AI. This move clarifies its legal research direction in the new era,[9] and lays a solid foundation for experimental practice teaching. In the curriculum system, it emphasizes the application and social demands of the internet, big data, and AI technologies. It pays attention to traditional legal theory research, and fully expands the courses of technological innovation and legal practice to ensure cross-integration and complementarity among disciplines.[10] Newly added courses such as "Introduction to Legal Big Data and AI," "Introduction to Legal Knowledge Mapping," and "Legal Big Data Algorithms and Logic" provide options for a comprehensive

[6] JI Weidong, 新文科的学术范式与集群化 (Academic Paradigm and Cluster of New Liberal Arts), 1 上海交通大学学报 (哲学社会科学版) (*Journal of Shanghai Jiao Tong University* [*Philosophy and Social Sciences*]), 11–14 (2020).

[7] See WANG, et al., fn. 3.

[8] WANG Yue & ZHAN Ke, 我国网络与信息法学科建设进路初探——以域外网络与信息安全法学科建设经验为视角 (Preliminary Study on Constructing the Discipline of Network and Information Law in China: From Experience of Disciplines of Network and Information Security Law Beyond China's Territory), 1 网络信息法学研究 (*Journal of Cyber and Information Law*), 237–263 (2008).

[9] WANG Lusheng, 以 "领域理论" 培养人工智能法学人才 (Cultivating Artificial Intelligence Law Talents with "Domain Theory"), 中国社会科学报 (*Chinese Social Sciences Today*), p. 8, Jun. 21, 2022.

[10] LIU Yanhong & SHAN Pingji, 以专业深度交叉融合助推新法科建设 (Construct New Law Discipline by Professional and Deep Cross-Vergence), 民主与法制时报 (*The Democracy and Law Times*), p. 5, Feb. 4, 2021.

and in-depth understanding of law application and its value when new technologies are emerging.

The Law School of Sichuan University has demonstrated its emphasis on the intersection of law and new technologies in terms of both research and teaching.[11] The Law School has established a legal big data laboratory, an institute of intelligent justice, and a research center for legal big data and AI. They provide abundant research resources and academic support for students,[12] ensuring the authority and cutting-edge nature of teaching content. The Law School also launched the "Legal Big Data Analysis" course jointly organized by the School of Computer Science, the School of Mathematics and the School of Law, covering a number of cutting-edge fields like machine learning, deep learning, judicial application of AI, and computational jurisprudence. The course comprehensively demonstrates the theoretical foundation and application prospect of the unity of law and big data, thus the students could enjoy the multidisciplinary teaching method and thinking mode, deeply understand the cross-integration of law and big data from multiple perspectives, and have a broader platform for academic research and experimental practice.

The School of Law at Beijing Institute of Technology established an intelligent technology law research center in 2018, dedicated to deeply integrating law and cutting-edge technologies. It integrates AI technology into civil and commercial law, litigation law, and international law to cultivate students' interdisciplinary thinking. The School of Law also designed a series of "law + technology" featured courses,[13] the cross-integration of national defense technology, AI, network technology, and law. In 2021, the School of Law and the School of Computer Science & Technology jointly launched the first "Law–AI" dual-bachelor-degree comprehensive talent cultivation program in China, and offered several compulsory laboratory courses for computer science majors, including "Programming Methods and Practice" and "Machine Learning Practice." The program explores a new mode of experimental practice teaching and cultivates students' innovative thinking and practical abilities.

B Overseas Universities

The Faculty of Law, University of Oxford, has developed an educational concept of technology-enhanced legal services. In 2019, it launched an interdisciplinary course called "Law and Computer Science." It explores how computer scientists and lawyers will work together in the future. This course includes theoretical lectures, hands-on lab work, and experiential learning in interdisciplinary teamwork. The course was attended by 12 students majoring in computer science and 12 majoring in law. During the theory sessions, students had in-depth talks to explore the cross-applications and challenges of law and computer science. In the experimental sessions, students were grouped for interdisciplinary cooperation.

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[11] ZUO Weimin, 大数据时代法学研究的谱系面向：自科法学？(Pedigree Orientation of Legal Research in the Age of Big Data: Natural-Science Jurisprudence?), 6 政法论坛 (*Tribune of Political Science and Law*), 32–43 (2022).

[12] WANG Yihan & WANG Zhu, 医疗人工智能侵权责任法律问题研究 (Research on Legal Issues of Medical Artificial Intelligence Tort Liability), 3 云南师范大学学报（哲学社会科学版）(*Journal of Yunnan Normal University* [*Humanities and Social Sciences Edition*]), 102–110 (2020).

[13] GONG Xiangqian & LI Shouping, "法律 + 科技" 复合型高端人才培养的实践与思考 (Practice and Reflection on Cultivating "Law + Science and Technology" Versatile High-End Talents), 2 学位与研究生教育 (*Academic Degrees & Graduate Education*), 41–45 (2019).

They used specific digital technologies to create a legal technology tool. In this process, students majoring in law and computer science were challenged, respectively: Law students thought about the legal application of technology, as well as the legal supervision and management over the technology tool; computer science students thought about the technical issues related to the tool design. To facilitate the experiment, the course scheduled six formal meetings on technical introduction, project plan, mid-term check, and final presentation. The program provides students with opportunities for interdisciplinary learning, and collaboration brimming with innovation and exploration.

The School of Law, University of Bologna goes beyond the traditional theoretical and applied research of law, adopts a legal-technological approach, emphasizes a multidisciplinary approach uniting legal knowledge, science, and technology; and provides interdisciplinary-oriented teaching and research. This interdisciplinary nature is shown by the courses "Big Data and Privacy Protection" and "Information Technology and Law" offered to postgraduate students. The courses "Programming for Lawyers" and "Data Science for Lawyers" guide students to understand the critical role of programming and data science in modern legal practice, as well as show how legal knowledge can be combined with programming and data science, and how technology can be utilized to perfect legal research and practice.

Stanford Law School teaches law in an interdisciplinary, geographically collaborative, hands-on manner. Commanding the rich intellectual resources of Stanford University, Silicon Valley, and the Pacific Rim, it provides numerous opportunities for practice, and has launched a "Law, Science & Technology" Master of Laws program integrating specialized knowledge of the law, e-commerce, biotechnology, and intellectual property, and an ever-expanding and up-to-date legal curriculum related to information sciences, communications law, and the internet. These interdisciplinary courses provide valuable opportunities to understand complex legal issues, cultivate critical thinking, and develop problem-solving capabilities. Seminars on law, science, and technology practice are organized for students to discuss practical cutting-edge legal issues at the intersection of law and technology. A combination of theory and practice could help students understand how law and technology interact in the real world.

The UC Berkeley Center for Law & Technology offers a broad range of legal programs in intellectual property, privacy, and other cross-cutting areas related to technology. Its Center for Law & Technology has a long-standing focus on integrated teaching and research in law and technology. The key areas of legal and technical issues include blockchain, fintech, AI, social media, and video games. By selecting their favorites from 19 computer-focused courses, including Computer Law, Computer Crime, Information Privacy Law, Lawyering Technology, and Blockchain Innovation, students could gain an in-depth understanding of how computers and data science affect policy regulation, criminal investigation, and business transactions, thus getting well-prepared for future legal practice at the intersection.

Columbia Law School integrates data technology into the forefront of legal research and practice, and studies crime research, consumer bankruptcy, United States and European Union competition law, and Chinese judicial decisions with state-of-the-art data science methods such as machine learning and natural language processing. The Law School offers a range of courses that explore how AI affects the study of almost all legal sectors to varying degrees, like business, antitrust, criminal justice, cybersecurity, human rights, intellectual property,

and securities regulation. Students could benefit from the theoretical lectures, and deeply understand and properly apply these cutting-edge technologies in the immersive environment of the labs, laying a solid foundation for their careers.

II Challenges Faced by Digital Jurisprudence Course Experiments and Their Causes

Currently, experimental courses in digital jurisprudence have not been widely offered, and the challenges and causes can be summarized as four aspects.

The first is the challenge of disciplinary integration. Digital technology is a branch of science and technology, while the law of the social sciences. It will be difficult for them to integrate with each other. From a theoretical perspective, they are markedly different in theoretical foundation, academic tradition, and methodology. Digital technology focuses on how to digitize various information and services to highlight practicality, while law emphasizes the study and understanding of legal rules in human society to highlight fairness. From a practical perspective, they greatly differ from each other. Digital technology focuses on technological implementation, while law focuses on its formulation, interpretation, and enforcement. How to ensure their deep integration is a common challenge.

The second is the challenge of curriculum matching. To begin with, the original legal curriculum system was established before digital technology was widely applied. Therefore, its core content, teaching methods, and evaluation standards did not take digital technology into full consideration, failing to properly match the new digital jurisprudence experimental courses and the existing curriculum system. When digital technology is developing and widely applied, new challenges are posed to legal rules and ethical ethics, and the legal curriculum system is in urgent need of updating. For example, legal education emphasizes legal principles teaching and case analysis, while digital technology education emphasizes technological implementation and experimental operation. Therefore, a new teaching plan and practical method shall be designed for digital jurisprudence experimental courses, which undoubtedly increases the difficulty of setting up the course.

The third is the challenge of technological innovation. Digital technology, as an emerging technology, is constantly updated with new iterations, leading to curriculum design and implementation being challenged. First, its update requires textbooks and teaching content to be continuously updated. Its rapid progress gives birth to new theories, methods, and tools that emerge one after another. Therefore, teachers shall constantly learn new knowledge and update teaching content, so that textbooks can keep abreast of the latest progress in digital technology, otherwise students may learn outdated knowledge. Meanwhile, updates to digital technology also pose higher requirements for curriculum design. The need to design experimental projects that reflect the latest progress in digital technology and meet the requirements of legal education undoubtedly exacerbates the difficulty of course design. In addition, updates to digital technology challenge curriculum implementation. New digital technologies may require more advanced hardware configurations and more complex software environments, and call for continuous investment in equipment and resources to facilitate experiments.

The fourth is the challenge of ethical risk. First, the widespread application of digital

technology has endangered ethics. Some people are worried about the status of humans, who may be replaced by machines in the future. It might harm human society and even human civilization. Further research is needed to find reasonable solutions. Furthermore, law is a discipline with high practicality and applicability, and judicial practice requires confidentiality. When dealing with information, it may involve risk issues such as state secrets, trade secrets, and personal privacy. Digital law experimental courses serve law applications, and these risks also pose huge challenges to them.

III The Value Positioning of Experimental Teaching System in Digital Jurisprudence Courses

This article takes XI Jinping Thought on the Rule of Law as the fundamental guidance to construct an experimental teaching system for digital jurisprudence courses, adheres to the legal education concept of cultivating both virtue and talents,[14] and demonstrates the characteristics and requirements of socialist rule-of-law construction with Chinese characteristics in the new era.[15] With this guidance, the value positioning of the experimental teaching system for digital jurisprudence courses shall be reexamined in the following two respects.

A Technical, Legal, or Composite Elites

Although it is the breakthrough point of the core value of the digital legal experimental system, digital technology has neither practical rationality nor the value logic of law. Technology and law belong to the objective and subjective worlds, respectively. Technical and legal experiments cannot be compared with each other due to the fundamental difference between technical and normative logic. Of course, it cannot be assumed that the experimental system of digital jurisprudence is confined to legal practice. The value of the digital legal experimental system should not be limited to cultivating traditional legal elites or legislative and judicial technical elites in a narrow sense, nor should it be designed to cultivate dedicated digital technical elites who know nothing about the legal profession. Instead, it should be positioned to cultivate digital legal elites who have grown from the comprehensive and deep integration of digital technology and legal knowledge. This is a new type of innovative composite talent, whose career value is neither oriented to the legal profession alone nor limited to digital technology professions such as AI and big data. Instead, they shall be a new type of high-end talent cultivated for the entire society, capable of intelligent legislation, intelligent law enforcement, intelligent judiciary, intelligent legal supervision, and intelligent legal culture construction. Such composite elites are both outstanding engineers and legal professionals, who can easily transform knowledge and innovate in both legal, and engineering and technical communities.

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[14] ZHANG Wenxian, 加强新时代法学教育和法学理论研究的纲领性文献——对《关于加强新时代法学教育和法学理论研究的意见》的解读 (Guiding Document on Strengthening Legal Education and Theoretical Research in the New Era: Interpretation of *Opinions on Strengthening Legal Education and Theoretical Research in the New Era*), 9 中国大学教学 (*China University Teaching*), 8–14 (2023).

[15] WANG Xigen, 论习近平法治思想的时代精神 (On Time Spirit of XI Jinping Thought on the Rule of Law), 1 中国法学 (*China Legal Science*), 29–47 (2021).

B Imitative or Innovative Thinking

Excellent legal talents should be innovative and pioneering in thinking, rather than reproduce the production process of knowledge or verify the knowledge obtained from textbooks through experiments, which is a primitive and low-level experimental goal. For example, it is difficult to achieve the value goals of reflection and innovation through moot court or observing court trials. The fundamental purpose of an experimental system of digital jurisprudence is to cultivate senior talents who are committed to legalizing digital technology and digitizing the law based on the two-way knowledge of digital technology and the legal profession, and to shape the inherent digital legal technology innovation through experiments. Therefore, innovation is the vitality of the experimental system of digital jurisprudence. Some people believe that legal education is conservative education based on existing normative systems, and that the laws just copy themselves mechanically without innovation. Indeed, legal professional activities must strictly follow legal norms, and cannot be implemented in a deviating manner. However, its hysteresis quality, principled nature, and limited coverage constrain its value and function. Although legal norms are crucial in legislation, judicial enforcement activities may be challenged by new problems, contradictions, and relationships that arise unexpectedly during legislation. At this time, it is urgent to fill legal loopholes and resolve legal conflicts in a timely manner with positive administration of justice and law enforcement, to maintain social fairness. Therefore, legal professionals should have both conservative and innovative thinking. The experimental system of digital jurisprudence should fully consider this characteristic, guide legal innovation through technological innovation, and serve technological innovation through legal innovation, which is precisely the major mission of digital jurisprudence courses.

Based on the integration and innovation of technology and logic, the value positioning of the experimental teaching system of digital jurisprudence should be based on the scenario application of legal knowledge, with the collecting and processing of legal big data as the intermediary, and cultivating students' innovation abilities in legalizing digital technology and digitalizing the law through the comprehensive and deep integration of digital and legal technology. Specifically, it includes three layers of value objectives from the bottom to the top. The first level means cultivating students' abilities to replicate digital jurisprudence practice, with intelligent simulation legal experiments, shared intelligent courts, and simulated intelligent trials as the main value carriers. The second level, as the middle one, means to train students to collect, organize, distinguish, and apply legal big data, that is, to use digital and legal knowledge to tap, summarize, and analyze big data, and provide raw materials for digital jurisprudence practice. The third and supreme level shapes the ability to flexibly use legal big data for AI legislation, law enforcement, and administration of justice, as well as to implement intelligence in economic and social governance through digital rule-of-law technology.

IV Constructing an Experimental Teaching System for Digital Jurisprudence Courses

Based on the value positioning of the experimental teaching system of digital jurisprudence courses, the framework is constructed, as shown in Figure 1, on the three major sections of

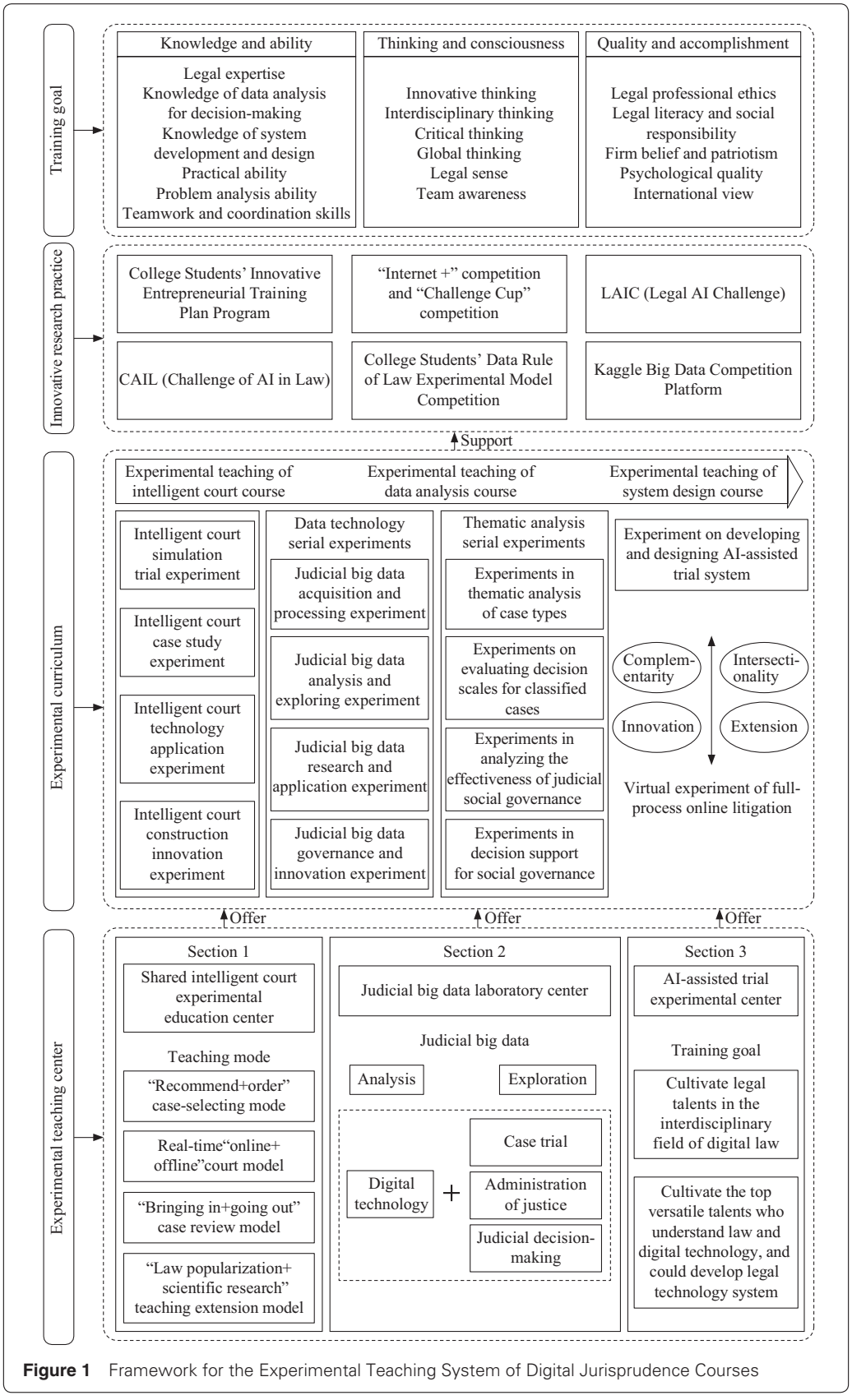

Figure 1 Framework for the Experimental Teaching System of Digital Jurisprudence Courses

the experimental teaching center, namely, the shared intelligent court experimental education center, the judicial big data experimental center, and the AI trial experimental center. The three sections give full play to the resource advantages of the judicial organs in legal practice, judicial data accumulation, and intelligent court construction, as well as the disciplinary advantages of colleges and universities, cultivating legal talents well fitting into the digital era.

Based on the three major sections, three different types of experimental courses, namely intelligent court, data analysis, and system design, are offered to jointly form the experimental teaching system of digital jurisprudence courses, which go forward one by one and interact with each other. The intelligent court course includes basic and innovative experiments related to intelligent court, which consolidate and deepen the students' legal theoretical knowledge, construct a professional framework for legal theoretical knowledge, and impart the practical techniques and methods of intelligent court. The data analysis course covers experimental content related to judicial big data. Judicial big data technology and analysis methods are brought into experimental design to improve students' technical application and problem-solving abilities. The theoretical knowledge of judicial big data is closely combined with its application. The system design course includes AI-assisted trial system development and design, as well as virtual experiments for online full-process litigation. It systematically, comprehensively, and deeply applies the methods and technologies learned from the intelligent court course and data analysis course, and trains students' system development and design abilities and innovative thinking.

Based on the experimental teaching system of digital jurisprudence courses, we develop and explore innovative research practices, to bring the latest progress and research results into students' competitions, like the LAIC (Legal AI Challenge), CAIL (Challenge of AI in Law), and the College Students' Data Rule-of-Law Experimental Model Competition, so as to cultivate their scientific research hands-on abilities and innovative spirit.

The experimental teaching system for digital jurisprudence courses is an important exploration for law schools to reform legal practice education, and to train composite legal talents with both theoretical and practical duties in accordance with the new strategy and requirements of cultivating outstanding legal talents for the comprehensive rule of law in the new era.

A Shared Intelligent Court Experimental Education Center

With judicial trial resources, typical, inspiring, and socially-concerned cases are heard in the "shared intelligent court" within the jurisdiction. The "shared intelligent court" real-life experiment is an immersive, interactive, and interesting method for the students to observe and adapt to the current model of online and offline trial systems, and to learn how judicial big data can be applied in practice. By observing the case at short range, the discussion on element extraction from judicial big data and judicial assistance in social governance decision-making can be extended. At the same time, opinions on shortcomings and improving methods of intelligence can be exchanged. This section supports courses such as intelligent court simulation trial experiments, intelligent court case study experiments, intelligent court technology application experiments, and intelligent court innovation experiments.

In the intelligent court simulation trial experiment, students can experience the trial processes online and offline. By playing different roles such as judge, lawyer, party and witness, they can participate in the trial, debate, and adjudication of cases, gain a deeper understanding of the operational mode of intelligent court in trial procedure, evidence presentation, case query, and automatic judgment generation. In addition, they can experience various functional applications of intelligent courts, such as video live streaming, electronic files, speech recognition, facial recognition, and AI-assisted judgments, to enhance the students' legal skills and literacy. Experimental courses can set different learning objectives and evaluation criteria based on different types and difficulty levels of cases, so as to cultivate students' legal practice capacities and communication and collaboration abilities.

The intelligent court case study experiment utilizes shared intelligent court cases for students to observe trials on site, fully discuss hot judicial issues, get inspired and exercise legal thinking, and provide multi-dimensional reference opinions for hot and controversial cases to increase their learning initiative and interactivity. Through the "recommend + order" case-selecting mode, students can choose cases they are interested in to analyze their background, controversial points, legal basis, and judgment results. They can also select cases of different types and difficulty levels based on their major directions and learning goals, such as criminal cases, civil cases, and administrative cases, to cultivate their abilities in case analysis, judgment, and legal application. It is also possible to invite judges responsible for relevant cases from judicial organs to comment on key points in specific cases, conduct communication and interaction, and exercise students' legal thinking and expression abilities.

Intelligent court technology application experiments incorporate the basic technologies and concepts of intelligent court applications, including digital technologies such as natural language processing and deep learning in intelligent trials, as well as how to use digital technologies to improve trial efficiency and quality. Through practical teaching, teachers could deepen their understanding of the cutting-edge progress of digital technology in intelligent courts, experience digital technology application in intelligent courts, cultivate students' innovation abilities and practical skills, and help them better adapt to their careers in the future.

The innovation experiment of intelligent court, by showcasing the latest achievements of intelligent court construction, teaches students the concept, characteristics, value, and significance of intelligent court, its architecture, functions, services, and management, as well as how to use the intelligent court system to improve judicial efficiency, maintain judicial fairness, and cultivate innovative thinking and practical abilities. By understanding the theoretical foundation, practical experience, and trends of intelligent court, the experiment participants could explore the current situation, challenges, and prospects of intelligent court, the difficult issues involved in its construction, put forward their own views and insights, and have their analytical and critical thinking abilities cultivated. In addition, experts and practitioners in constructing intelligent courts can be invited to give lectures, and students can be organized to visit and intern at intelligent courts.

B Experimental Center for Judicial Big Data

Based on the "shared intelligent court," a judicial big data experimental center works to

construct a collaborative and shared experimental teaching and research system centered on the needs of the times, driven by the judicial data platform, and integrated with industries, universities, and research institutions. Students are encouraged and supported to analyze, explore, and study judicial big data in an extended manner based on the cases' characteristics presented in the "shared intelligent court." Domestic universities make full use of the data resources and technical support of judicial organs, conduct in-depth data analysis portraits around case types, and provide judicial big data analysis reports on issues such as unifying the judgment scale of class cases, improving the efficiency of judicial social governance, and assisting the social governance decision-making process. Domestic universities provide judicial big data analysis reports and explore experimental analysis and application innovation of judicial big data based on digital technology and trial, judicial management, and judicial decision-making. This section supports two types of experiments on data technology and subject analysis.

The data technology experiment is designed to cultivate students' abilities to apply data technology in the judicial field, including four experimental courses, namely, judicial big data acquisition and processing, judicial big data analysis and exploration, judicial big data research and development (R&D) and application, and judicial big data governance and innovation. The experiment of judicial big data acquisition and processing allows students to master how to obtain and process the technology of judicial big data, such as data acquisition, data cleaning, and data integration. Students can use the data interface and tools provided by the judicial big data center to obtain different sources and types of judicial data, such as judgment documents, trial procedures, and judicial publicity. At the same time, they can preprocess and standardize the data for subsequent analysis and application, which can improve their data processing abilities and technical level. The judicial big data analysis and exploration experiment imparts the analyzing and exploring techniques of judicial big data, such as data statistics, data visualization, and data challenge. Students can make use of the data analyzing and mining platform provided by the judicial big data middle office to carry out in-depth analysis and mining of judicial data in different topics and fields, such as criminal cases, civil cases, and administrative cases, to discover the laws and values contained in judicial data, and display and exchange their own analyzing and exploring results to improve their abilities of data analysis and innovative thinking. The judicial big data R&D and application experiment helps students master the R&D and application technologies of judicial big data, such as AI, machine learning, and deep learning. Students can use the AI platform provided by the judicial big data center to design and implement their own judicial big data application schemes based on different judicial scenarios and needs, such as intelligence-assisted judgment, intelligent case recommendation, and intelligent early warning. At the same time, they can test and evaluate their own application schemes to improve their R&D and application abilities. The judicial big data governance and innovation experiment imparts judicial big data governance and innovation technologies, such as online public opinion monitoring, online public opinion analysis, and online public opinion intervention. Students can use the big data middle office of online public opinion provided by the judicial data center to collect, classify, analyze, and process online public opinions of different types and from different sources, such as social media, news media, forums,

and blogs, to understand the impact and role of online public opinions on judicial work. In addition, they can explore effective intervention and guidance strategies for online public opinions to improve their abilities to manage and innovate online public opinions.

Subject analysis experiments in series make a further step based on data technology experiments, aiming to deepen the understanding of legal cases, rulings, and social governance through applying big data technology methods, and improving practical application capabilities. Such courses are centered on four cores: case type analysis, judgment scale assessment for cases of the same category, judicial social governance effectiveness analysis, and social governance decision assistance. The subject analysis experiment of case types helps students to conduct subject analysis of different types of cases, such as keywords, subject words, and topic sentences, by combining the cases of "shared intelligent court." Students can use the text analysis and topic-exploring tools provided by the judicial big data center to extract and analyze data such as judgment documents, trial records, and videos, discover the core and characteristics of cases, and compare and summarize the subject distribution and differences of different types of cases, so as to improve their text analysis and topic-exploring abilities. The experiment helps students evaluate the judgment scale of the same type of cases by combining the cases of "shared intelligent court," such as the judgment result, judgment basis, and judgment standard. Students may use the judicial big data center to search for and compare the same or similar cases, find out the consistency and differences of the judgment scales, and assess the rationality and fairness of the judgment scales to give feedback, so as to improve their abilities to analyze the judgment documents and evaluate the judgment scales. The experiment on analyzing the efficacy of judicial social governance helps students analyze the efficacy of judicial social governance by combining "shared intelligent court" cases, such as judicial satisfaction, judicial credibility, and judicial influence. Students may use the tools of social survey data and judicial efficacy analysis provided by the judicial big data platform to evaluate and compare different types and levels of judicial institutions and cases, identify the advantages and disadvantages of judicial social governance efficacy, and explore and suggest ways to improve judicial social governance efficacy, so as to enhance their abilities in social survey and judicial efficacy analysis. The social governance decision-making assisted experiment helps students make auxiliary decisions on social governance by integrating "shared intelligent court" cases, such as predicting cases' trends, evaluating policy effects, and optimizing resource allocation. Students can use the AI platform and decision-aid tools provided by the judicial big data platform to design and implement their own social governance decision-making plans based on different social governance scenarios and needs, such as intelligent warning, intelligent policy recommendation, and intelligent resource allocation. At the same time, they can test and evaluate their decision-making plans to improve their abilities with AI applications and decision aids.

C AI-Assisted Trial Experimental Center

Based on the "shared intelligent court" and judicial big data experiment centers, the AI-assisted trial experiment system and full-simulation full-process online service system for litigation flow and service are built. This section supports courses of "AI-assisted trial

system development and design experiment" and "full-process online litigation simulation experiment," which cultivate students' abilities in system development and design, and their innovative thinking. The "full-process online litigation simulation experiment" focuses on simulating and implementing the online litigation process to help students understand and experience full-process digital litigation, while the "AI-assisted trial system development and design experiment" focuses on applying and realizing AI technology in the auxiliary trial system.

The R&D and design experiment of an AI-assisted trial system, combining with the cases' characteristics demonstrated by the "shared intelligent court" cases, fully utilizes judicial data resources and technical support. Experimental teaching helps students develop AI-assisted trial systems. The course is designed to impart the architecture, functions, and applications of AI-assisted trial systems, help students master the development and design methods and technologies of various stages of AI-assisted trial systems, including requirement analysis, system architecture, functional modules, interface specification, and testing and evaluation. Requirement analysis includes methods and techniques to analyze the requirements of AI-assisted trial systems, such as user research, case analysis, and functional requirements. Students can understand the process and steps of requirement analysis for AI-assisted trial systems, complete their own requirement analysis documents, and improve their abilities to analyze system design requirements. The system architecture includes the methods of system architecture and technologies of AI-assisted trial systems, such as module partitioning, hierarchical structure, component relationships, and architecture pattern. Students could understand the principles and methods of system architecture design for AI-assisted trial systems, complete their own system architecture diagram, and improve their system architecture capabilities in system design. The functional module includes the methods and technologies of the functional modules of the AI-assisted trial system, such as document processing, case hearings, and judicial services. Students can log in to the trial experiment system, select cases of different types and categories for function module operation, and complete their own function module codes, so as to improve their function module design abilities. The interface specification includes the interface specification methods and technologies of the AI-assisted trial system, such as data format, data transmission, and data security. Students can understand the design principles and methods of the interface specification of the trial system, and complete their own interface specification documents, so as to improve their interface specification abilities for the system design. The test and evaluation include testing and evaluating methods and technologies of AI-assisted trial systems, such as unit testing, integration testing, performance testing, and user testing. Students can log in to the AI-assisted trial experiment system, select cases of different types and fields for testing and evaluation, and complete their own test and evaluation reports, so as to improve their test and evaluation abilities of the system design. After designing and developing the system, they can further analyze the characteristics and difficulties of different types of judicial cases in developing an AI-assisted trial system, summarize the experience thereof, and put forward problems and suggestions through the development thereof.

The full-process online litigation simulation experiment truly restores the online litigation interface and functions, immersing students in full-process court litigation in a multi-mode

manner, including litigation counseling, dispute identification, and pre-litigation mediation. The students could learn to use a fully simulated system of full-process online litigation flow and litigation service for online filing, evidence submission, court hearings, mediation acceptance, and litigation document reception. It cultivates practical and communication skills in full-process online litigation, and lays a solid foundation for future practice in digital jurisprudence. By logging into the system, students could experience the litigation scenes as plaintiff, defendant, judge, lawyer, mediator, etc., feel the different standpoints, think about their claims, evidence, and defense strategies, and explore Chinese-style digital courts and online litigation models in depth. The system provides rich data and tools for students to simulate and experience different types and levels of judicial services and trial processes, where they can master multi-modal data processing technologies such as image, text, voice, and video, as well as cutting-edge technologies such as knowledge graphs and blockchain, so as to broaden their technical and practical vision for future work and research in digital jurisprudence. Students can also deeply analyze and study the characteristics and difficulties of different types of judicial cases in online full-process litigation, so as to provide reasonable suggestions to optimize the online litigation system. This practice-based research method could improve their practical operation abilities, and integrate practice and academic research in an organic manner.

The "AI-assisted trial system development and design experiment" and "full-process online litigation simulation experiment" share the goal of cultivating legal talents engaged in digital jurisprudence, inter-discipline, top-level versatile legal talents who understand law and digital technology, and are capable of developing legal technology systems. The two complement each other, jointly forming an organic whole of system design and experimental teaching.

The first is that the two courses complement each other to form a complete knowledge system of system design. The course of "full-process online litigation simulation experiment" is the source of rich case data, application scenarios, and user feedback for the other course, while the other one provides efficient system functions, technical support, and theoretical guidance for it.

The second is intersectionality. The two courses combine law and digital technology. Through the course of the "full-process online litigation simulation experiment," students can understand how digital technology changes traditional legal service models. Through the course of "AI-assisted trial system development and design experiment," students could directly develop and design legal technology systems, achieving the comprehensive application of law and digital technology.

The third is the innovativeness. The course of "AI-assisted trial system development and design experiment" provides technical support and innovative ideas for the course of "full-process online litigation simulation experiment." On the basis of understanding and mastering full-process online litigation, students can further learn to optimize the trial process with AI technology, develop a more intelligent and efficient online litigation service platform, and improve the efficiency and quality of legal services.

The fourth is extensibility. The two courses indicate academic and career possibilities. Those students who are interested in legal technology systems can deepen their understanding, and participate in legal technology system development and design through

the course "AI-assisted trial system development and design experiment." Those students interested in innovating online litigation services and legal services could explore new models and methods of digital litigation services through the course "full-process online litigation simulation experiment."

V Conclusion

The digital age is profoundly impacting the higher education system of law and its education model. Developing digital jurisprudence, strengthening the practical teaching of law, and constructing a practical teaching system of digital jurisprudence in colleges and universities based on the new era and in line with the law of scientific development are major issues of reforming and developing higher legal education in contemporary China. Taking XI Jinping Thought on the Rule of Law as the fundamental guide, and based on the general law of law experiment taught in colleges and universities, this paper explores how to construct an experimental teaching system for digital jurisprudence courses, and puts forward a set of new ideas. The system is centered on students, combines theory and practice, basic and cutting-edge knowledge, professional and interdisciplinary natures, and strengthens students' practical abilities and innovative spirit. The experimental teaching system of digital jurisprudence courses is an important supplement to and improvement of the traditional law teaching mode, and a new idea for the training mode of law talents under the new social form and new educational environment. It aims at cultivating high-quality and versatile law talents to meet the needs of the digital age.

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