

Ai-Facilitated Legal Education: Changes and Perseverance

Hong WU

School of Media and Law, Ningbotech University, Ningbo, Zhejiang 315099, China

mllxhfw2@gmail.com

Keywords: Artificial intelligence, Legal education, Ai-facilitated court, Ai-facilitated legal service, Teaching model, Legal thinking

Abstract: The current information revolution is characterized by the deep integration and development of new technologies such as the Internet, big data, artificial intelligence, blockchain and the Internet of Things. It has prompted the transformation of legal practices, which will certainly adjust the role of legal practitioners and thus promote law schools to keep pace with the developments in terms of discipline construction, teaching models and methods for cultivating “rule of law” talents. However, AI-facilitated legal education does not mean the total overthrow of traditional legal education, which should still adhere to the legal philosophies and legal thinking respected by legal practitioners.

1. Introduction

The deep integration and development of new technologies such as the Internet, big data, artificial intelligence, blockchain and the Internet of Things have brought about the so-called information revolution, which has prompted a shift in legal practices. The most typical examples are the “smart” systems such as “smart” courts, “smart” prosecution, “smart” administration, and “smart” law firms being promoted in China. At the same time, the information revolution is impacting established legal norms. For example, deep learning algorithms as an existential tool, super-tool and legal person have subverted the traditional understanding of monopolistic agreement rules in antitrust law. For another example, the Hangzhou Internet Court constructed versions 1.0 and 2.0 of blockchain evidence in two judicial cases in 2019, shaking up the rules for determining the authenticity of electronic evidence in traditional evidence law. These changes in legal practices will certainly adjust the role of legal practitioners, who will in turn promote law schools to keep pace with the development in the construction of disciplines, teaching models and methods for cultivating law students. However, AI-facilitated legal education does not mean the total overthrow of traditional legal education, it should still adhere to the legal philosophies and legal thinking respected by traditional legal education. In order to study this issue, this article proceeds as follows. First, Chapter 2 will introduce the practice of AI-facilitated courts and AI-facilitated legal services in various countries and their problems. Then, Chapter 3 will examine the responses of AI-facilitated legal education from both changes and perseverance perspectives. Finally, Chapter 4 will conclude the article.

2. Ai-Facilitated Courts and Ai-Facilitated Legal Services

2.1 Ai-Facilitated Courts

Against the background of optimization of algorithms and upgrading of computer hardware, adjudicative AIs will be more widely used in the future. So far, AI judges have already been in existence in some countries. For example, a privatized online court in the Netherlands has been experimenting with AI-independent adjudication in debt collection litigation since 2011, with AI judges making decisions based on adjudication models built by algorithmic engineers after analyzing key adjudicative elements that define debt collection litigation. In Estonia, AI judges have been designed at the national level in an attempt to solve the backlog problem by adjudicating small

claims litigation with a value of less than €7,000. The AI judges will analyze the materials and make a decision after the parties have entered their respective case files into the adjudication database, and the parties can appeal the decision of the AI judges to a human judge. In addition, AI technologies in the broad sense of adjudication are beginning to find a place in some common law countries. In the last decade or so, the use of risk-based algorithmic prediction has been expanding in U.S. criminal justice, covering multiple stages of criminal proceedings, including bail, sentencing, and parole.

Today, AI judging practice is characterized by several features. First, AI judges are beginning to be applied in the area of substantive decision making in the administration of justice, particularly criminal justice, especially in relation to sentencing and bail decisions. This practical application can be considered an important step forward from theory to practice for adjudicative AIs. However, there are limitations to AI judges. For example, the French judicial system piloted a judicial AI sentence outcome prediction software in two appellate courts in Rennes and Douai in 2017. After the pilot, the French judicial system concluded that the software was unable to determine the nuances of the cases and could not adequately take into account some extra-case factors. Subsequently, the French legislature enacted a ban on “judge profiling,” which prohibits data analysis, comparison, evaluation, and prediction based on the identity of judges, thus limiting such prediction of AI judges. It is important to note that even in the United States, where AI-facilitated risk assessment tools are widely used, the most critical area of adjudication - conviction or deciding the merits of a claim - is not left to AI judges. In summary, AIs can be applied to sentencing and small claims because the risk assessment in this area has an objective data base, and because the algorithm-based risk assessment techniques are quite quantitative and scientific in nature, and the algorithms can be competent and help improve the efficiency and consistency of sentencing and make the sentencing results trustworthy. However, AIs are not suitable for adjudicating core matters such as conviction, because on the one hand, such decisions are generally made by human judges, which have unshakable political and philosophical support and public support, and AI judges can hardly find a place in them; on the other hand, under the “beyond reasonable doubt” standard of proof of conviction in criminal cases, the requirement of inner conviction is difficult to be met by digital technologies. The principle of presumption of innocence needs to be applied when reasonable doubt cannot be ruled out, which makes it difficult for AI judges to meet the requirements of such a highly subjective proof process. In a nutshell, AI judges have become one of the actors in criminal justice in many countries, but they have not yet become a key player in criminal justice.

Second, AI judges are associated with methodological innovations such as the quantitative empirical approach. Almost all of the risk assessment tools currently used in U.S. criminal justice practice have been developed from traditional sentencing guidelines and related sentencing scales. As is well known, the U.S. sentencing guidelines system requires judges to determine the specific sentence of a convicted defendant based on an almost fixed number of factors, and has even been criticized as mechanistic sentencing as a result. In keeping with this tradition, risk assessment in sentencing takes the form of a “weighted checklist” in which the risk score is the sum of input values scored based on their statistical relevance to future offenses (as measured by rearrests or reconvictions). This simple model, modeled after the Sentencing Guidelines' Sentencing Scale, has taken the sentencing scale with its data-based features to the next level as an adjudicative aid. But it was actually the intervention of statistical methods that led to the important development of risk assessment tools. Specifically, they can be divided into two categories, simple risk assessment and complex risk assessment, depending on the statistical methods used. Simple risk assessment techniques do not utilize nonlinear or interactive relationships, but simple statistical assessment tools with integer weights and a small number of inputs can match the accuracy of complex predictive models in a number of areas. One study found that a simple risk assessment rule that considered only two characteristics, the defendant's age and prior failure to appear in court, yielded almost identical results for recidivism risk prediction as machine learning models (random forest and lasso regression) that included multiple available characteristics. In contrast, complex risk

assessment techniques such as COMPAS run primarily through standard regression models, but it incorporates more advanced machine learning models. In summary, AI judges, represented by recidivism risk assessment tools that are widely used in U.S. criminal justice practice, are a collection, summary, and modeling of human judges' decision-making practices. In other words, its basic model is empirical, and based on judicial big data, practice oriented to collect, analyze, and model sentencing practice data is the premise of its operation. Therefore, this risk assessment tool for analyzing and using data to make decisions is essentially a simpler or more complex empirical approach.

Once again, AI judges are associated with an epistemological transformation of data analytics. The formation of AI judges' algorithms relies on the feeding of massive amounts of data, which necessarily requires an epistemological system of AI judges centered on data analytics. In the U.S. state of Virginia, for example, the state had set a goal of diverting 25% of non-violent offenders from prison. Risk assessment was seen as an important method to reach this goal and was developed and tested by the Virginia Criminal Sentencing Commission, or VCSC, for nonviolent offenders in the late 1990s. It predicts which defendants are likely to be re-convicted of a felony within three years of their return to society by analyzing a random sample of data related to 1,500 sentenced nonincarcerated and recently released nonviolent offenders, using inputs such as the content of the conviction charge, the presence of other offenses, gender, age, employment and marital status, and records of recent arrests, incarcerations, and prior felony convictions. All of these data exist in past adjudication data, and what VCSC does is to collect and analyze data from these databases. Therefore, based on the past judicial practice, we can observe and extract the data, and summarize the patterns of the existing decisions, which will be the bases of the future AI judges' decisions.

Finally, AI judges are the presentation of “automated justice”, and they embody a “vending machine” type of decision-making mode. After abstracting and modeling the judicial decision-making experience in a statistical way, what judges and their assistants do is to identify and determine the key factors related to the decision of the judicial cases, and then let the algorithm score them one by one, and finally the AI judges calculate the total score and classify them into different levels and make recommendations on how to deal with them. In fact, the judges are not involved in the process of forming the conclusions and generally adopt the algorithm's results. With more than half of the U.S. states now using risk assessment software to assist judges in sentencing, it seems that the realization of Webb's vision of “vending machine” justice has finally seen the light of day after a century. In addition to the direct use of algorithms for judicial decision making, the indirect use of artificial intelligence for decision prediction is also beginning to emerge. Judgment prediction is based on modeling judges' decision patterns based on the results of existing decisions and predicting the likelihood of current and future decisions. For example, researchers at the Discovery Analytics Center at Virginia Tech used data-driven structural machine learning to analyze historical U.S. Supreme Court decisions in order to predict future decisions of the federal Supreme Court. The algorithm carefully analyzes the text of the decisions by calculating each discourse relevant to the point at issue, evaluating its weight, analyzing the extent to which different judges paid attention to it, and then judging the actual meaning of the textual expressions with reference to their votes. The resulting accuracy of the AI in predicting future Supreme Court decisions reached 79.46%.

2.2 Ai-Facilitated Legal Services

In 2016, IBM introduced an artificial intelligence robot that was applied to legal services by a US law firm, specializing in cases in the field of bankruptcy. An AI system developed by the University of London and the University of Sheffield can predict judicial decisions with an accuracy rate of 79%. China also launched its own legal AI bots in 2016. These design practices all aspire to achieve the autonomy and subjectivity of AIs in dealing with legal matters, i.e., the ability to think and make legal judgments like humans. If the machines of the industrial age replaced human physical labor, the intelligent machines of the information age are intended to replace human

mental labor.

The practice of AI-facilitated lawyering today is characterized by several features. First, AI-facilitated legal services and products may have high “intelligence”, but may have zero “emotional intelligence”. Legal service is a profession that mainly deals with human legal relations, and the target of lawyers' service is “living” people, not “static” objects. When lawyers provide legal services to clients, not only the information output of professional legal knowledge, but also many other aspects. For example, for the client in a state of emotional fluctuation, the lawyer should first do is to pacify his emotions, and then use his legal knowledge and practice experience to make professional analysis, judgment and interpretation of the case, the petition and the purpose of litigation. For example, when a lawyer and a client sign a service contract, there is a game of “bargaining”, in which the lawyer's communication skills and ability to assess the situation play a crucial role. Artificial intelligence may be able to provide efficient and accurate answers to legal knowledge, but it is not able to respond to the client's mood swings, which is the fundamental difference between it and human lawyers.

Secondly, the business areas that AI products can engage in should be characterized by formatting, data, and relatively fixed legal relationships, and its computing base and logic cannot be separated from the database set for it by humans, which is based on existing legal information and adjudication experience. When certain contract terms, commercial frameworks, and case situations have never been outdated before, I am afraid that intelligent robots will lose the basis for high-speed response. In short, an AI-facilitated legal product operates within the bounds of human cognitive control, except that it incorporates a great deal of information through deep learning and may reach conclusions that are closer to the law and prior adjudicative experience. The U.S. law firm's decision to have ROSS work in the bankruptcy field is even more so because of this consideration. If ROSS is used in the field of marriage and family, which involves human emotions, moods and passions, will it still be able to “respond to changes”? The first field of AI-facilitated legal services should be those high-end business fields that promote development, such as finance, securities, investment, competition, company-related business, etc., because the business model in these fields is relatively fixed and can be formatted and data-based. On the contrary, it is the low-end business areas that protect people's livelihood, such as divorce, inheritance, property, etc., because they involve emotional factors, folk customs, community conflicts, etc. It is yet to be examined whether AIs can function well. Artificial intelligence cannot respond to uncontrollable cases and social situations with a relatively fixed computing model and cognitive logic. The lawyering industry is a kind of service industry, and the practice of law is a kind of economic activity to a large extent. The reason why lawyers are closely related to the values of fairness, justice and order is that the content of their services - “law” is related to these values. Therefore, the lawyering service is actually a transaction activity with knowledge, information and experience as the main content.

Once again, AI-facilitated legal services cannot completely replace human lawyers, but it does not mean that it will not have an impact and influence on the lawyering industry. It has become an indisputable fact that technological achievements are widely used in legal services, and the information technologies represented by artificial intelligence profoundly affects the future direction of legal service industry and legal service market. The development of artificial intelligence technologies will not only improve the efficiency and quality of legal services, but also reshape the legal service market in terms of the structural composition, working style, profit model, resource deployment and use of lawyers' profession. When artificial intelligence is able to engage in some simple legal advice and judicial adjudication, it means that the legal professional community, including judges and lawyers, will start to face the challenges and impact it brings. The “idea” and “decision” itself is an expression of power. The use of intelligent robots actually shifts the power to provide legal advice and adjudicate legal disputes from the hands of lawyers and judges to the hands of program designers. The use of artificial intelligence to track changes in laws and regulations and judicial decisions in near-real time will have an impact on the value and function of some legal practice groups. At present, efficient and accurate legal information collection, categorization, storage, retrieval, and document reading have become the basic functions that “weak

AI” needs to have, while more advanced legal reasoning, case argumentation, conclusion extraction, case prediction, and legal consultation are the future directions of advanced AI development. When ordinary legal services (e.g., simple legal advice) can be performed by AI products, human resources will slowly withdraw from this market segment. In other words, the convenience, transparency, and manageability of AIs in providing legal services will be an advantage for clients. In this case, lawyers, paralegals, trainee lawyers and secretaries, who are not capable of engaging in complex legal practices, will be greatly affected.

3. Ai-Facilitated Legal Education as Responses: Changes and Perseverance

3.1 Changes

3.1.1 Changes of Disciplinary Construction

The accelerated integration of new technologies under the information revolution is greatly pushing legal research into a stage of deep multidisciplinary integration, and a number of new legal disciplines are gradually forming, such as data law, computational law, and cyber law. Many law schools in China and abroad have already established relevant research institutions, carried out relevant research projects, and offered relevant undergraduate and postgraduate course combinations according to their own advantages and characteristics. The more far-reaching ones even build inter-faculty and interdisciplinary programs, as well as graduate degrees in “Law + Technology”, “Internet + Law” and “Artificial Intelligence + Law”.

First, the development of AI-facilitated courts and legal practices pushes law schools to offer an interdisciplinary portfolio of “Law + Technology” courses. For example, the NJIT offers an interdisciplinary “Law, Technology, and Culture” program that includes core courses related to history, engineering, information technology, and business management for a total of 21 credits. The program focuses on law as it relates to technology, media, environment, health, and culture, providing students with knowledge in law and law-related business and administrative organizations, among other career fields. Its program features include the integration of law and culture. For example, it provides students with a broad perspective on legal thinking and practice through an examination of the historical culture of courts and the nature and social significance of law in different periods. Students are guided to experience careers such as patent attorney or patent examiner. The program also features advanced seminars in law, technology, and culture to learn interdisciplinary knowledge and thinking and to enhance professional pride; exceptionally talented students have the opportunity to join the JD program with Seton Hall Law School.

Another example is an interdisciplinary “Law + Technology” program. Stanford's LLM in Law, Science and Technology program offers students a high-level hands-on program in “law + technology” and academic and professional training in interdisciplinary analysis in areas such as e-commerce, jurisdiction and dispute resolution. The LL.M. program offers students a high level of practice in “Law + Technology” and academic and professional training in interdisciplinary analysis, including areas such as e-commerce, jurisdiction and dispute resolution, in the information industry, venture capital and high-tech startups, as well as intellectual property and contract law on biotechnology and health science issues. It is worth noting that Stanford's master's program is only available to students who have earned their law degrees outside the United States. The program combines the cross-disciplinary resources of Stanford University: in addition to our renowned faculty experts, it includes graduates from cutting-edge practices in the field of technology law, scientific and technical elites in the heart of Silicon Valley, alumni who have played prominent roles in addressing global economic and cultural challenges, and visiting scholars, university faculty, lawyers, business executives, and scientists from around the world. The master's program has six sub-programs, each with its own focus: the Center for Electronic Commerce, the Center for Internet and Society, the Center for Law and Bioscience, the Center for Computers and the Law, the Intellectual Property Litigation Clearinghouse, and the Transatlantic Technology Law Forum, which attracts experts in technology-oriented legal policy and features regular presentations by leading scholars and practitioners in the field.

Once again, interdisciplinary degrees are awarded. Several U.S. research universities, such as the University of Michigan and Carnegie Mellon University, have done so. For example, back in 1968, the University of Michigan created the Bachelor of General Studies (BGS) degree, which allows students with interdisciplinary interests to pursue their interests in a degree program that can be individually designed, without the constraints of departmental requirements. Unlike traditional degrees, the BGS program is explicitly positioned as an “interdisciplinary degree” that does not require a major as a foundation, but rather organizes knowledge, skills, and experience by selecting courses from multiple disciplines and departments. Specifically in the area of “law + technology,” UCLA offers a joint degree in collaboration with other professional schools and departments. For example, students in the School of Law can study at the Anderson School of Management and the School of Health Care, earning a joint degree on a credit-bearing basis; students in the Philosophy of Law and Technology program deepen their understanding of law by exploring the philosophy of technology, providing an ideal knowledge base for those pursuing academic careers.

3.1.2 Changes in Law Teaching Models and Methods

The information revolution empowers the deep integration of law teaching with new technologies, unblocks the connection channel between law practice and law teaching, and promotes the organic integration of knowledge education and practice education. At present, there are many large companies trying to build an Internet legal platform based on “smart” justice to realize automatic prediction of judges and automatic review of contract documents. If such a system is successfully developed, it will greatly promote the innovation of talent training mode, and case seminars and practical training will certainly bring innovation of teaching methods. In fact, even if it has not yet reached the stage of “smart” trial assistance for the generation of full-process adjudication documents, Hangzhou Internet Court has already brought positive promotion to the innovation of law student training methods. For example, Zhejiang University and Hangzhou Internet Court jointly offer “online courtroom” course, real-time access to Hangzhou Internet, full process observation and actively provide our “mock appeal trial”. This is an important exploration of “Internet + legal education”, which is of great significance to the innovation of talent legal student training and the achievement of talent training goals.

Artificial intelligence will become a wise assistant of law practice teaching. With the application of artificial intelligence and the use of intelligent rule of law resources, the future practical teaching of law will be characterized by the joint participation of students, teachers and intelligent machines. Among them, students are the inquirers, discoverers and collaborators, teachers are the supporters, guides and organizers, and intelligent machines coexist in the physical world and virtual information world, with the characteristics of synergy and openness, multi-dimensional symbiosis and intelligence enhancement. The interactive coupling between teaching and learning becomes closer than ever before, forming a human-machine symbiotic learning system. Human-computer collaboration and teacher-student interaction will become the norm. In such a teaching mode, artificial intelligence (intelligent teaching support system) will accompany and serve the interaction and growth of teachers and students at all times, providing knowledge support and knowledge organizing milestones around the needs of learning, and linking the real problems and needs of rule of law construction. With the support of intelligent assistants in the organization of the teaching process, teachers can carry forward the spirit of the “teacher-apprentice” system of teaching law and devote their efforts to teaching the analytical framework of jurisprudence and law, the tacit knowledge that cannot be replaced by machine learning, and overcome the limitations of formatted and formalized knowledge dissemination by artificial intelligence.

In summary, on the one hand, new technologies are used to complement the teaching of law in the classroom. For example, with the help of the Internet, students can actively study the topics assigned by the teacher through online videos, such as bilibili and mugshots, before class. Then, in the classroom, the teacher discusses the topic with the students in depth. This expands the teaching space and time, and the teacher's role is changed to that of a guide and enlightener, while students shift from passive acceptance to independent exploration and active learning, which ultimately

helps students develop legal thinking skills. For example, the case push function of judicial big data provides rich and scientific materials for case teaching, helping students to easily obtain the difficult problems in judicial practice as well as the collection of typical cases and the analysis of such cases. On the other hand, the new technology is used to fully restore the legal practice scene and innovate the teaching of law practice. For example, through real-time access to the online trial platform of the Smart Court, the “synchronous practice teaching” centered on “live trial” can be realized, so that students can face the judicial precedents directly in real life.

3.1.3 Acquisition of New Legal Skills

First, the acquisition of legal skills in understanding judicial precedents will become increasingly important. In the process of knowledge mapping and machine learning, such legal skills are very important. From the perspective of China's existing training of legal professionals, although various law schools have set up a large number of case seminar courses, there is no good training for the precedent recognition skills originated from the common law system. If Chinese legal professionals are unable to understand the judicial precedent skills well, not only can they not provide the initial case-like recognition algorithm model for the machine, but also cannot effectively monitor and correct the case-like recognition technology obtained by the machine through independent learning or semi-autonomous learning of case big data. As a matter of fact, the current Chinese court practice is not very satisfactory in trying to achieve the effect of case recognition through the case recognition system, and it is still not enough to effectively combine the advanced algorithms in artificial intelligence with the characteristics of the legal industry.

Second, it is also necessary to acquire the necessary theoretical and technical knowledge of AI and to maintain the motivation to learn new knowledge. Zhejiang University attaches great importance to general education in the cultivation of talents at the undergraduate level. At the undergraduate level, the course Computer Science and Technology is also specifically required. However, the development of artificial intelligence is changing rapidly, and it is of considerable importance to ensure the students' motivation to acquire new knowledge and their self-learning ability. For example, in the development of artificial intelligence trial assistance systems, there is a large amount of terminology that can arise, and without an understanding of this terminology, it is simply impossible to communicate with the algorithm experts involved in the co-development and develop a mutually agreeable trial assistance system. This knowledge is not just generalized neural networks, deep learning, big data, supervised learning, unsupervised learning, multimodal data extraction, and other fashionable terms, but also involves various basic techniques of artificial intelligence such as random wandering inference based on heterogeneous graphs, automated structure extraction of information, migration learning, semi-automatic knowledge graph construction, etc., for which a considerable understanding is also required. Otherwise, it is impossible to solve the algorithmic black-box problem that the system development tries to alleviate, and it will face many problems for the application, maintenance and update of the algorithms. Therefore, the development and application of intelligent trial support systems require a basic knowledge of the technology. This is also the basic requirement for the cultivation of our law students, application-oriented legal talents. Of course, on this basis, if we can cooperate with artificial intelligence disciplines to cross-cultivate and explore the construction of “artificial intelligence + law” disciplines to cultivate specialized legal AI talents, then the acquired technical knowledge needs to be more in-depth.

3.2 Perseverance

3.2.1 Perseverance to Legal Ethics and Value Judgment

On the one hand, we still need the cultivation of the public spirit of legal practitioners, and AI-facilitated legal education should adhere to the legal ethics and legal value judgment of “morality and law”. Law is centered on “human”. Technology should be under the control of “human”. The virtue and ethics of “human” should shape and restrain the ethics of technology. The value judgment of law reflects the subjective value orientation and psychological activities of

human reasoning, sensibility, experience and emotion, which cannot be completely replaced by technology. It can be seen that legal ethics and jurisprudential value judgment is the legal bottom line for “human” to put new technology, especially artificial intelligence, under its control, and is the premise for setting the responsibility and ethics of artificial intelligence. With the development of artificial intelligence trial-assisting technology, our professional ethics education will also face some innovative problems. In particular, the introduction of technology ethics, the introduction of general ethics, and so on, are issues that need to be strengthened in our human resources training process. For example, in the development of autonomous driving systems, the classical ethics of the “wrencher's dilemma” needs to be taken into account in the development of autonomous driving systems. In the development and operation of our AI-assisted trial system, will we face the same ethical dilemma, and thus need to make some corrections in terms of technology ethics? All these require us to further strengthen the research of ethical nurturing issues. As an example, the validation program of the interdisciplinary discipline of artificial intelligence led by the School of Computer Science of Zhejiang University has specifically set up the disciplinary direction of AI responsibility and ethics, which also reflects the importance of ethics.

3.2.2 The Perseverance of Legal Thinking

The proximity between legal reasoning methods and machine reasoning techniques in intelligent trials determines the increasing importance of training in jurisprudential methodology such as training in legal reasoning methods. At the same time, training in the constitutive elements, burden of proof, and rules of evidentiary determination and reasoning of the relevant norms in various fields of sectoral law will become even more important. The extent to which evidentiary reasoning and legal interpretation can be symbolized and digitized will determine how far an intelligent trial aid system can go. Taking the knowledge mapping in the development of intelligent trial assistance system as an example, it is to draw a large number of knowledge maps from legal norms and case databases for the main constituent elements of each legal effect and its evidence composition and burden of proof rules, to decompose the legal rules into a logical model, and then to provide these models with quality data for learning, as well as to provide the prerequisites for the improvement of the model and the establishment of the final algorithm. In this sense, the teaching contents and teaching methods of combining substantive and procedural law, which have been increasingly emphasized in major law schools over the past few years, and the training of factual theory of elements and basic training of claims, are still of fundamental significance in the context of artificial intelligence, and appear to be more urgent. The acquisition of such knowledge, thinking and skills is important not only for the development of intelligent trial assistance systems, but also for the monitoring, evaluation and system feedback of the operation of intelligent trial assistance systems.

To summarize, first of all, the algorithm development of smart systems such as smart courts, smart prosecution, smart administration, and smart law firms needs to draw knowledge maps. However, on the one hand, knowledge mapping is essentially the digitization of legal reasoning and legal interpretation, which mainly lies in the decomposition of normative constituent elements, burden of proof, evidence determination, and rules of reasoning into corresponding logical models from legal norms and jurisprudence databases. On the other hand, the problem of a priori bias and algorithmic bias of artificial intelligence cannot be solved by itself autonomously. These two aspects imply that the cultivation of legal thinking in traditional legal education is still very important in the era of AIs, which not only promotes the development of algorithms but also helps to establish an algorithmic interpretation mechanism to cut down the problem of a priori bias and algorithmic bias. Secondly, one of the core functions of the intelligent system is to realize the pushing of class cases and the same judgment of class cases. However, the current court practice is not effective. One of the important reasons is that the construction of deep learning algorithm models for case identification and their pre-training require the legal community to master the mature legal thinking and skills of case co-judgment. This requires the support of traditional legal education.

4. Conclusion

The application of artificial intelligence in legal practices opens a bright window for legal education, which will surely upgrade the practice teaching mode systematically and enhance the level of practice teaching. It is true that artificial intelligence is still at the stage of weak artificial intelligence development, and the construction of intelligent rule of law has just started, whether it is the construction of judicial big data or the creation of intelligent auxiliary system, there are still many technical difficulties and industry barriers, and it takes time to apply the results of artificial intelligence technology and AI-facilitated “rule of law” construction to the change of legal teaching. However, the iterative upgrading of AI-facilitated legal education is unstoppable, and only by seizing the opportunity of development and taking the lead can we lead the development process of legal education in the era of artificial intelligence. The intelligence of legal education requires not only the teachers and students of universities to change their concepts, integrate resources and deeply participate in the construction of rule of law, but also the “rule of law” practice departments to take up the responsibility of cultivating “rule of law” legal talents, and China and other countries need to make grassroots design and overall arrangement for the integration of industry-university-research to promote the change of legal education for the information revolution.

References

- [1] Cao, J.F. Prospects and Challenges of Artificial Intelligence Legal Services, [online] Available: <http://www.tisi.org/4855>.
- [2] David, J.W., “Litigation and Trial Practice in the Era of Big Data”, *Litigation*, Vol.41, no.55, 2015.
- [3] Feng, G. “Legal Education and Its Changes in the Era of Big Data”, *Law Education Research*, Vol.2, 2018.
- [4] Feng, Z.X. and Sun, Y. “Bravely Standing on the Tide of Artificial Intelligence Era and Jointly Seeking the Innovation of Legal Education - Review of the First Forum on Artificial Intelligence Legal Education”, *Chinese Higher Education*, Vol.21, 2018.
- [5] Henriette, N-W., Ton, J., et al. “Digitally Produced Judgements in Modern Court Proceedings”,
[6] *International Journal of Digital Society*, Vol.6, no.4, 2015.
- [7] Huang, Z. “On the Optimization of Traditional Legal Education by Legal e-Culture Education”, *Modern Education Science*, Vol. 7, 2016.
- [8] Jia, Y.S. “The Impact of Artificial Intelligence on the Legal Profession and the Challenges Facing Legal Education”, *Legal Education Research*, Vol.3, 2018.
- [9] Liberatore, S., Your AI lawyer will see you now: IBM's ROSS becomes world's first artificially intelligent attorney, [online] Available: <https://www.dailymail.co.uk/sciencetech/article-3589795/Your-AI-lawyer-IBM-s-ROSS-world-s-artificially-intelligent-attorney.html>.
- [10] Megan T.S. and Jennifer L.D., “Algorithmic Risk Assessment in the Hands of Humans”, *Social Science Electronic Publishing*, 2021.
- [11] Wu, Z.H. “The Learning Revolution in the Era of Intelligent Enhancement - Presentation at the International Conference on Artificial Intelligence and Education”, *World Education Information*, Vol.10, 2019.
- [12] Xi, Y.M. “Higher Education in the Era of Artificial Intelligence”, *World Education Information*, No.4, 2018.