DEVELOPMENT OF AN ONLINE LEARNING MODEL BY USING THE VIRTUAL ENVIRONMENT WITH SCAFFOLDING STRATEGIES TO IMPROVE LEARNING ACHIEVEMENTS IN VIRTUAL MOOT COURT FOR LAW UNDERGRADUATE STUDENTS IN CHINA

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Graduate School Srinakharinwirot University

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การพัฒนารูปแบบการเรียนออนไลน์โดยใช้สภาพแวดล้อมเสมือนด้วยกลยุทธ์ฐานการช่วยเหลือการเรียนรู้เพื่อพัฒนาผลสัมฤทธิ์ทางการเรียนในศาลจำลองเสมือนสำหรับนักศึกษาด้านกฎหมายในประเทศจีน

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CHEN XIAOFANG

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THE DISSERTATION TITLED

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BY

CHEN XIAOFANG

HAS BEEN APPROVED BY THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT
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The research and development of an online learning model by using the virtual environment with scaffolding strategies to improve learning achievement in virtual moot court for undergraduate law students in China, which aimed to: (1) study learning needs and problems of students under traditional moot court teaching; (2)to develop a learning model by using a virtual environment with scaffolding strategies to improve student learning achievements in moot court teaching; (3) to study the result and satisfaction with of using an online learning model by using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching. The research instruments were as follows: (1) the needs questionnaires about traditional moot court teaching; (2) a learning model by using virtual environment with scaffolding strategies; (3) lesson plans; (4) a learning achievement test on student satisfaction questionnaires; and (6) an approval model form. The data was analyze using mean, SD and dependent t-tests. The population was a total of 96 law undergraduate students in their third-year at the Faculty of Law at Jianghan University, and in the 2023 academic year. The samples were five model experts and 40 law undergraduate students at Jianghan University. Objective 1 found the priority needs (PNI=3.62), the second was needs (PNI=3.59), and the third was needs (PNI=3.57). Objective 2 found the learning model by using virtual environment with scaffolding strategies named MOOT-COSE had seven components: (1) media; (2) online virtual environment and learning platform; (3) an offline lesson plan; (4) teacher; (5) communication (6)Scaffolding; and (7) an evaluation. Objective 3 found there was a significant difference in the learning achievement between the pre-test (Mean=53.65,S.D=3.16) and post-test (mean=95.30, S.D=2.84) and satisfied significantly (p<0.05). In conclusion, the average of total on students' satisfaction questionnaires the meaning was strongly satisfaction (mean=4.61).

Keyword : Online learning model;, Virtual environment, Scaffolding strategies

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INTRODUCTION

Introduction

In the 21st century, modern technology is extremely important in our lives. It is seen as the cornerstone of progress in economic, educational, and social development. In today's era, modern technology has had an impact on every sector, one of which is education (Raja & Nagasubramani, 2018). With the widespread application of modern technology in daily life and learning, learning methods and teaching methods have also undergone changes. The impact of modern technology on teaching is profound (Xia, 2020).

Modern technology has not only enabled students to access a wealth of online material to aid their learning, but it has also caused a shift in the way teaching is done. Most universities and educational institutions have started to incorporate modern technology into their teaching techniques. For example, teachers can save time grading and reviewing assignments by using online quizzes. Teachers can also receive questions raised by students via email (Li & Qian, 2009).

Computer, media technology, the Internet, and virtual reality technology have promoted the transformation of teaching methods from a single offline teaching approach to a combination of online and onsite methods. Technologies such as digital cameras, projectors, laptops, PowerPoint presentations, and 3D visualization tools can be invaluable for teachers to help students quickly grasp what they are teaching. At the same time, these technologies and tools can also increase the fun and attractiveness of teaching and improve students' enthusiasm for learning.

Several scholars have mentioned in their research that "moot courts" first appeared in medieval England when there were no legal research projects in British universities at that time (Knerr, Charles, & Sommerman, Andrew, 2000). A moot court is defined as a setting where hypothetical cases are tried for the training of law students (Rachid & Mohamed, 2000). Moot courts benefit law students as they learn how to apply legal knowledge to real-life cases, create written statements, improve debating skills,

and master how to handle real-life legal issues (Knerr, Charles, & Sommerman, Andrew, 2000).

Moot court teaching has a long history and has attracted the attention of scholars (Leone, Karen, 2001; Knerr et al., 2000; Rachid et al., 2000). Currently, several review studies on moot courts have been published. In the United States, undergraduate classes such as business law, international politics, contract law, constitution, constitutional history, communication, or speech classes require participation in appeal simulations. In this academic format, completing the appeal simulation is a necessary task for the class. The case is chosen by each professor, reflecting their special interests. The final grade of a student's course is determined by their moot court performance. Therefore, students receive different grades. Although some professors only require students to make oral statements about moot courts, briefings, and oral debates are essential. In some academic moot courts, students simulate roles of judges and lawyers, and professors might also serve as judges. In other academic moot courts, other law professors might play roles such as judges, local practicing lawyers, or others (Knerr, Charles, & Sommerman, Andrew, 2000). The results show that improving the teaching quality of moot court requires the guarantee of teachers.

Chinese scholars have conducted theoretical research on college moot court practices. In China, moot court teaching involves the teacher first explaining theoretical knowledge, and then students, under the guidance of the teacher, select typical cases and simulate various roles such as judges, prosecutors, plaintiffs, defendants, agents, witnesses, and clerks to participate in the trial and adjudication of pre-designed cases. Huiying (2020) summarized the dilemmas of moot court practice teaching and proposed that moot court training should be close to judicial practice and avoid mere role-playing. Yehu (2015) comprehensively analyzed problems existing in moot court teaching at colleges and universities in China and suggested improvements. Honggu (2014) proposed enhancing the content design of moot court courses. Bing (2013) suggested promoting moot court curriculum development. Han (2010) analyzed the diversified

educational value of moot court in colleges and universities. Xibin (2007) investigated the actual teaching effect of moot court.

Review results indicate that currently, scholars mainly study the value and organizational form of moot court in colleges and universities, paying less attention to the application of virtual reality technology in moot court teaching, and insufficiently researching the reform of moot court teaching methods.

The results of the above-mentioned review studies showed that traditional moot court teaching involved teachers or students choosing good cases, then assigning trial roles to students in groups. Students rehearsed after writing corresponding documents and then performed according to their "lines" in the moot court procedure. This process was akin to "acting". Students rehearsed several times according to the "script" and their "roles" to ensure that there would be no major mistakes in the simulation process. This kind of "performance" moot court emphasized the integrity and legitimacy of the litigation procedure, ignored the adversarial nature of court trials, weakened the role of practical teaching, and students did not receive comprehensive training in legal knowledge, legal thinking, and professional skills. Therefore, it was necessary to use information technology to address the deficiencies of traditional moot court teaching and enhance the teaching level of moot court.

An online learning model utilizing the virtual environment in moot court teaching was primarily aimed at conducting moot court teaching in a virtual courtroom trial environment. Through virtual reality technology, the courtroom trial scene was recreated, including the courtroom appearance of judges, the seating arrangement of litigation participants, and the main scenes of the court trial, providing participating students with a sense of realism. At the same time, the virtual environment demonstrated the main court trial process, and the progression of this process was controlled by students, with the system identifying and presenting different outcomes. Students could experience human-computer interaction approaching a real trial in the experimental process and understand the court trial process, which could compensate for the shortcomings that were difficult to fully present in offline teaching. After completing the simulation of the

initial trial, students could also experience the appeal procedure of the subsequent trial. The system guided students to enter the courtroom trial interface of the subsequent trial through selection and judgment. The outcome of all courtroom trials depended on students' interactions. The courtroom trial experience was authentic and highly realistic.

The situation nowadays is that we are applying the almost entirely online learning model, and using scaffolding is also important. Scaffolding is a process in which knowledgeable individuals (such as teachers, peers, or tools) provide cognitive and social support to help students enhance their problem-solving abilities (Vygotsky, 1978; Wood, Bruner, & Ross, 1976). The original meaning of scaffolding was from the construction industry. In teaching, it metaphorically refers to the guidance and assistance provided by teachers based on students' existing knowledge structure and cognitive level and based on their actual needs. In the past twenty to thirty years, the scaffolding teaching model has received increasingly widespread attention. Its core is: on the one hand, learners can increase the likelihood of completing difficult tasks through effective teacher-student communication and interaction, and the leading role of teachers can also be played, reflecting the modern educational concept of learner-centered; on the other hand, learners complement each other's strengths and achieve common progress through classroom discussions. Teachers guide students to carry out online exercises in combination with platform cases. The scaffolding strategy of this study is reflected in the moot court virtual learning system, which helps students complete tasks that they cannot independently complete by setting up theoretical knowledge Q&A, knowledge point prompts, and after-school knowledge expansion. The teacher encourages students to adopt a group discussion approach, allowing learners to support and help each other, learning from each other's advantages and strengths, in order to achieve common improvement. Through prompting students, students are guided to analyze cases, select evidence, and simulate the whole process of litigation, thereby helping students review theoretical knowledge and consolidate and apply theoretical knowledge.

In recent years, the booming development of virtual reality technology has not only brought significant changes to life and work but also brought unprecedented opportunities and challenges to moot court teaching. Virtual reality is one component of the virtual environment, and the digital environment it generates can be extremely similar to real or hypothetical environments in terms of visual, auditory, or tactile senses (Wadee & Miltiadis, 2019, p.215). The three basic characteristics of virtual reality, namely immersion, interactivity, and imagination, enable learners to interact with objects in the virtual environment through matching devices such as glasses, resulting in feelings and experiences similar to those in the real environment (Poap, Ksik, Winnicka, & Woniak, 2020, p.397). Many studies have found that the application of virtual reality in education can not only enhance students' learning enthusiasm but also improve their learning initiative and ability to express their own opinions and increase their ability to apply knowledge to practice (Meyer, Omdahl, & Makransky, 2019, p.140). Therefore, many educational researchers and teachers use virtual reality as a scientific and effective tool to improve the quality and level of teaching and enhance learning efficiency (Hwang, Wu, Chen, & Tu, 2016; Wu, Guo, Wang, & Zeng, 2019, p.1895). Whether the application of virtual reality technology in moot court teaching can improve students' learning achievements and enthusiasm has not been tested.

Therefore, this study attempts to solve the existing gaps in this field. This research aims to develop an online learning model using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching for undergraduate students. Through the guided training process operation, students can choose their own roles for simulation so that students can immerse themselves in the trial procedures of the court and become familiar with and master each link of case handling. This research examines whether learning achievements of undergraduate students can be improved through an online learning model using the virtual environment with scaffolding strategies in moot court teaching and explores participants' perceptions of the online learning model using the virtual environment with scaffolding strategies in moot court teaching.

Research Questions

1. What are the learning needs and problems of students in moot court courses?

2. What are the components of moot court virtual environments?

3. What are the learning processes of moot court virtual environments?

Objectives of the Research

1. To study students' learning needs and problems under traditional moot court teaching.

2. To develop a learning model by using a virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

3. To study the results and satisfaction of using an online learning model by utilizing the virtual environment with scaffolding strategies to improve learning achievements in virtual moot court.

Research Scope

The content: The subjects were law students who had learned the basic knowledge of civil procedure law and civil law before participating in the online learning model training for moot court, and generally knew how to conduct court proceedings in civil cases. The population of this study was a total of 96 third-year law students at the Faculty of Law, Jianghan University, China.

1. The population consisted of 96 law undergraduate students in their third year at the Faculty of Law, Jianghan University, studying during the 2023 academic year.

2. The sample model experts consisted of five individuals, including three content experts and two technology experts proficient in virtual reality technology, selected through a specific selection method.

3. The sample consisted of 40 law undergraduate students at Jianghan University, selected from the third-year cohort using cluster sampling. Their ages ranged from 20 to 21.

Variable

1. The independent variable was the learning model using the virtual environment with scaffolding strategies.

2. Dependent variables included learning achievements, which encompassed students' cognition, understanding, and memory of theoretical knowledge, as well as students' satisfaction with the online learning model using the virtual environment with scaffolding strategies.

Definition of Terms

Moot court teaching in this study refers to the entire process of civil litigation, including prosecution, filing, first-instance trial, appeal, and second-instance trial, in a virtual learning system where teachers guide students through the litigation process by unfolding the case layer by layer, analyzing the case under system prompts, guiding students to select evidence, clarify litigation requests, and simulate civil litigation.

Virtual moot court in this study, "virtual platform" refers to the online platform that has the functions of using 3D animation technology to create virtual cases and virtual courtroom trial scenes, including the appearance procedures of judges, seating arrangements for litigation participants, and the main scenes of court proceedings. Through the theoretical knowledge Q&A, knowledge point prompts, and post-class expansion knowledge of scaffolding strategies in the online learning model, students can systematically and comprehensively review legal theoretical knowledge, achieving the consolidation and application of legal theoretical knowledge.

Virtual environment refers to the online learning environment that consists of the simulation of moot court. Corresponding to the real environment, the virtual environment refers to the virtual world created using modeling tools and programming languages in the three-dimensional virtual space, which is an orderly combination of various virtual objects. The virtual environment developed by applying virtual reality technology can create a lifelike and intuitive learning environment, immersing students in the virtual world for interaction, participation, experimentation, and other operations, allowing them to experience boring and difficult knowledge in an "immersive" way, and transforming

the passive indoctrination learning mode into active and interesting learning exploration. This situational learning process can improve students' deeper academic knowledge and thinking skills. Moreover, detailed data on students' actions and statements can also be automatically collected through the background, providing immense potential for student assessment. The virtual environment in this study mainly refers to the virtual environment of court trials.

Virtual reality technology, in this research using simulation, participants did not wear glasses. Virtual reality technology aims to immerse people in a simulated sensory experience, providing a virtual sense of the real world. Virtual reality refers to events or entities that have a true effect rather than actual existence. It has three main characteristics: immersion, where the user's senses can be completely immersed in the virtual world; interactivity, allowing users to interact with objects in the virtual world; and computer generation, where this virtual reality is generated by computer simulation. By using virtual reality technology, the court trial scene is recreated, including the appearance procedures of judges, the seating arrangements of litigation participants, and the main scenes of the court trial, providing students participating in the experiment with a lifelike sense of presence.

The use of virtual reality technology in moot court teaching in this research, the restoration of the court scene with virtual reality technology as the core includes the court proceedings of the judges, the seating arrangement of the litigation participants, and the main scenes of the court trial, giving the students participating in the experiment a sense of reality. At the same time, the experiment demonstrates the main trial process, which is operated by students, and the system recognizes and presents different results. Students can experience human-computer interaction approaching a real trial, undergo the court trial process, and practice court control and debate skills. The program has a high degree of realism and can compensate for the shortcomings of traditional moot court teaching, which are difficult to fully present and repeatedly train. Through online teaching with virtual reality, we can change the teacher-oriented teaching mode in traditional moot court teaching, overcome the rigidity of traditional

moot court teaching, and realize an interactive teaching mode where students learn independently with guidance and improvement from teachers.

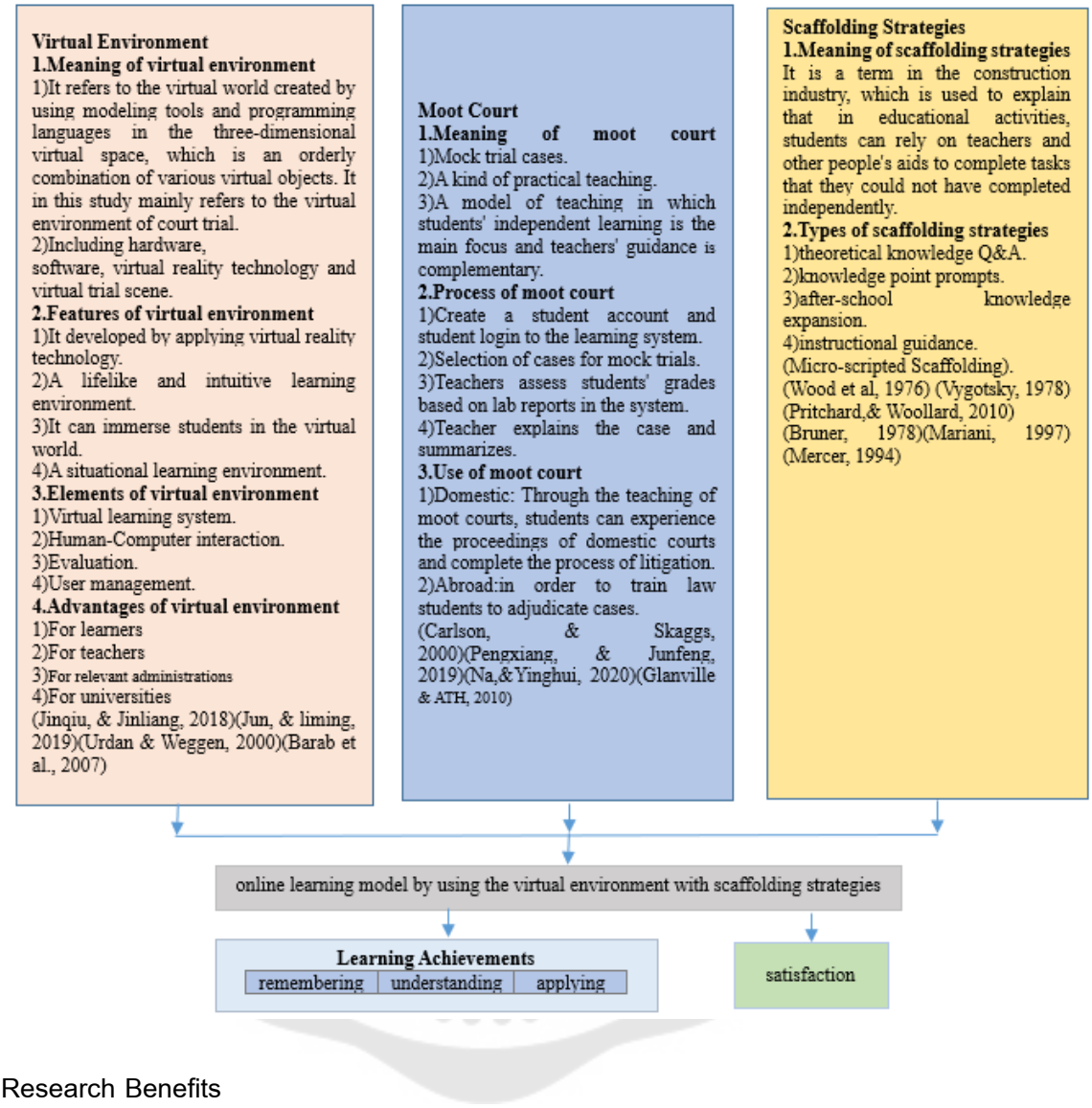
Scaffolding, which is a term from the construction industry, is used to explain that in educational activities, students can rely on teachers and other people's aid to complete tasks that they could not have completed independently. Once students can complete the task independently, such aid will be gradually withdrawn. Starting from the essential characteristics of scaffolding, it could serve as a teaching strategy and plan, as well as a teaching tool and method. Bruner was the first to propose the term "scaffolding," which was described as a form of effective intervention by knowledgeable individuals towards other learners. The questioning and guidance in the classroom had attracted people's attention, which led to a new metaphorical usage of the word “scaffolding”. Later on, scaffolding was increasingly described as certain types of help that learners received through communication with parents, teachers, and other mentors, and this concept developed based on previous studies. This term emphasized that although the role of teachers in promoting learners to acquire knowledge and deepen understanding was temporary, these forms of assistance were essential. Therefore, the concept of scaffolding was constantly evolving, meaning that teachers promoted the progress of learners by helping them successfully complete tasks. The scaffolding strategy should construct a conceptual framework for learners to understand knowledge and promote further understanding of the problem. Therefore, complex learning tasks should be decomposed in advance to gradually guide learners to deepen their understanding. According to whether the scaffolding strategy has an interactive function, it can be divided into two types: interactive and non-interactive, among which interactive includes teacher demonstration, voice thinking, and asking questions. Non-interactive includes changing the textbook and suggesting written or oral prompts. The scaffolding strategy of this study is reflected in the moot court virtual learning system, which helps students complete tasks that they cannot independently complete by setting up theoretical knowledge Q&A, knowledge point prompts, after-school knowledge expansion, and instructional guidance (Micro-scripted Scaffolding). The

teacher encourages students to adopt a group discussion approach, allowing learning members to act as support and help each other, learning from each other's strengths and weaknesses, in order to achieve common improvement.

Learning achievement, according to Bloom's Taxonomy (Anderson & Krathwohl, 2001), includes six aspects: remembering, understanding, applying, analyzing, evaluating, and creating. Due to the application of learning systems, learning achievement in this study only includes three aspects: remembering, understanding, and applying. The moot court course involves knowledge of substantive law and procedural law. Therefore, the achievements of the moot court course are embodied in the knowledge of substantive law and procedural law. In this study, we used the virtual environment and scaffolding strategy to develop the moot court online learning model and selected inheritance disputes as the case samples, so that students can become familiar with the procedural law knowledge of civil litigation and consolidate the substantive law knowledge of civil law. Therefore, in terms of knowledge, the academic achievements in this study specifically refer to the procedural law knowledge of civil litigation and the substantive law knowledge of civil law.

A learning model using the virtual environment with scaffolding strategies in this research, the goal is to create a virtual environment involved in court proceedings, enabling students to engage in learning, assume roles in scenes resembling real environments, fully experience the litigation process, help students visualize the case scene, understand the case handling process, observe the trial scene, refine and summarize the case dispute focus, participate in the case handling process, etc., so that students can truly experience the litigation situation, become familiar with the litigation process, and deepen and consolidate relevant procedural and substantive law knowledge.

Research Framework



Research Benefits

This study aimed to reveal the effectiveness of developing a learning model by using the virtual environment with scaffolding strategies to improve learning achievements in virtual moot court for undergraduate students. The results showed that third-year students in a law major class at Jianghan University could improve their learning achievements through the learning model. This might help teachers consider this method as an alternative teaching approach for the moot court course at Jianghan University, thereby improving the teaching quality of moot court.

The adopted virtual environment provided a sense of immersion and reality, which greatly mobilized the enthusiasm and initiative of students. They could play roles repeatedly in the virtual teaching environment, become familiar with trial procedures, consolidate theoretical knowledge, improve learning achievements, and work ability, and promote employment. This was conducive to training legal talents who were more aligned with social requirements.

CHAPTER II
LITERATURE REVIEW

This chapter reviews the relevant literature and research that formed the background of this study. Related topics included:

1. Moot Court and Approaches to Moot Court Teaching
    1.1 Moot Court
    1.2 Traditional Moot Court Teaching Method
    1.3 Moot Court Teaching Using a Learning Model
    1.4 The Characteristics of Moot Court Teaching Using a Learning Model
    1.5 Learning Achievements
    1.6 Research Related to the Students' Learning Achievements
    1.7 Conclusion
2. Virtual Environment
    2.1Virtual Reality Technology
    2.2 Types of Virtual Reality Technology
    2.3 Research on Using Virtual Reality Technology in Teaching
    2.4 Conclusion
3. Learning Model
    3.1 Meaning of the Learning Model
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    3.4 Conclusion
4. Scaffolding
    4.1 The Nature of Scaffolding in Educational Contexts
    4.2 Key Features of Scaffolding
    4.3Type of Scaffolding
    4.4 Conclusion
5. Instructional of Law
    5.1 Traditional American Law School Delivery Methods

5.2 Instructional of Law in China

5.3 Conclusion

1.Moot Court and Approaches to Moot Court Teaching

The moot court originated from the "moot court" course of American law schools. It refers to the virtual court held by law schools to discuss simulated or hypothetical cases. The teaching mechanism of moot court was widely introduced in Chinese colleges and universities to enable law students to further recognize, understand, memorize, and apply the legal professional knowledge they had learned through contacting and handling cases. There were two main teaching methods of moot court. The first method focused on performing mock trials. The second method emphasized the use of virtual reality technology for the entire process of legal trial teaching. In the following chapters, we will briefly review the changing trend of moot court teaching. First of all, the traditional teaching method of moot court will be discussed, and then the limitations and disadvantages of the traditional teaching method will be pointed out. Finally, moot court teaching and virtual reality technology will be deeply integrated to establish a moot court virtual reality teaching system, which is a method of applying information technology to legal practice teaching.

1.1 Moot Court

Moot court is a practice where students play the role of lawyers or judges, simulating the trial of cases in an appellate court, with the aim of educating students about legal knowledge and familiarizing them with judicial processes. Moot court has a wide range of members, including students, former students, and professors, as well as genuine lawyers and judges who voluntarily participate. According to reports, in certain specific situations, students can serve as judges, legal clerks, journalists, or courtroom brief writers, while real lawyers or judges defend the case. Of course, students can also play the role of lawyers in moot courts to defend the case (Knerr, & Sommerman, 2001, p. 4). Moot court is a teaching tool that applies legal theory knowledge to legal practice, which can be used to consolidate legal knowledge and to master judicial procedures (Carlson, & Skaggs, 2000, p. 145).

The simulation court has various forms and simulates a complete judicial process, from case selection to oral debate; all aspects are simulated in different ways (Weizer, & Walsh, 2002). In most moot courts, students act as lawyers and judges to engage in oral debates between lawyers and judges. The lecturer arranges for each student to participate in oral debates based on their own preferences, or only some students participate while others conduct their own courses without participating. In a few moot courts, cases are debated through the exchange of written legal abstracts instead of oral arguments, which summarize the group's position. Sometimes, written legal abstracts are combined with oral arguments in moot courts. The moot court might have an oral debate as the final stage, or there might also be a stage of reviewing and voting on the case, reviewing the opinions presented for discussion and debate by the whole class (Ringel, 2002). In moot court, students simulate the trial of cases, engage in debates, and ultimately make a guilty or innocent verdict. The mock trial defense team is composed of students. The prosecution and defense teams provide the opening and closing remarks of the trial and take turns questioning students and witnesses to prevent improper application or interpretation of the law by the trial court, or issues such as a policy or law violating the state or national constitution. The lawyer in the moot court argues with a panel of judges, who raise questions. Based on the mock situation, the judge might adjourn before making a decision and then talk to the lawyer.

1.2 Traditional Moot Court Teaching Method

In traditional moot court teaching, teachers first need to pick a case and assign roles to students. Faculty have to decide how complex to make their case (Ringel & Fair, 2004, p. 9). Once the case and roles are assigned, teachers act as part facilitator, advisor, and taskmaster. Teachers give students one or two weeks to prepare, and then they enter the simulated trial stage. Teachers have little role in this stage. The teacher is responsible for announcing the start of the simulation, then several groups of students conduct a simulated trial. At this stage, the teacher does not interrupt the students' simulated trial. After the simulated trial, teachers are responsible for

summarizing and commenting on the students' performance and the legal knowledge involved in the trial.

Specifically, the practice teaching of moot court is a practical rather than a special teaching method. Together with legal clinics and case teaching, it forms the framework of legal practice teaching methods. From the perspective of the whole teaching process, the complete moot court practice teaching should include the preparation stage, the simulated trial stage, and the summary stage. In the organization stage, we should first select cases. The difficulty of selecting cases should be moderate. The case could be real or virtual. According to the selected cases, students are divided into groups. Students complete relevant work according to their respective roles, such as evidence collection, agency, and defense writing. In the simulated trial stage, students are required to conduct simulation around the case itself in strict accordance with the requirements of substantive law and procedural law. The whole trial process is completed by students independently. At the end of the trial, students participating in the hearing can evaluate the simulated trial process, and then external lawyers, judges, or prosecutors can judge the students' simulated behavior. Finally, teachers can comment and summarize the simulation process in combination with theoretical knowledge (Junying & Hui, 2018). This kind of moot court teaching has some disadvantages. Firstly, in moot court teaching, teacher-led role-playing is not conducive to improving students' comprehensive practical abilities. Professor Li Yougen believed that the purpose of offering moot court courses in universities was not to cultivate all undergraduate law students into future judges or lawyers, but to enable them to have the ability to apply legal knowledge to legal practice and meet the needs of all legal positions after graduation. As a legal practice teaching, the purpose of moot court teaching is not only to enable students to master more basic legal knowledge but also to enable students to experience the real legal environment and atmosphere and master skills such as court trials (Pengxiang & Junfeng, 2019). This requires universities to change their outdated cramming teaching methods. Only by transforming passive indoctrination into active learning can stimulate students' enthusiasm for learning.

Secondly, there is a lack of enthusiasm for participation. Students do not value moot court courses and overlook the importance of moot courts. Some students believe that the performance in moot court is too strong, the case and evidence are not true, and there is a lack of investigation and confirmation. The debate speech is already written before the trial, just like in a movie, lacking the authenticity of the court hearing and debate. Others believe that future careers might not necessarily be linked to legal positions, and participating in moot courts is meaningless (Peng, 2021). Finally, an important goal of moot court is to train students' ability to adapt to court situations. However, currently, most moot courts are merely formalistic and conduct trials in the form of performances. An important characteristic of "performance" is that both parties are familiar with each other's arguments and debating methods in advance, that is, both debating parties have already rehearsed before the trial. However, real court trials do not have pre-rehearsal sessions, and both judges and lawyers need to perform on the spot. The significance of simulated court teaching lies in cultivating students' ability to analyze and solve practical legal problems (Jinqiu & Jinliang, 2018).

1.3 Moot Court Teaching Using a Learning Model

According to the characteristics of legal education, its fundamental attribute is vocational education. The professionalization and practicality of legal education are inseparable, mainly reflected in the fact that practicality is the foundation of legal education professionalization, and specialization is the manifestation of legal education practicality. Currently, it is necessary to combine the background of the information age and use virtual reality technology to improve the practicality of legal knowledge, break through the limitations of moot courts due to time and location limitations, which cannot simulate according to the needs of students at any time, and improve the professional ability and learning convenience of students. The virtual reality teaching system uses 3D animation to display cases, immerse students, and provide an immersive experience for participants. By simulating the entire process of a trial, students can become familiar with and master various aspects of case handling. Through case analysis and research, it improves students' legal logical thinking ability, legal evidence recognition ability, and

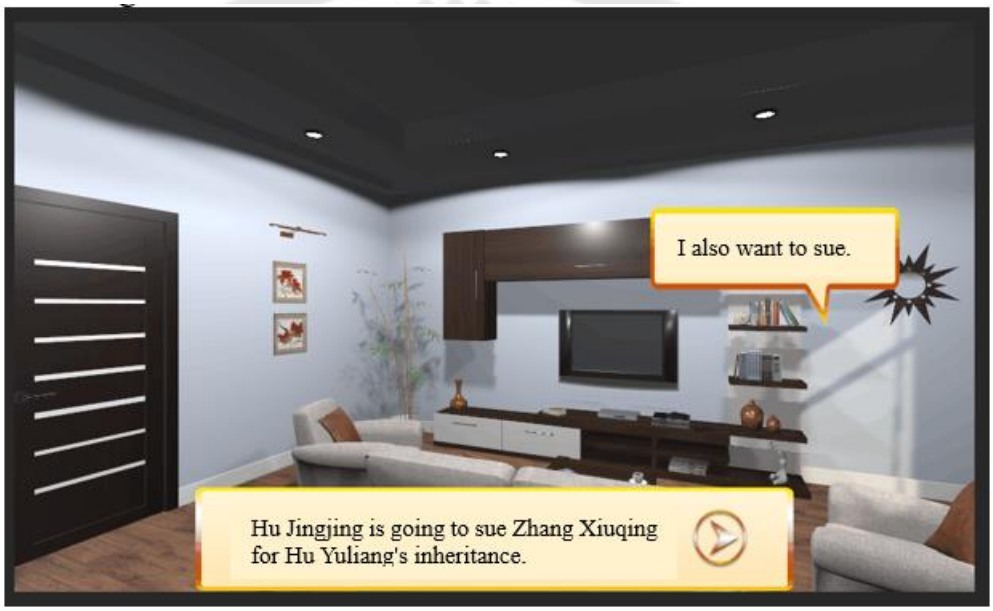
legal knowledge application ability, such as legal document writing ability (Na & Yinghui, 2020). In moot court courses, students can choose different roles such as judges, lawyers, and parties to simulate. Simulation refers to the use of learned legal knowledge to analyze and handle cases, training students in their ability to solve practical legal problems. In a virtual environment, students can experience different roles, enhance their legal thinking and debating abilities, and improve their legal professional competence. Teachers can summarize the specific performance of students in the simulation process, evaluate their ability to analyze and respond to legal cases, and guide students in analyzing and solving legal problems (Jun & Liming, 2019).

We used virtual reality technology to conduct moot court teaching and used online explanation and simulation to carry out teaching, to realize the interactive teaching mode in which students' self-learning is the main, and teachers' guidance and improvement are supplemented. Through the VR teaching system, students can restore the case scene, understand the case handling process, observe the trial scene, refine and summarize the case dispute focus, participate in the case handling process, etc., so that students can truly experience the litigation situation, solve the problems that traditional teaching serves the surface, stimulate students' interest in learning, and realize students' independent learning and training. During the teaching process, teachers guide students to review the knowledge before class, guide students to open the browser, enter the virtual reality system, and then click the start button to simulate. Through the complete process and full role simulation, students can consolidate their legal knowledge. After the students have completed all the simulation steps, the teachers will make statistics on the operation of the students through the system. For the weak links of the students, they can try to improve in the next teaching. If necessary, further improve the system and design new interactive links to help the students train.

At present, the virtual reality comprehensive teaching platform for moot court that has been built and used in China is a free teaching platform. The moot court online teaching model used in this study precisely utilizes this teaching platform to enable students to conduct online learning. Students can log in to the website

https://www.ilab-x.com/details/page?id=6962&isView=true. The experimental method was divided into five steps: prosecution, court acceptance, first trial, appeal, and second trial.

Prosecution stage: Students understand the case and then enter the prosecution stage. In the first step, students need to assume the role of "plaintiff" and select evidence beneficial to their own side according to the types and contents of evidence prompted by the system. The second step is to create litigation documents based on the evidence.



Figures 1Example of Interface in the Prosecution Stage

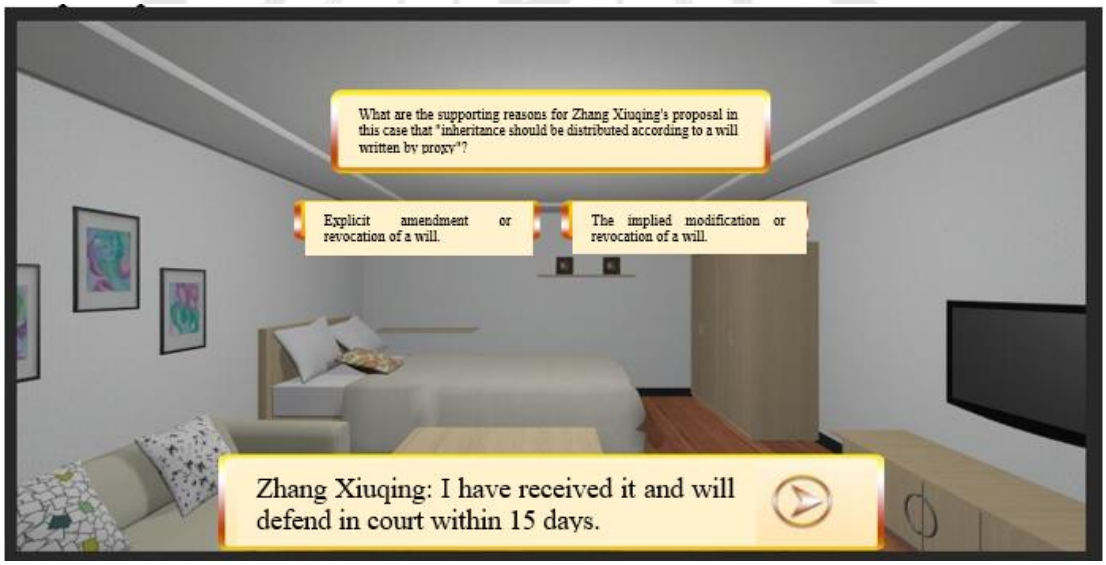
Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

In the court acceptance stage, there are three steps. The first step is for the court to review the indictment and claim and judge whether it is accepted. If the court decides to accept the case, it needs to prepare a document and "deliver" the document to both the plaintiff and the defendant. Here, students are required to judge the time limit and type of documents, and complete the preparation and uploading of documents.

Secondly, the "defendant" should prepare a defense according to the plaintiff's complaint and evidence, and submit the defense reasons and evidence materials to the court. Here, students are required to judge the type of documents, and complete the preparation and uploading of documents.

The third step is to organize the plaintiff and the defendant to hold a pre-trial meeting, exchange evidence, and summarize the focus of the dispute. Here, it is necessary for the students of the court to conclude the focus of the dispute and then proceed to the next procedure.

Finally, the court confirms the date of the hearing and makes an announcement. Students are required to make announcements according to the prompts and fill in the announcement contents.



Figures 2 Example of Interface in the Court Acceptance Stage

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

At the trial stage of the first instance, there are three steps. First, the court presides over the trial, completing it according to the basic process of the first instance of civil litigation. The court controls the basic rhythm of the trial, maintains the discipline of the court, and avoids deviating from the focus of the dispute. The court carefully listens to the opinions of the plaintiff and the defendant, and judges the facts and legal issues of the case. In this session, there are prompts for the trial process. Students can choose according to the prompts to advance the trial process. If the selection is correct, the next process will smoothly proceed. If the selection is wrong, a knowledge point prompt will pop up, and guidance will be provided.

Secondly, the plaintiff completes the trial under the guidance of the court, completing the presentation and cross-examination of the evidence, and using the knowledge learned to conduct court debates. Here, students are required to answer the related theoretical knowledge questions correctly before proceeding to the next process.

Lastly, the defendant completes the trial under the guidance of the court, completing the presentation and cross-examination of the evidence, and using the knowledge learned to conduct court debates. Here, students are required to answer the related theoretical knowledge questions correctly before proceeding to the next process.

Figures 3 Example of Interface in the Trial Stage of the First Instance

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

In the appeal stage, there are again three steps. The first is for students to choose whether to appeal. If students choose "yes", they will proceed to the appeal stage. The second is when students need to judge the basic conditions and realization requirements of the appeal and enter the submission process of the appeal documents after making the correct judgment. And the third, students make and upload the appeal documents.

Figures 4 Example of Interface in the Appeal Stage

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

In the trial stage of the second instance, there are three steps. Firstly, the court presides over the trial, completing it according to the basic process of the second instance of civil litigation. The court controls the basic rhythm of the trial, maintains court discipline, and avoids deviating from the focus of the dispute. The court carefully listens to the opinions of the plaintiff and the defendant, and judges the facts and legal issues of the case.

Secondly, the plaintiff completes the trial under the court's guidance, conducting proof and cross-examination of the evidence, and using learned knowledge to conduct court debates.

Thirdly, the defendant completes the trial under the court's guidance, conducting proof and cross-examination of the evidence, and using learned knowledge to conduct court debates.

This stage involves after-school assessment. The system no longer prompts key knowledge points. Students operate independently, complete the entire process, and submit documents and experimental reports.

1.4 The Advantages of Moot Court Teaching Using a Learning Model

Shan Ouyang and Peng Nai (2019) stated that although developing virtual courts might incur some costs, it also brings objective benefits. Firstly, using virtual courts can reduce transportation, time, and labor costs compared to traditional real courts. Additionally, trial cases in virtual courts can be updated in a timely manner, with a large number of cases that can be reused. This means that as the number of users increases, costs decrease. Secondly, virtual courts are more practical than traditional real courts. Practicing in a closed virtual court allows students to overcome shyness and timidity without worrying about making mistakes. Students practice repeatedly and compare with each other in virtual courts to improve their ability to conduct court sessions. Thirdly, utilizing big data capabilities, virtual courts can generate and accumulate a large amount of court data. This valuable data can be used for academic research or generating research reports with intellectual property rights, as well as serving as other valuable scientific research materials (Ouyang & Nai, 2019).

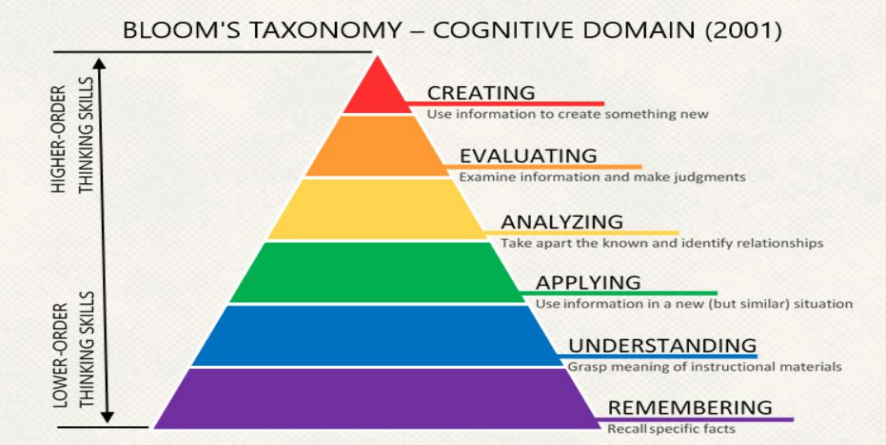
Kara Nance and Helen Armstrong (2010) pointed out that moot courts could be held in university classrooms or conference rooms, and at specific times moot courts could also be held in real courts. However, these places were difficult to scale up to meet the needs of a large number of students, and it was also not easy to frequently hold moot courts (Kara & Helen, 2010). The online learning model using the virtual environment with scaffolding strategies in moot court teaching can effectively overcome these drawbacks.

1.5 Learning achievements

The main function of the moot court, according to Glanville L. Williams and ATH Smith (2010), is a course that involves legal practice or the translation of theory from the legal field into practice, especially in procedural law courses such as Civil Procedure Law, Criminal Procedure Law, or Administrative Procedure Law. Moot courts are a key component of legal education and research activities. The purpose of the moot court, according to James A. Holland and Julian S. Webb (2018), is to implement knowledge in the field of procedural law, enabling students to apply knowledge of civil procedure law, criminal procedure law, and administrative procedure law in the classroom, rather than just memorizing legal provisions. Moot Courts involve different tasks and are a form of assessment, which combines both knowledge of substantive law and procedural law (Lynch, 1996).

Therefore, learning achievements of the moot court course include remembering, understanding, and applying Bloom's Taxonomy (Anderson & Krathwohl, 2001) about substantive law knowledge and procedural law knowledge, as well as students' satisfaction with the learning model by using the virtual environment with scaffolding strategies. Bloom's taxonomy is known as the original Taxonomy of Educational Objectives, created by Benjamin Bloom in 1956 and revised in 2001. According to complexity and richness, Bloom divided the cognitive domain of learning into different levels. In Bloom's taxonomy in 1956, he outlined six main categories: knowledge, comprehension, application, analysis, synthesis, and evaluation.

In 2001, some educators, psychologists, and teaching researchers changed the name of Bloom's classification system from nouns to verbs (Krathwohl, 2002). Changed knowledge (minimum level) to remembering, which required learners to recall or remember the information they had acquired. Comprehension was changed to understanding, and students were able to explain or describe concepts as understanding. Changed application to applying that required the ability to use learned information, such as selection, writing, or interpretation. Changed analysis to analyzing, which required students to have comparative ability and be able to distinguish different components or relationships. These four levels remained the same as Bloom et al.'s (1956) original hierarchy. In the revised model, synthesis, and evaluation, as the two highest and most complex levels, were reversed in order and renamed evaluating and creating (Anderson & Krathwohl, 2001). Both were based on analysis as the fundamental process. However, synthesis or creating required rearranging various parts in a different way, while evaluation or evaluating required comparing with standards and determining whether it was good, better, or best. This was like the difference between creative thinking and critical thinking.



Figures 5 Bloom's Taxonomy Graphic Description

Source:https://citt.ufl.edu/resources/the-learningprocess/designing-the-learning-experience/blooms-taxonomy/

The closer to the top of the pyramid, the greater the degree of complexity. The role of this framework in designing learning experiences is self-evident, as it helps teachers understand, identify, categorize, organize, and summarize the content that students want to learn in the course.

In this study, three main categories of Bloom's Taxonomy are adopted, including remembering, understanding, and applying. Learning achievements of the moot court course include remembering, understanding, applying, and students' satisfaction with the learning model by using the virtual environment with scaffolding strategies.

The advantage of a virtual learning environment is that it can provide various learning experiences (Weller, 2007). Virtual reality technology can simulate the real environment, where students interact with computers to complete tasks in the system (Burdea & Coiffet, 2003). Interaction means enabling students to interact with other objects in a virtual environment, thereby creating an immersive feeling (Stary, 2001). Research has shown that virtual reality creates an immersive digital environment where students are immersed, which can enhance their participation and academic performance (Barab et al., 2007; Cheng & Tsai, 2019; Parmaxi, 2020; Yeh et al., 2020). Virtual reality was applied in the teaching process of astronomy-related courses during the research conducted by Aktami**Ş** and Arici (2013), and at the end of the study, it was determined that virtual reality applications increased learning achievements. In order to verify whether the virtual environment could improve students' learning achievements in moot court teaching, the study selected a part of the questions in the unified legal professional qualification examination of China to sort out a set of test questions, and the participants were tested. The test questions included 50 multiple-choice questions. Prior to receiving any treatments, the participants were tested using this set of test questions. The participants were tested again after eight weeks of training.

With the support of highly configured computers, VR technology can generate virtual and realistic 3D environments, stimulating learners' senses from visual, auditory, tactile, and other aspects. Learners can achieve various interaction modes such as

gesture interaction, speech interaction, and tactile interaction in the virtual environment. Learners perceive the environment through interaction, collaboration, creation, and immersion (Psotka, 1995). Therefore, it has a huge role and unlimited potential in the field of education, which is conducive to creating a more suitable virtual environment for learning with scenarios. According to the degree of immersion, virtual reality can be divided into three types: desktop VR technology and so on. Desktop VR technology does not require wearing glasses and only simulates the environment, lacking immersion. It is widely used in language learning research. The application of desktop VR in language learning can create the necessary language environment for learning, improve learning engagement and grades, and its role has been proven in many studies (Lan, Kan, Hsiao, Yang, & Chang, 2013). Researchers have found that the use of tools and technologies in teaching could assist teaching and improve learning efficiency (Reeves, 1998; Shudayfat, 2014).

Costley, K. (2014) pointed out that the current technological revolution has had a profound impact on the transformation of learning methods, and its role in improving learning enthusiasm and academic performance is beyond doubt. Many studies have found that the scenarios created by 3D virtual reality learning environments could help attract learners to participate, thereby improving learning motivation and achievement (Lee et al., 2009; Piovesan et al., 2012; Shudayfat, 2014). Smith, T. (2014) indicated that the 3D-virtual reality learning environment was effective in increasing academic achievement, enhancing engagement, and developing the 21st-century competencies like collaboration, communication, and technology use. It could increase the fun of learning, making students more motivated and proactive in learning and building their knowledge system (Piovesan, Passerino, & Pereira, 2012). Asma Al Amri et al. (2020) pointed out that the integration of virtual reality learning environment and physics discipline compensated for the lack of conditions and environment in the classroom and laboratory and helped to improve students' interest and academic performance in physics learning. Giesbers et al. (2013) found that if students participated actively in a virtual learning environment, their test scores would be higher. Virtual learning

environment improved the educational interaction between the teachers and the students with the aid of digital resources that endeavored to enhance the learning achievement of the students (Sneha, & Nagaraja, 2013). The learning achievement test revealed that the students who were taught with the support of virtual learning environment outperformed the students who were taught through the traditional lecture method (Sangay, & Somchanok, 2017, p. 777).

1.7 Conclusion

In conclusion, the moot court course is a learning process in which law students complete the trial of cases in accordance with court procedures on campus through role-playing under the guidance of teachers to further remember, understand, apply the legal professional knowledge learned, and consolidate the theoretical knowledge. From the perspective of the whole teaching process, the complete practical teaching of the moot court should include the preparation stage, the simulated trial stage, and the summary stage. In the traditional teaching methods, case selection and student grouping were the work in the preparation stage. The difficulty of the cases selected by teachers should be moderate. Cases could be real or virtual. According to the selected cases, students would be divided into groups, and students would complete evidence collection, agency, defense writing, and other related work according to their roles. In the simulated trial stage, students are required to simulate the case itself in strict accordance with the

requirements of substantive law and procedural law. Teachers play a small role at this stage and usually cannot interrupt the simulation program. All courses are handled by students independently. In the summary stage, teachers can combine theoretical knowledge to comment on students' role-play and summarize some shortcomings of this moot court teaching. Formal role-play is not easy to improve students' learning achievements and stimulate students' enthusiasm for learning. Therefore, the traditional moot court teaching mode is relatively backward.

In the era of booming information technology, utilizing virtual reality technology and scaffolding strategies to develop virtual environments can create case

scenarios and complete litigation processes that traditional moot courts cannot achieve, allowing students to fully experience the real scene of judicial trials and feel the atmosphere of intense debate in the virtual environment. The virtual environment created by virtual reality technology has realism and can attract law school students to participate in interaction. In a virtual environment, students achieve the goal of applying legal theory knowledge to practice and familiarizing themselves with legal procedures by repeatedly simulating different roles such as judges and lawyers. Through the virtual environment, students become familiar with relevant procedural law and substantive law knowledge and improve their learning achievements and enthusiasm. Currently, scholars' research has proved that the use of virtual environment in teaching can improve students' learning achievements.

2. Virtual Environment

In many engineering fields, virtual environments have been successfully applied due to their unique advantages (Mokhtar & Khan, 2004). These systems combine 3D visualization technology and virtual reality technology with modern teaching concepts, enabling complex teaching concepts to be presented vividly and realistically. There are two types of virtual environments: small virtual environments and large virtual environments. Small-scale virtual environments include users sitting still in front of monitors or wearing binocular orientation monitors, which can interact with virtual objects in a small workspace (Lucidarme & Richard, 2005, p.14). Using virtual environments to analyze the movements of users' body parts in sports training can help mobilize sports enthusiasm and improve training skills (Tsuji, Sumida, Kaneko, & Sadao, 2001, p.168). In the medical field, Pieper et al. (1991) and Maekawa et al. (1995) made it possible for users to train medical surgery and treatment using a virtual environment system. However, the existing system was mainly used to help users train physical skills using virtual environments. To the best of our knowledge, there was no relevant research on the use of virtual environments in moot court teaching to improve learning achievements.

2.1 Virtual Reality Technology

Virtual reality usually refers to an experience where the user's body is in the real world, but their hearing, touch, and other senses have entered the virtual world (comprising three-dimensional objects) with the assistance of a computer or specific devices equipped with glasses and headphones (Cooper, Park, Nasr, Thong, & Johnson, 2019, p.2). Virtual reality is a computer application that can simulate objects, characters, or environments in real life. Users can complete tasks through interaction in the virtual environment, with fascinating visuals and powerful functions (Philippe & Grigore, 2003, p.45). Virtual reality (VR) is a technology in which users interact with virtual environments using devices such as computers or specific glasses (Sharmistha, 2013, p.304). The very first idea of it was proposed by Ivan Sutherland in 1965: “Made the virtual world on the screen feel real from the perspectives of vision, hearing, and touch, and interacted with users' behavior” (Ivan, 1965, p.506). Nowadays, virtual reality is constantly advancing and has developed into an advanced and increasingly sophisticated technological means. It is widely used in manufacturing and education industries such as archaeology, medicine, linguistics, physics, biology, chemistry, automotive manufacturing, architecture, and has shown a trend of integration with various industries, achieving a number of emerging development industries (Whyte, 1999, p.371). VR technology has three remarkable features: immersion, interactivity, and imagination.

2.2 Types of Virtual Reality Systems

Virtual reality can be classified into distinct types based on the user's perceived level of immersion (Sharmistha, 2013, p.307):

First, Non-Immersive Systems or desktop virtual reality is the most basic form of virtual reality, with a low level of immersion and convenient application. It can be independently and easily implemented on a computer. As the simplest computer application, desktop virtual reality refers to the ability to present a virtual environment through a computer screen without the need for specific glasses. Although users can interact with virtual environments, they lack immersion. It uses traditional monitors to display various images. In this virtual environment, users can only perceive the virtual

environment through visual and auditory means, which have the characteristics of visualization and interaction, but the sense of immersion is poor. This desktop virtual reality is mainly applied in the field of education.

Next, Semi-Immersive (Fish Tank VR) Systems which require users to wear LCD shutter glasses to create an immersive feeling. Due to the use of traditional monitors, these systems are difficult to achieve sensory output.

Lastly, Immersive Systems which provide a powerful sense of immersion, allowing users to fully immerse themselves in the virtual world through HMD. Users gain a strong three-dimensional sense and fully experience the virtual world from visual, auditory, and tactile perspectives.

2.3 Research on Using Virtual Reality Technology in Teaching

Using VR technology can create an immersive 3D environment where users can interact. Although this environment was expensive in the past, its strong practicality made VR technology widely used. VR technology enables students to have stronger initiative in teaching and provides students with a vivid learning environment. This advantage comes from the immersion of virtual reality technology itself, which cannot be provided by traditional teaching methods. In the teaching process of virtual reality technology, students have stronger participation and can be well immersed in the whole learning process (Xiaoyi & Hao, 2020). The immersive and realistic environment constructed by virtual reality environment helps students liberate from the rigid traditional teaching and transforms students from passive reception learning to independent inquiry and interactive learning (Wenjun & Qing, 2019). VR technology can realize the reproduction or simulation of the real environment and use 3D animation technology to display the scene and let students immerse themselves (Na & Yinghui, 2020).

Universities have begun to attach importance to the application of virtual reality technology in teaching practice. Its advantage lies in creating vivid and realistic practical scenarios, allowing students to learn knowledge as if they were there. In history, virtual reality technology can realistically reproduce historical scenes, while in

law, virtual reality technology can realistically reproduce case and trial scenes, thereby stimulating learning motivation, improving participation, and transforming teaching methods (Jiawei, 2021). Due to the low immersion of desktop virtual reality systems, they are mainly used in the teaching process of law, history, and language, making it easier for learners to understand and master knowledge more intuitively in vivid images and scenes.

Through a semi-immersive (fish tank VR) system, students wear VR glasses during teaching, immerse themselves in the virtual environment, and interact with it, effectively improving the quality of teaching. The teaching method has also transformed into a form that students enjoy. Adapted to the characteristics of these systems, this virtual reality system is mainly used for experimental teaching in disciplines such as architecture and medicine. It helps learners immerse themselves and quickly integrate into virtual characters for operation, which is conducive to better achieving teaching objectives (Wenjun & Qing, 2019).

The immersive system, with its unique user experience, is used by the Dutch Capital Archaeological Museum to project restored images of the original building onto ancient Roman ruins, making users feel as if they had returned to the distant and mysterious ancient Roman era (Yalong & Poyuan, 2020). Virtual reality is used to construct scenes that cannot be presented in monotonous teaching environments, avoiding teaching scenes with high construction costs, which is beneficial for saving teaching costs.

2.4 Conclusion

In conclusion, using virtual reality technology in the moot court teaching process allows students to interact with the virtual environment and experience the trial more vividly and intuitively. At the same time, the virtual reality system helps to break through the limitations of the current moot court that cannot be trained at any time according to the needs of students due to time and place constraints and improves students' learning enthusiasm and learning efficiency. A virtual environment is a copy or simulation of a real environment. It uses 3D animation to show cases and immerse

students in it. Students operate according to the process and can become familiar with and master all aspects of case handling. With VR simulation features, students can experience different roles. The moot court virtual reality system is a desktop virtual reality system. The system has designed an experimental project, and students only need to operate according to the steps. The virtual simulation system can reproduce the scene, bring a new experience to students, stimulate learning motivation, and improve learning achievements.

3. Learning Model

The learning model of this study refers to the model that uses virtual environments with scaffolding strategies. Technology and online learning enable learners to complete tasks in virtual environments that are similar to real environments (Duffy & Cunningham, 1996; Honebein, 1996). Online learning provides a highly simulated virtual learning environment, enhances learners' experience, helps them understand knowledge, and enhances their motivation to actively complete learning tasks (Driscoll & Carliner, 2005). For learners, online learning has the characteristics of flexibility and convenience in both time and place, allowing them to learn anytime, anywhere. Online learning has lower costs than on-site learning (McDonald, 1999-2000). Compared to classroom learning, online learning has a superior learning effect (McEwen, 1997). In the online learning model, animation can help demonstrate concepts and events that are difficult to describe in the traditional classroom and can vividly show legal dispute cases.

3.1 Meaning of the Learning Model

The learning model refers to virtual learning or net-based learning (Urdan & Weggen, 2000). Additionally, it is equipped with a complete course, allowing easy access to the content learned at any time (Hall, 2000). This definition encompasses the delivery of course content via the Internet, intranets, and extranets. After reviewing and organizing the development process of online learning in the United States, Kong Yan (2010) proposed that the learning model is a new learning style carried out through the Internet. That is, an Internet platform is developed in the field of education. The online

learning environment is built using computer technology, the Internet, big data, and other technologies. This online learning usually includes learning content, login and operation environments carried by multimedia, and an online community composed of learners, technical developers, and content experts.

Specifically, Fan Rong (2019) defined online learning as follows: based on exploring strategies to improve online learning investment. Online learning means that schools and teachers organize students to learn online learning resources on the online platform, participate in online learning discussions and interactions, and complete homework and corresponding tests assigned by teachers according to curriculum outlines and curriculum standards under the organizational form of clear teaching objectives and teaching plans. Campbell (2004) argued that in the field of higher education, online learning focuses on cultivating learners' metacognitive, reflective, and collaborative abilities. Additionally, online learning breaks through conventional learning and is guided by self-learning, which helps unleash the learner's subjectivity and initiative. In a comparative study, Dabbagh and Nanna Ritland (2005) analyzed the differences between onsite learning environments and online learning environments, arguing that onsite learning environments are (a) due to the location limitations of teachers and students, (b) the teaching content cannot be repeatedly learned, (c) the teacher takes the lead, and (d) the teaching methods are single. With the help of the Internet and information technology, online teaching provides a way of learning that is not constrained by time and place. The online learning environment showcases exciting potential in practical teaching, achieving a student-centered teaching approach (Baker, 2003; Browne, 2005). Since the 1960s, online learning has emerged and influenced companies, businesses, governments, training institutions, and the education sector in different ways.

3.2 Components of the Learning Model

The learning model involves various technological means such as information technology and is based on computer-created networks for learning, virtual classrooms, and digital programs (Urdan & Weggen, 2000). The learning model cannot

be separated from the online environment, which includes learning platforms built on computers, various media such as multimedia, educational resources, interactive games, evaluation systems, etc.

3.3 Research on Using the Learning Model for Law Learning

The study of learning patterns has received widespread attention from experts, scholars, and educators in the field of education (Hill, Wiley, Nelson, & Han, 2003). Many studies have confirmed the impact of online learning as a change in learning methods on traditional learning methods, and its convenience undoubtedly aligns with the information age (Poole, 2000) and flexibility (Chizmar & Walbert, 1999), as well as its challenges including technical difficulties continuously improving online learning to win the favor of more learners and educators (Song, Singleton, Hill, & Koh, 2004).

In recent years, undergraduate education reform has been vigorously carried out in various universities in China, and the online teaching model has been implemented in undergraduate education reform, such as classes, small classes, and so on. This new teaching mode is a bold attempt at teaching reform, where its online teaching mode is still combined with offline traditional classrooms, mostly about offline traditional classrooms. But since the outbreak, major national universities have carried out a variety of online teaching, marking the first time that education reform has embraced large-scale full-time online teaching mode. The entire teaching process is completed without contact, accelerating the pace of online learning mode reform, and online learning mode has been widely applied in many disciplines.

Regarding law learning, Chinese universities have also started using a learning model. Lin Jinjing (2019) analyzed the advantages of applying a learning model to legal education. Online learning is helpful in improving teaching and learning efficiency. For teachers, if students have doubts about the knowledge points explained in class, they can use Internet technology to re-tutor students about the relevant content in class through online communication. Based on the knowledge attribute of law itself, the traditional teaching mode often used to teach legal knowledge makes students feel

bored, which weakens their enthusiasm for learning to a certain extent. Therefore, online learning combines technology with learning and can improve learning enthusiasm through realistic case teaching.

Furthermore, Chang Jiekun (2021) proposed that the online learning platform needs to make an appropriate choice of teaching content to be carried out, focusing on some core and relatively more important legal concepts, memory, and structural knowledge. The online learning part can create micro-videos, carefully designed according to the requirements of the teaching plan and syllabus. The teacher should master the teaching content proficiently, freely pick up, and set suitable difficulty and visibility in the teaching design based on students' actual situations.

3.4 Conclusion

In conclusion, the learning model that uses virtual environments with scaffolding strategies can provide a sense of a three-dimensional environment and user immersion. It is a learning mode with students as the main body and teachers as auxiliary. As a new learning model, it needs to make full use of scientific and technological means, leverage the advantages of virtual reality technology, vividly display legal knowledge and cases, enhance students' participation, promote students' active learning, and improve the learning effect.

4.Scaffolding

Wood et al. (1976) proposed this term, where scaffolding was defined as an expert aiding children and guiding them to achieve goals they could not independently accomplish. Originally, Wood et al.’s (1976) conceptualization of scaffolding was consistent with Vygotsky’s model of instruction and emphasized the role of teachers in scaffolding strategies. Teachers used their extensive knowledge to guide learners in solving challenging problems and tasks they faced (Vygotsky, 1978). This concept of scaffolding was based on the notion of the zone of proximal development (ZPD) which Vygotsky (1978) defined as the gap between tasks that learners independently completed and those that could be completed with the assistance of knowledgeable mentors. Scaffolding was the process of using ZPD to support learners, which was

manifested in the intervention of language prompts, text prompts, peer discussions, and computer interactions to help learners complete learning tasks (Pritchard & Woollard, 2010). As is well known, scaffolding was an essential auxiliary tool for building new buildings, supporting them to rise from the ground and being dismantled immediately after the new building was built. In recent years, scaffolding has been continuously extended to the field of education. Scaffolding provided necessary support for construction workers, and teachers acted as scaffolding to provide guidance and assistance to learners, supporting them in acquiring new understanding, concepts, and skills. Similar to building scaffolding, when learners acquired knowledge and skills, teachers suspended support and guidance.

4.1 The Nature of Scaffolding in Educational Contexts

Wood, Bruner, and Ross (1976) were the first to extend building scaffolding to the learning process. Initially, the three scholars extended scaffolding to parents teaching their children to learn a language. Research showed that as scaffolding workers, parents found ways to attract their children's attention and provide rewards to encourage them to complete tasks. These parents divided tasks based on their level of difficulty, and through imitation, let their children know the standards for completing tasks, broke down tasks, and gradually guided their children to complete challenges. Through this approach, parents successfully acted as scaffolding. Bruner (1978) defined scaffolding as clearing obstacles for learners during the task completion process, so that learners could complete tasks under the guidance of a mentor. In classroom learning, the term scaffolding is defined as the teacher providing temporary assistance to students to support them in completing tasks or gaining new understanding and possessing the ability to independently complete similar tasks in the future. Maybin, Mercer, and Steirer (1992) described it as a guide providing learners with temporary and necessary assistance to support them in successfully completing tasks. By definition, the term scaffolding has many significant characteristics.

4.2 Key Features of Scaffolding

Extending understanding was the first key feature of scaffolding. Scaffolding refers to providing necessary assistance to enable learners to understand and complete tasks that they could not independently complete. As Mercer explained (1994): 'Scaffolding represented that adults could provide various cognitive support for children's learning, indicating that with the help of adults, children had internalized their understanding of things psychologically'. Teachers gradually increased the difficulty level in teaching activities, beyond the current abilities and understanding levels of students, and provided high-level guidance to assist students in completing challenges, supporting students in improving their abilities to another level and internalizing new understandings. In a discussion on the impact of teaching, Mariani (1997) organized and summarized the impact of the level of teacher support and the difficulty of challenges on classroom learning outcomes. Research has found that students might experience frustration, insecurity, and anxiety when facing high difficulty challenges and low levels of support. The research results indicated that when the difficulty of the challenge exceeded the student's ability range, it was likely to lead to challenge failure. When the difficulty of the challenge was low and the level of support was low, students would lack the motivation to complete the challenge. This led to a dampening of students' learning enthusiasm, believing that learning was dull and uninteresting. When the difficulty of the challenge was high and the level of support was high, students would find a comfortable learning area and enjoy the classroom experience, but the learning gains could not reach the ideal state. Most learning required students to complete tasks beyond their abilities, that is, to be carried out in a highly challenging and supportive environment. As Vygotsky (1978) wrote, good learning referred to learning that was ahead of actual development. The core of scaffolding lay in knowledgeable guides, usually including experts and teachers, who assisted learners in completing learning and supported learners in acquiring new understanding or skills about things. Through this new understanding, students could not only complete the current learning but also independently complete tasks in future learning. Independently completing tasks

specifically referred to knowing what to think and do without the help of a mentor when facing new learning tasks, and being able to apply the new understanding and skills acquired.

Scaffolding strategies, like building scaffolding, had a temporary nature. When learners were able to independently apply new skills to solve problems, teachers no longer served as scaffolding. Scaffolding requires teachers to assess the learning status of students, specifically their level of cognition and understanding. Teachers need to be clear about when and how to assist students, in order to provide personalized support tailored to various levels of needs. This ability to customize support for specific learners was what van Lier (1996), Wells (1986), and others referred to as contingency. Contingency aimed to highlight the necessity and importance of adjusting teaching strategies based on students' current cognition to help them learn smoothly. Contingency is reflected in the teacher's ability to grasp the needs of learners and adjust corresponding teaching strategies to aid students in a timely manner. A crucial factor in determining the quality of teaching is the ability to assess the cognitive needs and level of understanding in students thereby providing necessary assistance. Van Lier (1996) stated that "Although scaffolding was not required by the curriculum plan or syllabus, it was a symbol that measured the excellence of teachers and the appropriateness of teaching methods".

The last important feature of scaffolding was giving consideration to macro and micro focuses. In addition to fully understanding the cognitive level, comprehension level, and ability of learners, teachers also needed to be fully familiar with the key and difficult points that needed to be solved to complete learning tasks to play the role of scaffolding. Therefore, teachers who provided scaffolding assistance must be experts in the learner's curriculum or research field, with a profound professional background and rich teaching experience. Therefore, high-level teaching design and plans were inseparable from scaffolding, while closely adhering to teaching objectives and tasks. Mercer (1994), who also held a similar view, argued that the concept of scaffolding emphasized building bridges between students' current cognition, understanding, and

abilities and learning objectives, establishing necessary connections, and using specific discourse strategies to assist children in learning.

4.3 Type of Scaffolding

There were two levels of scaffolding: macro-scripted scaffolding and micro-scripted scaffolding (Table 1). The scaffolding used in the online learning model of this study included instructional guidance and inquiry questions.

Table 1Type of Scaffolding

Scaffolding Levels	Scaffolding Tools
Macro-scripted Scaffolding	Predict, Observe, Explain and Evaluate (POEE)strategy: create constructivist environment by providing elicitation, cognitive conflict, opportunity to interact, explain, reflect, and evaluate.
Micro-scripted Scaffolding	**1.Instructional guidance: strongly** guided activity with clear instructions supports students' inquiry.
	2.Multiple external representations: macro, sub-micro and symbolic level representations facilitated abstract science concepts learning.
	3.Inquiry questions: These provide reflective, elaborate, and procedural guidance to students in their inquiry.

4.4 Conclusion

In a word, scaffolding is widely used in classroom interaction, specifically as temporary help provided by teachers to students to assist and support them in completing tasks or developing new understanding, enabling them to complete tasks independently in the future. Scaffolding strategies can reduce the frustration, insecurity, and anxiety that students encounter in the learning environment, helping them

understand how to think and act, and thereby apply new skills and understanding in new environments.

5. Instructional of Law

The traditional teaching model of law in China primarily focused on theoretical teaching, supplemented by case teaching. Law education in the United States belonged to vocational education. After entering school, students mainly engaged in vocational training, paying attention to legal case analysis, and developing skills in analyzing problems, oral defense, and language expression. Because students' future training direction was practicing lawyers, American Law Majors paid special attention to legal practice teaching.

5.1 Traditional American Law School Delivery Methods

For over 100 years, classroom teaching in American law schools has used case study methods (Friedland, 1996, p.3). Although the effectiveness of the case study method has been questioned by the academic community, its position in classroom content has not wavered (Sheppard, 1997, p.621; Floyd, 1997; Thomas, 1994). In American law schools, besides case study, lectures were also necessary for learning (Friedland, 1996, p.27). Lectures serve as opening or concluding speeches at the beginning or end of a law course, clarifying erroneous statements made by the opposing party or lawyer during the course. Small groups and role-playing are common teaching strategies in American law schools, using case studies to train law school students in case reasoning skills (Dutile, 1981, p.1). Case studies also help train students' legal thinking. Professors not only teach legal rules but also guide students to actively think and analyze classic cases through questioning, promoting the use of case law (Sheppard, 1997, p.586). This clever combination of precedent law and Socratic dialogue is known as the Socratic method in the legal community (Stevens, 1983, p.55).

5.2 Instruction of Law in China

For a long time, China's legal education placed more emphasis on the infusion of knowledge and the teaching of legal theory. Teachers focused on teaching theoretical knowledge while students listened and understood passively in a memory-

based learning mode (Huakui, 2022). While teaching theoretical knowledge, teachers interspersed case debate teaching methods in the classroom. This method guides students to properly learn cases that conform to classroom teaching, enhance understanding of relevant laws and regulations, and improve the quality of law teaching (Shuhang & Shasha, 2016). Case debate teaching highlights the main position of students' learning. Students are the main body of legal classroom learning and teaching activities. Teachers play a guiding and enlightening role in legal debate teaching, enabling students to integrate into learning activities and improve their understanding of legal knowledge quickly and comprehensively. In classroom teaching, teachers use cases and law-related problems to attract students' attention, allowing them to analyze legal issues and explore teaching cases, guiding students to identify key learning points and engage in interaction and discussion. Students master and apply knowledge in interaction and communication, improving classroom learning efficiency, divergent thinking, and subjective initiative in learning. The moot court, a practical teaching method, involves role-playing in court proceedings where students take on various roles (parties, agents ad litem, judges, clerks, witnesses, etc.). In this teaching process, teachers mainly play the role of guides, setting scenes, and asking questions. Students should be the main focus of teaching, with their subjective initiative fully utilized.

5.3 Conclusion

In the existing moot court teaching process, it is generally necessary to select cases and group students in the teaching class to determine their roles. After receiving the task, students write corresponding legal documents (scripts) and rehearse according to their own "lines". After several rehearsals and repeated revisions of the problems, students present the complete court trial process. This process resembles acting hence it is also called "acting" moot court. In this process, students rely heavily on the internet, searching for various materials needed. Some students use ready-made materials from the internet without distinction. Due to different roles and tasks, some roles have heavier responsibilities, such as the chief judge and the public prosecutor; while some roles have lighter tasks, such as jurors, bailiffs, etc. In task assignment,

some students with low participation enthusiasm choose roles with fewer tasks, while others "hitchhike" in roles with multiple tasks, such as prosecutors. This moot court model emphasizes form over content. Because roles are predetermined and performed according to fixed "lines", it lacks the antagonism and tension of a trial, making it difficult to stimulate student enthusiasm. Reforms are needed in the moot court teaching mode to standardize the court trial process, stimulate student enthusiasm for participation, and improve teaching quality.

CHAPTER III
RESEARCH METHODOLOGY

The topic of this study was development of an online learning model using the virtual environment with scaffolding strategies to improve learning achievements in virtual moot court for law undergraduate students in China. The objectives of this research were:

1) To study students' learning needs and problems under the traditional moot court teaching.

2) To develop a learning model using the virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

3) To study the result and satisfaction of using an online learning model using the virtual environment with Scaffolding strategies to improve learning achievements in moot court teaching.

There were 3 phases:

Phase 1: To study students' learning needs and problems under the traditional moot court teaching.

Phase 2: To develop a learning model using the virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

Phase 3: To study the result and satisfaction of using a learning model using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching.

Phase 1: To study students' learning needs and problems under the traditional moot court teaching.

At this stage, the researchers collected literature on traditional moot court teaching. In addition, the researchers also conducted expert interviews. The expert group is composed of three IOC experts.

1.1 Population

The population of this study was a total of 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University.

1.2 Sample Group

The sample was a total of 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University, studying in 2023 academic year.

1.3 Research Instruments

The research instrument was a needs questionnaire designed to assess traditional moot court teaching practices.

The Construction and Improvement Process

(1) Studied, analyzed, and synthesized relevant research about moot court teaching and learning in order to draft a needs questionnaire. The needs questionnaire was designed on a five-level scale. The criteria for are as follows:

Table 2 The criteria of the scale in the first part of the needs questionnaires

level	meaning
5(Always)	This level indicates that the event or behavior consistently occurs or is highly likely to occur under almost all circumstances.
4(Frequently)	The event or behavior happens often, though there may be occasional exceptions or instances where it doesn't occur.
3(Sometimes)	The event or behavior occurs occasionally, but not as frequently as "frequently" implies. There are periods or situations where it does not occur.
2(Rarely)	The event or behavior occurs infrequently, and it's unusual for it to happen. It might happen in exceptional circumstances or under specific conditions.
1(Never)	This level indicates that the event or behavior does not occur at all or is highly unlikely to occur under any circumstances.

Table 3 The criteria of the scale in the second part of the needs questionnaires

level	meaning
5(Very Satisfied)	This level indicates the highest degree of satisfaction. The individual is extremely pleased with their experience, product, or service, and it likely exceeds their expectations.
4(Satisfied)	The individual feels content and happy with their experience, product, o r service. While not necessarily ecstatic, they have no significant complaints and feel overall positive about the situation.
3(Neutral)	This level signifies a lack of strong emotion either way. The individual ne ither feels particularly satisfied nor dissatisfied. They may have a mix of positive and negative feelings or feel indifferent.
2(Dissatisfied)	The individual feels discontent or unhappy with their experience, product, or service. They may have encountered issues or shortcomings that affect their overall satisfaction negatively.
1(Very Dissatisfied)	This level represents the lowest level of satisfaction. The individual is hi ghly disappointed or frustrated with their experience, product, or service. Their expectations were not met, and they may have had a particularly negative experience.

(2) Draft of needs questionnaire submitted to advisor for assessment.

(3) Needs questionnaire sent to three IOC experts.

The expert team was organized to evaluate all items of the needs questionnaire based on a scoring range from -1 to +1 according to the criteria:

1 means the item is related the objective

0 means not sure the item is related the objective

-1 means the item is not related the objective

The items with the maximum score of 1 were determined to be excellent items agreed on by all experts. The items with the score between 0.5 and 1 were retained, while the items with the score between 0.5 and -1 were revised, and those with the minimum score of -1 were deleted. The IOC experts' approval for all items between were 0.67-1.00.

(4) Modified according to expert suggestions and finalized.

1.4 Data Collection

The needs questionnaires (Appendix A) were completed by 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University.

1.5 Data Analysis

The data collected from the needs questionnaires was analyzed using a Priority Needs Index (PNI) according to criteria as follows:

Needs questionnaire part 1:

4.50-5.00 means Always

4.00-4.49 means Frequently

3.50-3.99 means Sometimes

3.00-3.49 means Rarely

1.00-2.99 means Never

Needs questionnaire part 2:

4.50-5.00 means Very Satisfied

4.00-4.49 means Satisfied

3.50-3.99 means Neutral

3.00-3.49 means Dissatisfied

1.00-2.99 means Very Dissatisfied

Phase 2: To develop a learning model using the virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

At this stage, the researchers collected literature on virtual environments, virtual reality technology, moot court teaching and scaffolding. In addition, the researchers also

conducted expert interviews. The expert group was composed of three IOC experts, five model experts and three content experts.

2.1 Population

The population of this study was a group of experts in content and technology experts, respectively. The experts had more than 5 years of working experience in the related field.

2.2 Sample Group

(1) Five model experts proficient in virtual reality according to specific selection criteria, composed of three content and two technology experts.

(2) Content experts were 3 legal professors who used technology in their teaching with more than 5 years of working experience by specific selecting method.

2.3 Research Instruments

Tool 1: A learning model using the virtual environment with scaffolding strategies.

Tool 2: Lesson plan.

Tool 3: Learning achievement test.

Tool 4: Approval model form.

Tool 1: A learning model using the virtual environment with scaffolding strategies (Appendix B).

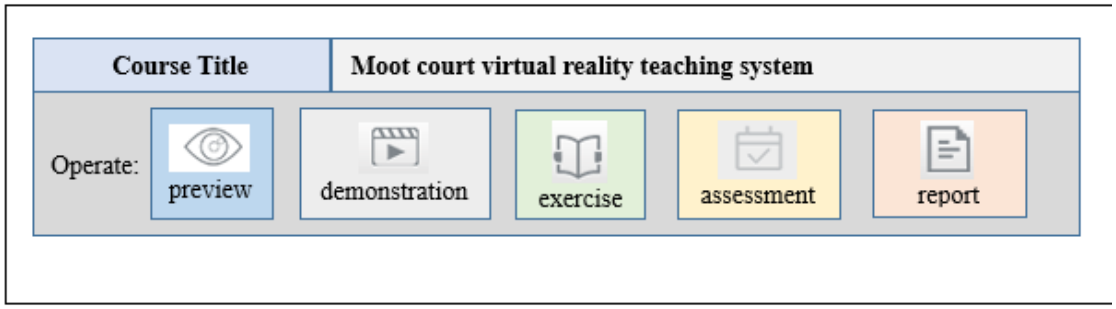
The Construction and Improvement Process

(1) Studied, analyzed, and synthesized the document, and relevant research.

(2) Using results from phase I, designed draft of a learning model using the virtual environment with scaffolding strategies.

(3) Drafted the components and process of learning with an online learning model in the virtual environment with scaffolding strategies and defined the scope based on the topic on the platform. The experimental teaching simulation had five systems: preview, demonstration, exercise, assessment, and report.

The functions on the platform were shown as follows:



Figures 6 Functional diagram of the platform

(3.1) Knowledge preview system: the system included simulation purpose, basic theoretical knowledge involved, simulation process tips, etc. Students previewed and consolidated basic knowledge before simulation;

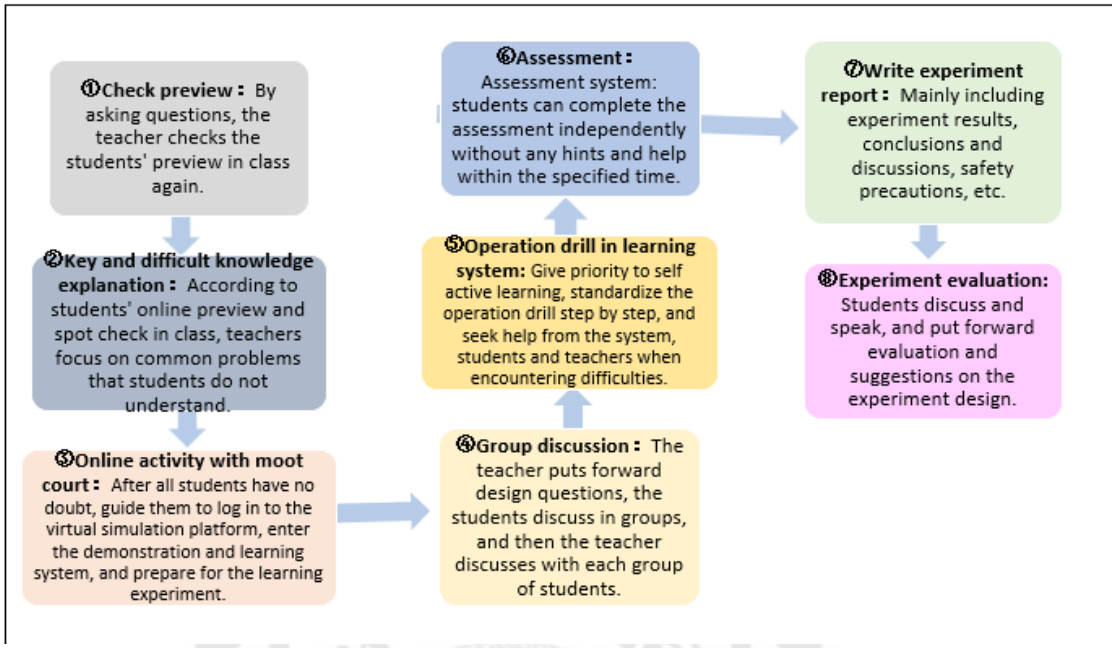
(3.2) The court trial demonstration system: the court trial process was simulated as a reference, so that students quickly understood the contents of the court trial as a whole;

(3.3) Simulation exercise system: with the help of words, sounds, highlights and other prompts, human-computer interaction guided students to learn and complete the simulation trial process step by step;

(3.4) Simulated assessment system: no prompts given during the operation test; the system automatically gave a score after assessing;

(3.5) Document writing system: after the assessment, it was necessary to write documents or reports, and the teacher would score according to the quantity and quality of documents.

(4) Drafted the process of a learning model using the virtual environment with scaffolding strategies shown as follows:



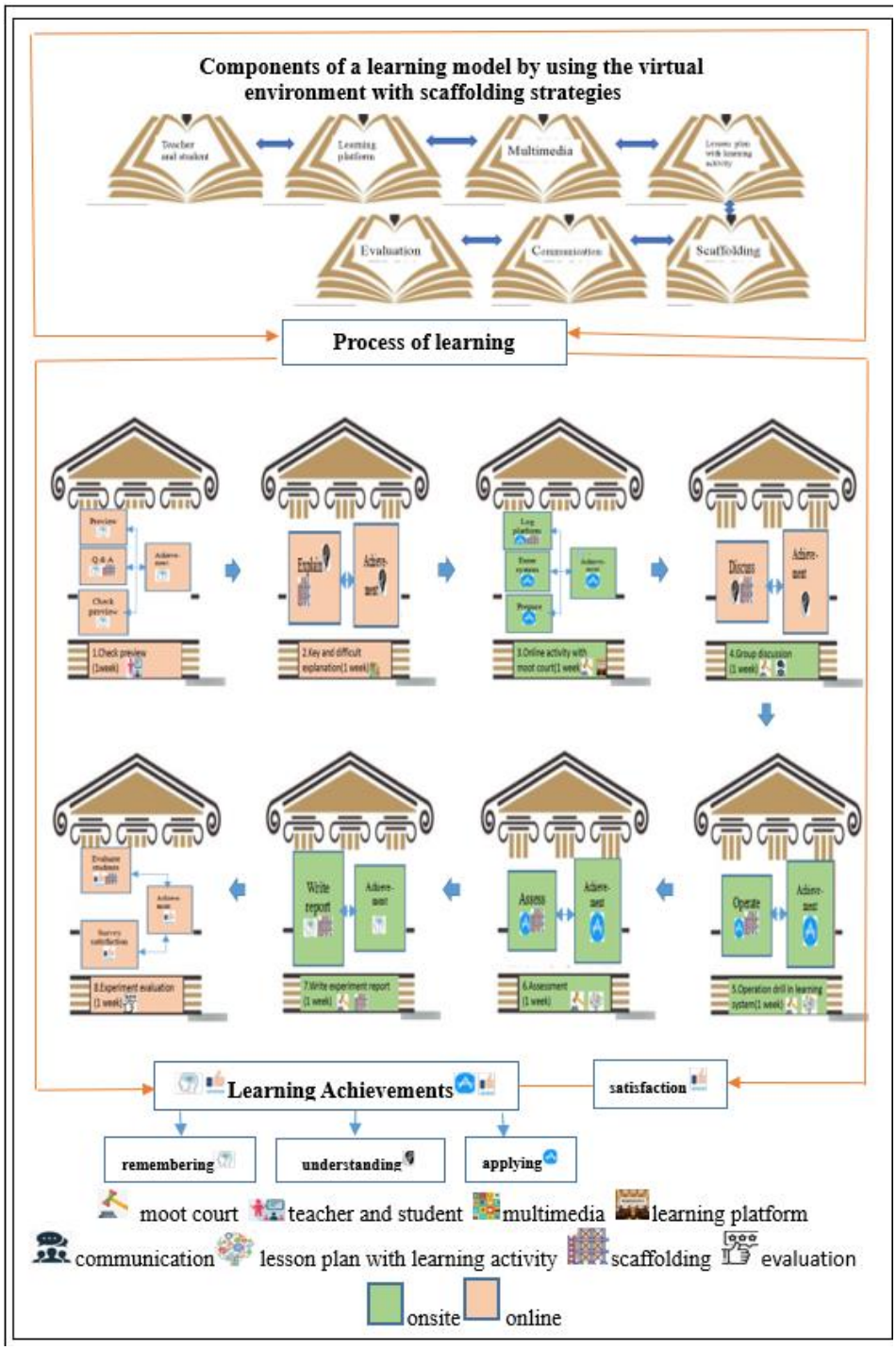
Figures 7 The process diagram of a learning model using the virtual environment with scaffolding strategies

(5) Drafted the evaluation of a learning model using the virtual environment with scaffolding strategies. The learning model evaluation was designed on a five-level scale. For more details regarding this instrument, please refer to Likert scales.

Table 4 The criteria of the scale in a learning model using the virtual environment with scaffolding strategies

Scale	Range-Value	Verbal Interpretation
5	4.50-5.00	Highly Acceptable
4	3.50-4.49	Acceptable
3	2.50-3.49	Moderately Acceptable
2	1.50-2.49	Fairly Acceptable
1	1.00-1.49	Not Acceptable

(6) Proposed the draft of a learning model using the virtual environment with scaffolding strategies to adviser for modification.



Figures 8 Draft of MOOT-COSE model

(7) Submitted to IOC experts for evaluation using the criteria:

1 means the item is related to the objective

0 means not sure the item is related to the objective

-1 means the item is not related to the objective

(8) Modified according to expert suggestions and finalized.

Tool 2: Lesson plan (Appendix C)

The Construction and Improvement Process

(1) Studied, analyzed, and synthesized the document, and relevant research.

(2) Using results from phase I, designed draft of a lesson plan.

(3) Drafted the lesson plan. The evaluation for the lesson plan was designed on a five-level scale. For more details regarding this instrument, please refer to Likert scales.

Table 5 The criteria of the scale in lesson plan

Scale	Range-Value	Verbal Interpretation
5	4.50-5.00	Highly Acceptable
4	3.50-4.49	Acceptable
3	2.50-3.49	Moderately Acceptable
2	1.50-2.49	Fairly Acceptable
1	1.00-1.49	Not Acceptable

(4) The lesson plan was designed for 32 class hours, and participants used computers for operation. Participants had eight weeks of online and onsite learning and studied 4 class hours a week.

Table 6 Lesson Plan

Week	Lesson Plan	links	class hours
1 Check preview (onsite)	Prosecution stage	Evidence selection and complaint writing	4
2 Key and difficult knowledge explanation (onsite)	Court acceptance stage	Respondent defense and document making	4
3Online activity with moot court (Online)	Court acceptance stage	Summary of pre-trial meeting and dispute focus	4
4 Group discussion (online & onsite)	Trial stage of first instance	Organize the court hearing of the first instance	4
5 Operation drill in learning system (online)	Trial stage of first instance	Witness appearance and questioning	4
6 Assessment (online)	Trial stage of first instance	Organize court mediation	4
7 Write experiment report (online)	Trial stage of first instance	Evaluation and sentencing of first instance	4
8 Experiment evaluation (On site)	Stage of appeal and second trial	Appeal and document making, organization of second instance court trial, second instance review and judgment	4

Table 6 shows the learning contents of each lesson. Students participated in learning activities through human-computer interaction. The teacher provided tasks for each class, allowing students to simulate the process of domestic litigation from filing to judgment, from first instance to second instance.

Table 7 Step-by-step table for student interaction

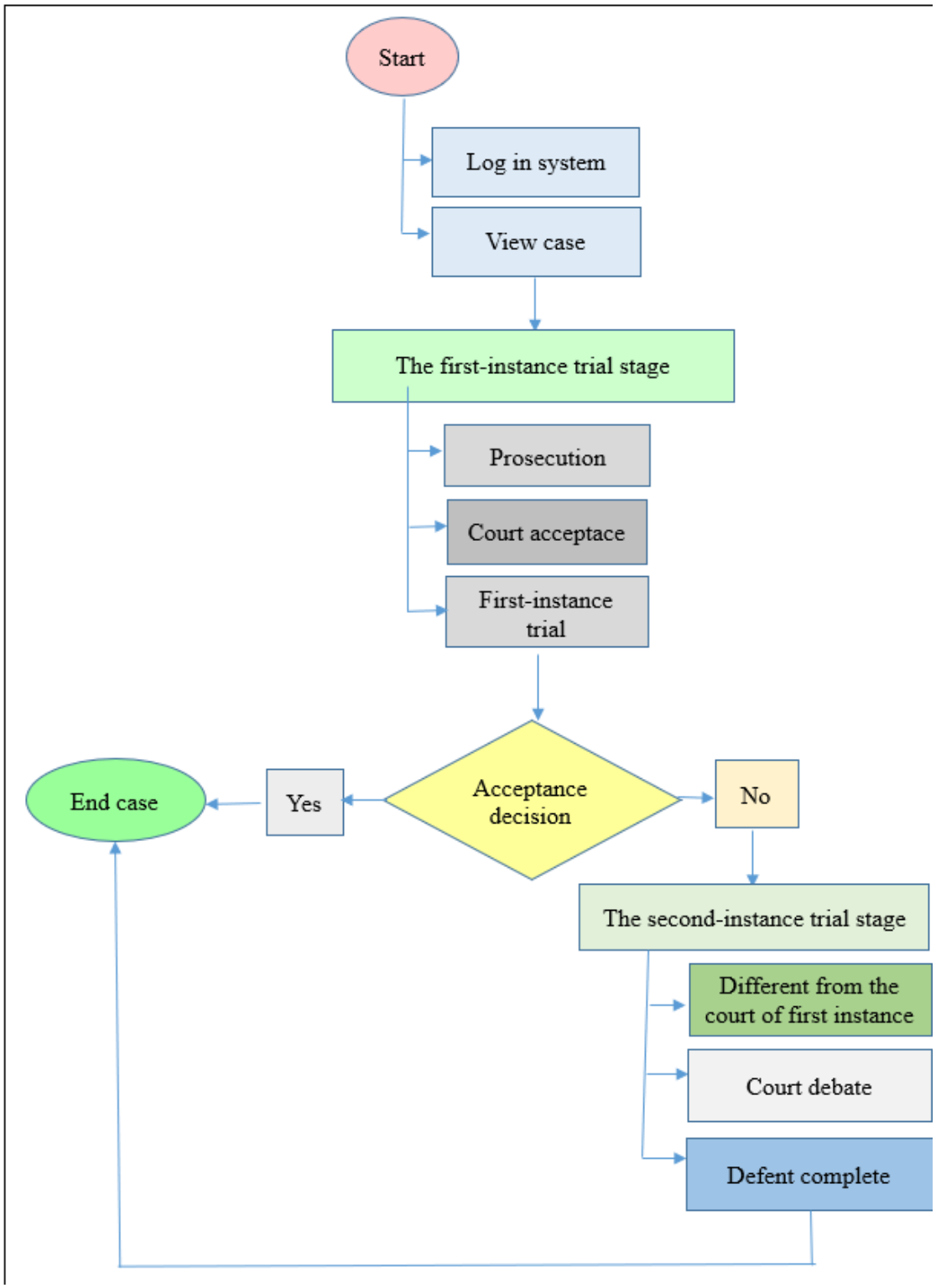
Step number	Step target requirement	Reasonable time for steps	Goal attainment scoring model	Full marks for steps	Type of achievement
Moot court					
1	Select evidence and write indictment	30 minutes	Proper selection of evidence and submission of documents	5 points	ROperating results RSystem reports £Preview grades £Teacher evaluation report
2	Select evidence and submit a statement of defense	30 minutes	Submit documents as required	5 points	
3	Organize a pre-court conference	15 minutes	Determining the burden of proof and issues	5 points	
4	Organize a trial	60 minutes	Organize the trial according to the trial process	5 points	
5	Witness appearance and questioning	15 minutes	The proof purpose of properly selecting witnesses	5 points	

Table 7 (continue)

Step number	Step target requirement	Reasonable time for steps	Goal attainment scoring model	Full marks for steps	Type of achievement
			Moot court		
6	Mediation in court	5 minutes	Organize mediation and prepare mediation documents	5 points	
7	First instance verdict	10 minutes	Submit documents as required	5 points	
8	Appeals and papermaking	30 minutes	Choose whether to appeal and make paperwork	5 points	
9	Organize a second-instance trial	60 minutes	Organize the trial according to the trial process	5 points	
10	Second instance verdict	10 minutes	Filing of paperwork as required; correct application of law	5 points	

Students operated and practiced in the moot court virtual system. The learning tasks were divided into five stages: the prosecution stage, the court acceptance stage,

the first-instance trial stage, the appeal stage, and the second-instance trial stage. The flowchart of the learning tasks was shown as follows:



Figures 9 The Flowchart of the Learning Tasks

(4.1) Prosecution stage: Once students understood the case, they entered the process of case prosecution. Firstly, students entered the role of "plaintiff", and selected evidence that was beneficial to their own side according to the type and content of evidence prompted by the system. Secondly, students created litigation documents based on evidence.

.Figures 10 Example of Interface in the Prosecution Stage

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

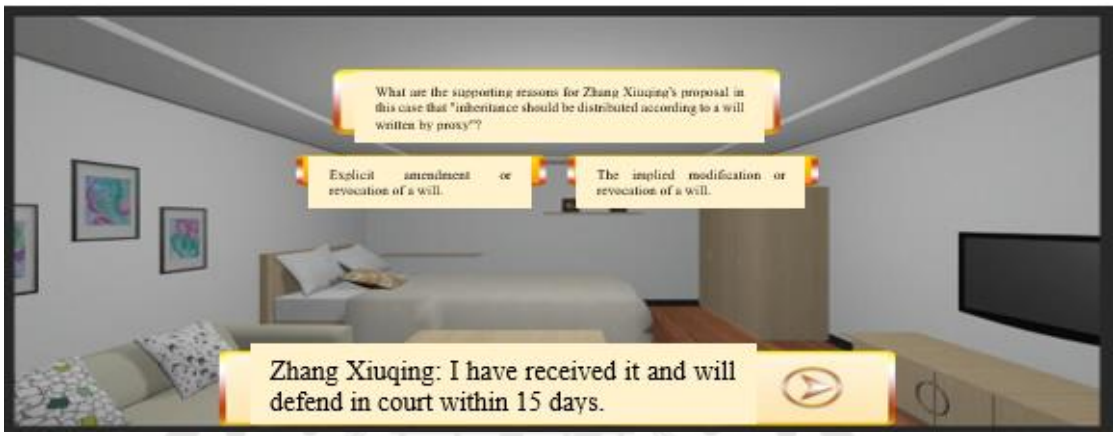
(4.2) Court acceptance stage: Firstly, the court reviewed the indictment and determined whether it was accepted. If the court accepted the case, it made a document and "delivered" the document to both the plaintiff and defendant. Here, students were required to complete and upload the correct type of documents within the time limit.

Secondly, the "defendant" then prepared and submitted a defense to the court according to the plaintiff's pleadings with reasons and evidence. Here, students were required to judge the type of documents needed then complete and upload.

Thirdly, the court called a pre-court meeting to exchange evidence and summarize the focus of the dispute between the plaintiff and the defendant. Here, the

students playing the role of “the court” were required to summarize the focus of the dispute and enter the next procedure.

Lastly, the court confirmed and announced the date of the hearing. Students were required to make an announcement according to the prompts and filled in the contents of the announcement.



Figures 11 Example of Interface in the Court Acceptance Stage

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

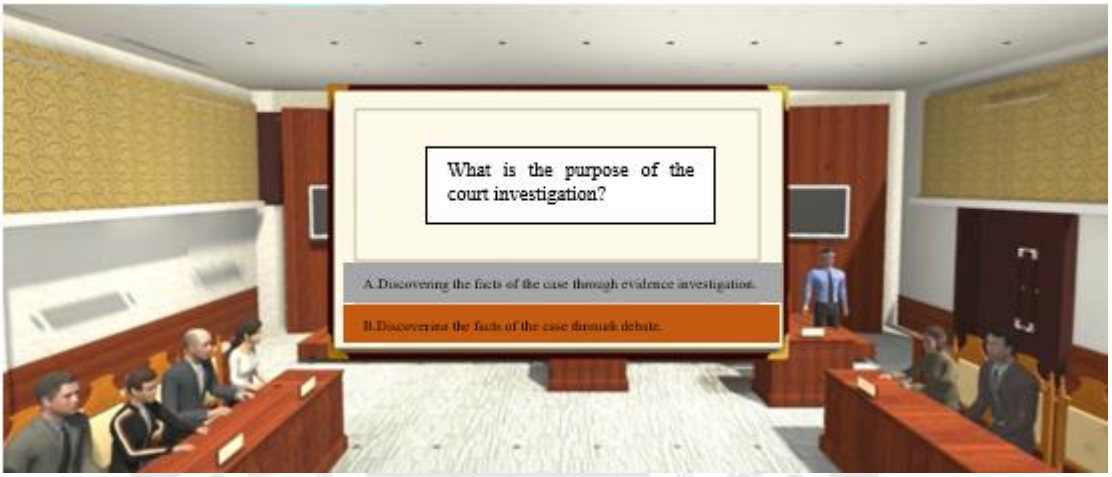
(4.3) First instance court trial stage: Firstly, the court: presided over the trial which was completed according to the basic process of the first instance of civil litigation; controlled the basic rhythm of the trial, maintained court discipline, and avoided deviation from the focus of dispute; carefully listened to the opinions of the plaintiff and defendant, and judged the facts and legal issues of the case.

In this link, there would be prompts for the court trial process. Students would make choices according to the prompts to move the trial process forward. If the selection was correct, they entered the next part of the trail process; If the selection was wrong, a knowledge point prompt would pop up to offer guidance.

Secondly, the plaintiff: completed the trial under the guidance of the court, bringing forward evidence and submitting to cross examination; Used knowledge to debate in court. Here, students were required to answer the theoretical knowledge

questions involved, and again correct answers were required before proceeding to the next step.

Thirdly, the defendant: completed the trial under the guidance of the court, bringing forward evidence and submitting to cross examination; Used knowledge to debate in court. Here, students were required to answer the theoretical knowledge questions involved, and again correct answers were required before proceeding to the next step.



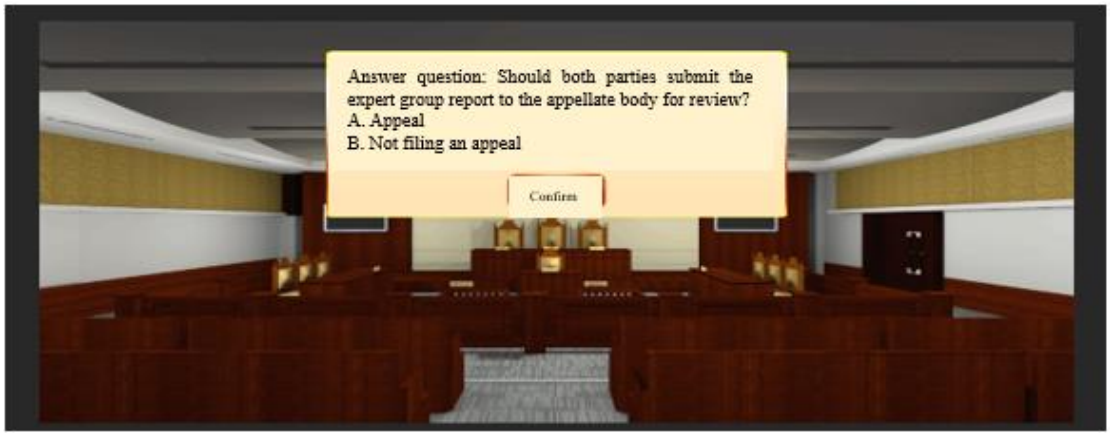
Figures 12 Example of Interface in the Trial Stage of the First Instance

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

(4.4) Appeal stage: First, students chose whether to appeal. If students chose "Yes", they entered the appeal stage.

Second, students judged the requirements of an appeal and after correct judgement, entered the process of submitting appeal documents.

Finally, students made and uploaded appeal documents.



Figures 13 Example of Interface in the Appeal Stage

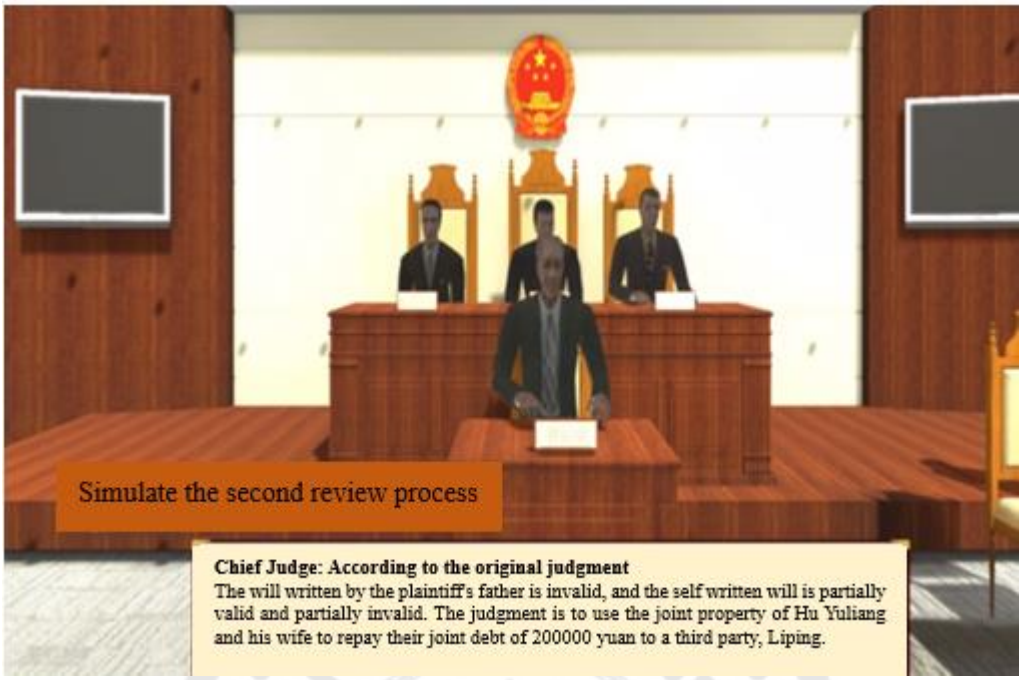
Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

(4.5) The second trial stage: Firstly, the court which was different from court of first instance presided over the trial: completed court work according to the basic process of the second trial of civil litigation; Controlled the basic rhythm of the trial, maintained court discipline, and avoided deviation from the focus of dispute; Carefully listened to the opinions of the plaintiff and defendant, and judged the facts and legal issues of the case.

Secondly, the plaintiff: completed the trial under the guidance of the court; bringing forward evidence and submitting to cross examination; Used knowledge to debate in court.

Thirdly, the defendant: completed the trial under the guidance of the court; bringing forward evidence and submitting to cross examination; Used knowledge to debate in court.

This stage formed part of the assessment, and the system would no longer prompt the students with key points of knowledge. Students would operate by themselves, complete all the processes, and submit documents and experimental reports.



Figures 14 Example of Interface in the Second Trial Stage

Source: Cai Jun. (2021). Virtual Reality Integrated Teaching Platform for Moot Court from http://www.ilab-x.com.

(5) Proposed the draft of lesson plan to adviser for modification.

(6) Submitted to IOC experts for evaluation using the criteria:

1 means the item is related to the objective

0 means not sure the item is related to the objective

-1 means the item is not related to the objective

(7) Modified according to expert suggestions and finalized.

Tool 3: Learning achievement test (Appendix D).

The Construction and Improvement Process

(1) Studied, analyzed, and synthesized the document, and relevant research.

(2) Using results from phase I, designed draft of learning achievement test.

(3) Drafted the learning achievement test. The evaluation was designed on a five-level scale. For more details regarding this instrument, please refer to Likert scales.

Table 8 The criteria of the scale in learning achievement test

Scale	Range-Value	Verbal Interpretation
5	4.50-5.00	Highly Acceptable
4	3.50-4.49	Acceptable
3	2.50-3.49	Moderately Acceptable
2	1.50-2.49	Fairly Acceptable
1	1.00-1.49	Not Acceptable

(4) Prior to being taught using the learning model, 40 undergraduate students majoring in law in the third year of Faculty of Law, Jianghan University, completed the Learning achievement test. In order to accurately measure improvement in the participants' learning achievement in the virtual environment, the participants were tested before coming into contact with it. Moot court teaching involved the knowledge of procedural law and substantive law related to civil litigation thus, the study selected a set of 50 multiple-choice questions from the examination questions of the China Unified Legal Professional Qualification Examination, related to this topic.

(5) Proposed draft of the learning achievement test to advisor for modification.

(6) Submitted to IOC experts for evaluation using the criteria:

1 means the item is related to the objective

0 means not sure the item is related to the objective

-1 means the item is not related to the objective

(7) Modified according to expert suggestions.

(8) Trial tested with 40 students to find p, r, and reliability.

(9) Modified according to results of the trial test and finalized.

Tool 4: Approval model form (Appendix F).

The Construction and Improvement Process

(1) Studied, analyzed, and synthesized the document, and relevant research.

(2) Brought the result from phase 1 to design draft of approval model form.

(3) Drafted the evaluation of approval model form. The evaluation was designed on a five-level scale. For more details regarding this instrument, please refer to Likert scales.

Table 9 The criteria of the scale in approval model form

Scale	Range-Value	Verbal Interpretation
5	4.50-5.00	Highly Acceptable
4	3.50-4.49	Acceptable
3	2.50-3.49	Moderately Acceptable
2	1.50-2.49	Fairly Acceptable
1	1.00-1.49	Not Acceptable

(4) Proposed the draft of approval model form to advisor for modification.

(5) Submitted to IOC experts for evaluation using the criteria:

1 means the item is related to the objective

0 means not sure the item is related to the objective

-1 means the item is not related to the objective

(6) Modified according to expert suggestions and finalized.

2.4 Data Collection

(1) Collected data from five model experts on the learning model using the virtual environment with scaffolding strategies.

(2) Collected data on the lesson plan from three content experts who used technology in their teaching.

(3) Collected data using approval form with five model experts to confirm the model.

2.5 Data Analyze

Data analysis of the online learning model using the virtual environment with scaffolding strategies, lesson plan and approval model form involved using mean and standard deviation (S.D.).

Phase 3: To study the results and user satisfaction with the online learning model using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching.

3.1 Population

The population of this study was a total of 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University, China.

3.2 Sample Group

The sample was composed of 40 law undergraduate students at Jianghan University, who were selected from the third-year students according to cluster sampling. Their ages ranged from 20 to 21.

3.3 Research Instruments of Moot Court Virtual Reality Teaching System

Tool 1: Lesson plan

Tool 2: Learning achievement test

Tool 3: Students' satisfaction questionnaires

Tool 3: Students' satisfaction questionnaires (Appendix E)

The Construction and Improvement Process

(1) Studied, analyzed, and synthesized the document, and relevant research.

(2) Using results from phase I, designed draft of students' satisfaction questionnaires.

(3) Drafted the students' satisfaction questionnaires. The questionnaire included two dimensions, usefulness, and ease of use, with a total of 12 items. We anchored the end points of the scale with "strongly disagree" (1) and "strongly agree" (5). For more details regarding this instrument, please refer to Likert scales.

Table 10 The criteria of the scale in students' satisfaction questionnaires

Scale	Range-Value	Verbal Interpretation
5	4.50-5.00	Highly Acceptable
4	3.50-4.49	Acceptable
3	2.50-3.49	Moderately Acceptable
2	1.50-2.49	Fairly Acceptable
1	1.00-1.49	Not Acceptable

(4) Proposed the draft of students' satisfaction questionnaires to adviser for modification.

(5) Submitted to IOC experts for evaluation using the criteria:

1 means the item is related to the objective

0 means not sure the item is related to the objective

-1 means the item is not related to the objective

(6) Modified according to expert suggestions and finalized.

3.4 Data Collection

Research methodology

(1) In order to test whether the participants' learning achievements improved through the online learning model, the participants were tested before engaging. The tool used in the pretest was the learning achievement test (Appendix D).

(2) The researchers implemented the lesson plans through the online learning model. There were five lesson plans and ten links, namely: evidence selection and writing of pleadings; responding to lawsuits and document making; pretrial conference and summary of dispute focus; organizing trial of the first instance, witnesses' appearance and inquiry; organizing mediation in court, reviewing and sentencing of the first instance, appeals and document making; organizing trial of the second instance, reviewing and sentencing of the second instance. These ten links were the entire process of litigation. The lesson plans would be tested by the 40 students for eight weeks with four class hours of online learning each week.

The moot court course was a simulation of the whole trial process, with the main interaction steps as follows:

(3) Evidence selection and complaint writing: First, students could only proceed once they had correctly selected evidence; if the evidence selection were insufficient, the program would not be able to enter the prosecution page; In the process of prosecution, students must submit evidence and documents as required before proceeding;

(4) Responding to the lawsuit and making documents: After the case was accepted, students needed to view and select evidence, answer the lawsuit, and submit evidence and documents, then process on to the next stage;

(5) The summary of the pretrial conference and the focus of the dispute: After the defense submitted, the students then determined the burden of proof and the focus of dispute as the court, and submitted the court documents; Again, if the dispute focus were not submitted as required, the students could not proceed;

(6) Organized the trial of the first instance: In the first instance procedure, the students would preside over the trial as the court party. If the procedure were wrong, the procedure might be interrupted or restarted, and a new trial would be required;

(7) Witness appearance and questioning: When the witness appeared in court, the students should stand on their own side and questions the witness; if questions were selected incorrectly, the testimony of the witness would be difficult to prove, which would affect the outcome of the lawsuit;

(8) Organized court mediation: The commencement of the mediation procedure depended on whether the students, acting as the litigants and defendants, mutually agreed to it; If mediation were agreed, the trial procedure would be terminated and the students would make a mediation document; If the mediation were not agreed, the trial procedure would continue.

(9) First instance evaluation and sentencing: After the first instance, the students needed to make a judgment. If the judgment were not submitted as required,

the program would not proceed; If the application of law in the judgment was incorrect, the final score would be affected;

(10) Appeal and document making: The appeal procedure depended on whether the students, as the litigants and defendants, filed an appeal on the platform; If an appeal was filed, the second instance procedure was started and the appellant submitted documents; If no appeal was filed, the trial proceedings were terminated.

(11) Organized the court hearing of the second instance: In the procedure of the second instance, the students would preside over the trial as a court party. If the procedure was wrong, the process might be interrupted or restarted, and a new trial was required.

(12) Second instance evaluation and sentencing: After the second instance, the students needed to make a judgment. If the judgment were not submitted as required, the students could not proceed; If the application of law in the judgment was wrong, the final score would be affected.

(13) At the end of the eight-week study, in order to test whether the learning achievement of 40 law undergraduate students had been improved by the moot court virtual reality teaching system, a post-test of learning achievement was conducted.

(14) Additionally, another post-test of learning achievement was conducted after the end of the eight-week study, in order to check student memory retention after learning with the moot court virtual reality teaching system.

(15) After the post-test, the students completed satisfaction questionnaires.

3.5 Data Analysis

The learning achievement test was analyzed using a dependent t-test, and the data from the students' satisfaction questionnaires was analyzed using mean and standard deviation (S.D.).

CHAPTER IV
DATA ANALYSIS

The research aimed to develop an online learning model using the virtual environment with scaffolding strategies to enhance learning achievements in virtual moot court for law undergraduate students in China.

The objectives of this research were:

1) To study students' learning needs and problems under traditional moot court teaching

2) To develop a learning model utilizing a virtual environment with scaffolding strategies to enhance students' learning achievements in moot court teaching

3) To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

There were 3 phases:

Phase 1: To study students' learning needs and problems under traditional moot court teaching.

Phase 2: To develop a learning model utilizing a virtual environment with scaffolding strategies to enhance students' learning achievements in moot court teaching.

Phase 3: To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

The following are the details of the analysis results.

Phase 1: Results of students' learning needs and problems under the traditional moot court teaching.

The researchers submitted needs questionnaires about traditional moot court teaching to experts to evaluate the applicability and accuracy of the questionnaire content. Thereafter, modifications and improvements were made based on feedback.

1.1 The results of the needs questionnaires about the traditional moot court teaching

The population of this study was a total of 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University. The results were as follows:

According to Bloom's Taxonomy, needs in this study comprised four major components: remembering, understanding, applying and satisfaction.

Table 11 Results on the “Remembering” section of the needs questionnaires about the traditional moot court teaching(N=96)

Item	Current status		Meaning	Expect status		Meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching has problems in using tools to help memorize knowledge.	4.05	0.37	Frequently	4.97	0.17	Always	0.23	7
The current moot court teaching lacks teaching equipment and software to help memorize knowledge.	3.92	0.31	Sometimes	4.91	0.29	Always	0.25	6

Table 11 (continue)

Item	Current status		Meaning	Expect status		Meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching is backward in the use of technology or tools to help memorize knowledge.	3.74	0.44	Sometimes	4.74	0.44	Always	0.27	5
The current moot court teaching motivates you to increase your knowledge of court debate through some tools.	1.25	0.56	Never	4.64	0.48	Always	2.71	4
The current moot court teaching motivates you to increase your knowledge of procedural law through scaffolding strategies or other tools.	1.05	0.22	Never	4.79	0.41	Always	3.55	3

Table 11 (continue)

Item	Current status		Meaning	Expect status		Meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching motivates you to increase your knowledge of substantive law through technology.	1.01	0.10	Never	4.60	0.49	Always	3.56	2
The current moot court teaching motivates you to increase your knowledge of court trials through scaffolding strategies or other tools.	1.04	0.20	Never	4.76	0.43	Always	3.57	1
Average of total	2.29	0.31	Never	4.77	0.39	Always	2.02	

Table 6 displays the averages for the total remembering scores, distinguishing between the expected status (mean=4.77, S.D=0.39) and the current status (mean=2.29, S.D=0.31). The former consistently scored higher than the latter. Regarding the ranking of Needs Assessment, three distinct rankings were identified. The first-ranked PNI (Perceived Need Importance) item was: "The current moot court

teaching motivates you to increase your knowledge of court trials through scaffolding strategies or other tools" (PNI=3.57). Following closely, the second-ranked PNI item was: "The current moot court teaching motivates you to increase your knowledge of substantive law through technology" (PNI=3.56). Lastly, the third-ranked PNI item was: "The current moot court teaching motivates you to increase your knowledge of procedural law through scaffolding strategies or other tools" (PNI=3.55).

Table 12 Results on the “Understanding” section of the needs questionnaires about the traditional moot court teaching

Item	Current status		Meaning	Expect status		Meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching has problems in using tools to aid understanding.	3.88	0.33	Sometimes	4.96	0.20	Always	0.28	6
The current moot court teaching helps you deepen your understanding of court trials knowledge through scaffolding strategies or other tools.	1.09	0.33	Never	4.80	0.45	Always	3.39	5
The current moot court teaching helps you deepen your understanding of court debate knowledge through some tools.	1.09	0.36	Never	4.81	0.44	Always	3.40	4

Table 12 (continue)

Item	Current status		Meaning	Expect status		Meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching helps you deepen your understanding of the basic process of litigation through technology.	1.04	0.20	Never	4.75	0.46	Always	3.56	3
The current moot court teaching helps you deepen your understanding of procedural law knowledge through scaffolding strategies or other tools.	1.06	0.24	Never	4.88	0.36	Always	3.59	2
The current moot court teaching helps you deepen your understanding of substantive law knowledge through technology.	1.04	0.20	Never	4.81	0.44	Always	3.62	1
Average of total	1.53	0.28	Never	4.84	0.39	Always	2.97	

Table 7 illustrates the averages for total scores in understanding, contrasting the expected status (mean=4.84, S.D=0.39) with the current status (mean=1.53, S.D=0.28). The expected status consistently yielded higher scores than the current status. Concerning the ranking of Needs Assessment, three distinct rankings emerged. The top ranked PNI item was: "The current moot court teaching helps you deepen your

understanding of substantive law knowledge through technology" (PNI=3.62). Following closely, the second-ranked PNI item was: "The current moot court teaching helps you deepen your understanding of procedural law knowledge through scaffolding strategies or other tools" (PNI=3.59). Lastly, the third-ranked PNI item was: "The current moot court teaching helps you deepen your understanding of the basic process of litigation through technology" (PNI=3.56).

Table 13 Results on the “Applying” section of the needs questionnaires about the traditional moot court teachin

Item	Current status		meaning	Expect status		meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching helps you use the knowledge you have learned to argue in court.	3.81	0.39	Sometimes	4.96	0.20	Always	0.30	5
The current moot court teaching helps you use the knowledge you have learned to resolve legal disputes related to daily life.	3.21	0.63	Rarely	4.84	0.42	Always	0.51	4
The current moot court teaching helps you use the knowledge you have learned to prepare a statement of defense.	3.08	0.63	Rarely	4.72	0.52	Always	0.53	3
The current moot court teaching helps you use the knowledge you have learned to create litigation documents.	3.08	0.64	Rarely	4.78	0.49	Always	0.55	2

Table 13 (continue)

Item	Current status		meaning	Expect status		meaning	PNI	Rank
	M	S.D.		M	S.D.			
The current moot court teaching helps you use the knowledge you have learned to complete the proof and cross-examination of evidence.	2.94	0.59	Never	4.83	0.45	Always	0.65	1
Average of total	3.22	0.58	Rarely	4.83	0.42	Always	0.51	

From Table 8, the average scores for applying, comparing the expected status (mean=4.83, S.D=0.42) and the current status (mean=3.22, S.D=0.58), reveal a consistent superiority of the expected status over the current status. Regarding the ranking of Needs Assessment, three distinct rankings were identified. The top ranked PNI item was: "The current moot court teaching helps you use the knowledge you have learned to complete the proof and cross-examination of evidence" (PNI=0.65). Following this, the second-ranked PNI item was: "The current moot court teaching helps you use the knowledge you have learned to create litigation documents" (PNI=0.55). Lastly, the third-ranked PNI item was: "The current moot court teaching helps you use the knowledge you have learned to prepare a statement of defense" (PNI=0.53).

Table 14 Results on the “Satisfaction” section of the needs questionnaires about the traditional moot court teaching

Item	Current status		meaning	Expect status		meaning	PNI	Rank
	M	S.D.		M	S.D.			
You are disappointed by the lack of sufficient guidance from teachers to students in the current moot court teaching.	3.25	0.44	Dissatisfied	4.35	0.48	Satisfied	0.34	15
You are disappointed that the current moot court teaching is just a formality and does not match the real court.	3.21	0.63	Dissatisfied	4.33	0.47	Satisfied	0.35	14
You are disappointed that you don't get as much learning from the current moot court teaching.	3.23	0.42	Dissatisfied	4.53	0.50	Very Satisfied	0.40	13
You are disappointed by the poor teacher-student interaction in the current moot court teaching.	3.09	0.36	Dissatisfied	4.35	0.48	Satisfied	0.41	12
You are disappointed by the inauthentic evaluation of students by teachers in the current moot court teaching.	3.26	0.44	Dissatisfied	4.58	0.50	Very Satisfied	0.41	12
You are disappointed that the mock trial don't help you understand the real trial much.	3.25	0.46	Dissatisfied	4.60	0.49	Very Satisfied	0.42	11
You are disappointed that the current moot court teaching deviates from the teaching mode of self-study by students and supplemented by teacher guidance.	3.16	0.64	Dissatisfied	4.74	0.44	Very Satisfied	0.50	10

Table 14 (Continue)

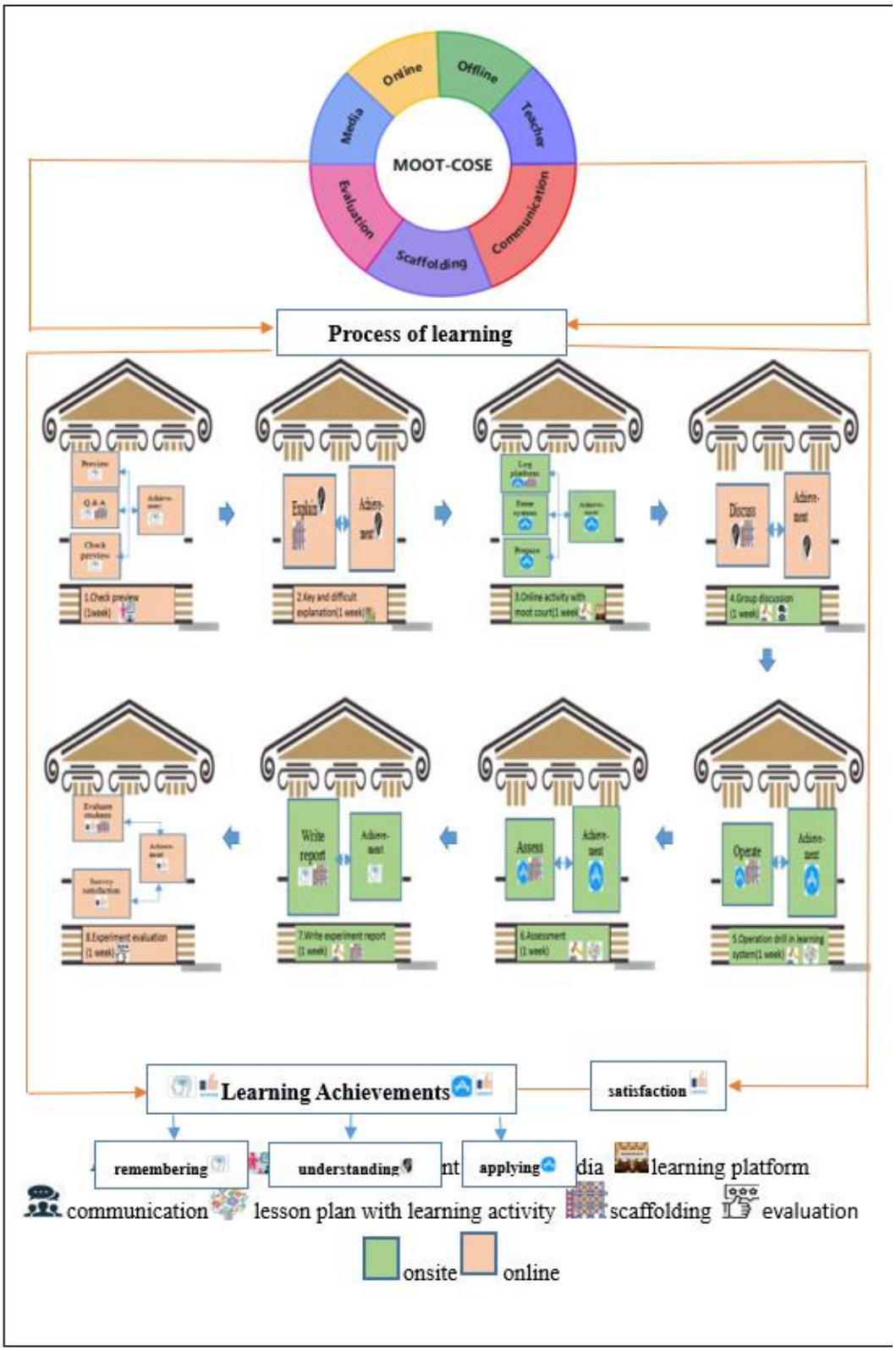
Item	Current status		meaning	Expect status		meaning	PNI	Rank
	M	S.D.		M	S.D.			
You are disappointed that you cannot fully experience the trial procedures of domestic courts in the current moot court teaching.	3.04	0.61	Dissatisfied	4.64	0.48	Very Satisfied	0.52	9
You are satisfied with the current moot court teaching environment.	1.60	0.80	Very Dissatisfied	4.34	0.50	Satisfied	1.71	8
You are satisfied with current moot court teaching in an environment without the Internet.	1.36	0.65	Very Dissatisfied	4.29	0.46	Satisfied	2.15	7
You are satisfied with the facilities of current moot court teaching.	1.36	0.70	Very Dissatisfied	4.35	0.48	Satisfied	2.19	6
The current moot court teaching is interesting.	1.32	0.61	Very Dissatisfied	4.32	0.49	Satisfied	2.27	5
You like the activity of current moot court teaching.	1.24	0.54	Very Dissatisfied	4.31	0.55	Satisfied	2.48	4
You like the media of current moot court teaching.	1.34	0.58	Very Dissatisfied	4.69	0.47	Very Satisfied	2.49	3
You are satisfied with the time of current moot court teaching.	1.17	0.43	Very Dissatisfied	4.11	0.61	Satisfied	2.53	2
You like the content of current moot court teaching.	1.33	0.66	Very Dissatisfied	4.74	0.44	Very Satisfied	2.55	1
Average of total	2.26	0.56	Very Dissatisfied	4.45	0.49	Satisfied	1.36	

Based on Table 9, the average satisfaction scores indicate a notable disparity between the expected status (mean=4.45, S.D=0.49), which showed satisfaction, and the current status (mean=2.26, S.D=0.56), which displayed a state of very dissatisfied. Concerning the ranking of Needs Assessment, three distinct rankings were identified. The top ranked PNI item was: "You like the content of current moot court teaching" (PNI=2.55). Following closely, the second-ranked PNI item was: "You are satisfied with the time of current moot court teaching" (PNI=2.53). Lastly, the third-ranked PNI item was: "You like the media of current moot court teaching" (PNI=2.49).

Phase 2: Results of development of the MOOT-COSE online learning model utilizing a virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

2.1 Results of the MOOT-COSE online learning model using the virtual environment with scaffolding strategies

The results are shown as a graphic model and as a detailed description of Media, Online, Offline, Teacher, Communication, Scaffolding and Evaluation (MOOT-COSE). The results were as follows:



Figures 15 MOOT-COSE model

Model

The MOOT-COSE learning model using the virtual environment with scaffolding strategies had 7 components:

1) **Media:**

Including projector and screen, text, animation, courseware, video, audio, and picture.

2) **Online:**

Including five aspects:

1. Equipment:

1) computer

2) smart phone

3) mobile tablet

4) wired network, mobile network or wi-fi, open URL with browser and virtual learning system.

2. Content:

1) operation video

2) case video

3) standard answer library

3. Exercises:

Scaffolded online exercises combining platform and cases

4. Simulation:

Simulated as Judge, Lawyer, Plaintiff and Defendant

5. System reports:

System analysis and summary

3) **Offline:**

Including checking preview, key points and difficult concept explanation, system login, group discussion, operation drill in learning system, completing the system assessment, writing experiment report and experiment evaluation. All learning activities are provided to students both online and onsite.

4) Teacher:

Specifically, the teachers of virtual moot court and law undergraduate students.

Teacher role: The teacher monitored students' preview situation through questioning and other methods, explain key points and difficult concepts, guide students to log in to the learning system, help students complete simulated exercises in the learning system through questioning and teacher-student discussions, and evaluate students' practice situation. Student role: Students preview relevant knowledge, enter the litigation process, and analyze cases under system prompts, select evidence, clarify litigation requests, and simulate the entire process of civil litigation, including prosecution, filing, first instance trial, appeal, and second instance trial. When encountering learning difficulties, discuss with teachers or classmates.

5) Communication:

Including online teacher-student and student-student discussion; onsite teacher-student and student-student discussion. Online teacher-student and student-student discussions were conducted using QQ and WeChat.

6) Scaffolding:

Including theoretical knowledge Q&A, instructional guidance, knowledge point prompts and knowledge expansion. All scaffolding was online.

7) Evaluation:

Including materials and rewards, learning achievements, credits, rating level and students' satisfaction evaluation on a learning model using the virtual environment with scaffolding strategies.

8) Processes:

1) Check preview (onsite)

2) Key and difficult knowledge explanation (onsite)

3)Online activity with moot court (online)

4) Group discussion (online & onsite)

5) Operation drill in learning system (online)

6) Assessment (online)

7) Write experiment report (online)

8) Experiment evaluation (onsite)

Table 15 The details and results of a learning model using the virtual environment with scaffolding strategies named MOOT-COSE model from five model experts

Components		Details	M	S.D.	Meaning
Media	1	Projector and screen	5.00	0.00	Highly Acceptable
	2	Text	4.75	0.50	Highly Acceptable
	3	Animation	4.75	0.50	Highly Acceptable
	4	Courseware	4.75	0.50	Highly Acceptable
	5	Video	4.75	0.50	Highly Acceptable
	6	Audio	4.50	0.58	Highly Acceptable
	7	Picture	5.00	0.00	Highly Acceptable
		Average	4.79	0.37	Highly Acceptable
Online	1	Equipment includes: 1)computer 2)smart phone 3)mobile iPad 4) wired network, mobile network or wi-fi, open URL with browser and enter virtual learning system	4.50	0.58	Highly Acceptable
	2	Contents include: 1) Operation video 2) case video 3) standard answer library	4.75	0.50	Highly Acceptable
	3	Exercises: Online exercises combined with platform cases and scaffolding strategies	4.75	0.50	Highly Acceptable
	4	Simulation: Simulate as Judge, Lawyer, Plaintiff and Defendant	4.75	0.50	Highly Acceptable
	5	System reports, analysis, and summary	4.75	0.50	Highly Acceptable
		Average	4.70	0.52	Highly Acceptable

Table 15 (Continue)

Components		Details	M	S.D.	Meaning
Offline	1	Check preview	4.75	0.50	Highly Acceptable
	2	Key and difficult knowledge explanation	5.00	0.00	Highly Acceptable
	3	System login	4.75	0.50	Highly Acceptable
	4	Group discussion	4.75	0.50	Highly Acceptable
	5	Operation drill in learning system	5.00	0.00	Highly Acceptable
	6	Complete the system assessment	4.75	0.50	Highly Acceptable
	7	Write experiment report	4.75	0.50	Highly Acceptable
	8	Experiment evaluation	4.75	0.50	Highly Acceptable
		Average	4.81	0.38	Highly Acceptable
Teacher	1	Teacher of virtual moot court	5.00	0.00	Highly Acceptable
	2	Law undergraduate students	4.50	0.58	Highly Acceptable
		Average	4.75	0.29	Highly Acceptable
Communication	1	Online teacher-student discussion	4.75	0.50	Highly Acceptable
	2	Onsite teacher-student discussion	5.00	0.00	Highly Acceptable
	3	Online student-student discussion	4.75	0.50	Highly Acceptable
	4	Onsite student-student discussion	4.75	0.50	Highly Acceptable
		Average	4.81	0.38	Highly Acceptable
Scaffolding	1	Theoretical knowledge Q&A	4.75	0.50	Highly Acceptable
	2	Instructional guidance	4.50	0.58	Highly Acceptable

Table 15 (Continue)

Components		Details	M	S.D.	Meaning
	3	Knowledge point prompts	5.00	0.00	Highly Acceptable
	4	Knowledge expansion	4.75	0.50	Highly Acceptable
		Average	4.75	0.40	Highly Acceptable
Evaluation	1	Material and spiritual rewards	4.75	0.50	Highly Acceptable
	2	Achievement	5.00	0.00	Highly Acceptable
	3	Credit	4.75	0.50	Highly Acceptable
	4	Rating level	4.75	0.50	Highly Acceptable
		Average	4.81	0.38	Highly Acceptable
		Average of total	4.78	0.39	Highly Acceptable

From Table 15, the average total score for the MOOT-COSE model, a learning model utilizing a virtual environment with scaffolding strategies, as evaluated by five model experts, indicated a high level of acceptability (mean=4.78, S.D=0.39).

The top three rankings within the category of "Highly Acceptable" were identified. The first rank encompassed "Offline", "Communication", and "Evaluation" (mean=4.81, S.D=0.38). Following closely, the second rank was attributed to "Media" (mean=4.79, S.D=0.37). Lastly, the third rank was assigned to "Scaffolding" (mean=4.75, S.D=0.40).

2.2 Results of lesson plan

From the opinions of five model experts, lesson plans were eight weeks. Result shown below:

Table 16 The results of lesson plan from five model experts

Item	M	S.D.	Meaning
Week1 Stage One			Highly Acceptable
Check preview	5.00	0.00	
Week2 Stage Two			Highly Acceptable
Key and difficult knowledge explanation	4.75	0.50	
Week3 Stage Three			Highly Acceptable
Online activity with moot court	4.50	0.58	
Week4 Stage Four			Highly Acceptable
Group discussion	5.00	0.00	
Week5 Stage Five			Highly Acceptable
Operation drill in learning system	5.00	0.00	
Week6 Stage Six			Highly Acceptable
Assessment	4.75	0.50	
Week7 Stage Seven			Highly Acceptable
Write experiment report	5.00	0.00	
Week8 Stage Eight			Highly Acceptable
Experiment evaluation	5.00	0.00	
Average of total	4.88	0.20	Highly Acceptable

Based on Table 16, the average total score for the lesson plan indicated a high level of acceptability (mean=4.88, S.D=0.20). Additionally, all activities within the lesson plan were also rated as highly acceptable.

2.3 Results of approval model form

From the opinions of five model experts, results shown below:

Table 17 The results of approval model form(components) from five model experts

Item	M	S.D.	Meaning
7 components of the model: 1)Media	4.79	0.37	Highly Acceptable
7 components of the model: 2) Online	4.70	0.52	Highly Acceptable
7 components of the model: 3) Offline	4.81	0.38	Highly Acceptable
7 components of the model: 4) Teacher	4.75	0.29	Highly Acceptable
7 components of the model: 5) Communication	4.81	0.38	Highly Acceptable
7 components of the model: 6) Scaffolding	4.75	0.40	Highly Acceptable
7 components of the model: 7) Evaluation	4.81	0.38	Highly Acceptable
Average of total	4.77	0.39	Highly Acceptable

From Table 17, the average total score for the approval model form (components), as evaluated by five model experts, indicated a high level of acceptability (mean=4.77, S.D=0.39). Moreover, all individual items within the model form were rated as highly acceptable.

Table 18 The results of approval model form (processes) from five model experts

Item	M	S.D.	Meaning
8 processes of the model: 1) Check preview (onsite)	5.00	0.00	Highly Acceptable
8 processes of the model: 2) Key and difficult knowledge explanation (onsite)	4.75	0.50	Highly Acceptable
8 processes of the model: 3)Online activity with moot court (Online)	4.50	0.58	Highly Acceptable
8 processes of the model: 4) Group discussion (online + onsite)	5.00	0.00	Highly Acceptable
8 processes of the model: 5) Operation drill in learning system (online)	5.00	0.00	Highly Acceptable
8 processes of the model: 6) Assessment (online)	4.75	0.50	Highly Acceptable
8 processes of the model: 7) Write experiment report (online)	5.00	0.00	Highly Acceptable
8 processes of the model: 8) Experiment evaluation (Onsite)	5.00	0.00	Highly Acceptable
Average of total	4.88	0.20	Highly Acceptable

Based on Table 18, the average total score for the approval model form (processes), as evaluated by five model experts, indicated a high level of acceptability (mean=4.88, S.D=0.20). Furthermore, all individual items within the model form were rated as highly acceptable.

Phase 3: Results of the MOOT-COSE online learning model using the virtual environment with scaffolding strategies on improving learning achievements in moot court teaching.

3.1 The results of learning achievement test

The population of this study was a total of 40 undergraduate students majoring in law in the third year of Faculty of Law Jianghan University. The results were as follows:

Table 19 Results of learning achievement test

	Mean	S.D	Different of Mean	Different of S.D	t	p
Pre-test	53.65	3.16	41.65	-0.32	-62.758	.000*
Post-test	95.30	2.84				

*p<0.05

From Table 19, it was observed that the mean score of the post-test (Mean=95.30, S.D=2.84) was significantly higher than that of the pre-test (Mean=53.65, S.D=3.16) with statistical significance at p<0.05.

3.2 The results of students' satisfaction questionnaires

The population of this study was a total of 40 undergraduate students majoring in law in the third year of Faculty of Law Jianghan University. The results were as follows:

Table 20 Results on students' satisfaction questionnaires

Item	M	S.D	Rank	Meaning
Using the learning model in my learning would increase my productivity	4.45	0.50	11	Satisfaction
My interaction with the learning model would be clear and understandable	4.48	0.55	10	Satisfaction
Learning to operate the learning model would be easy for me	4.53	0.55	9	Strongly Satisfaction
I would find the learning model to be flexible to interact with	4.55	0.55	8	Strongly Satisfaction
I would find it easy to use the learning model to do what I want to do	4.55	0.50	8	Strongly Satisfaction
Using the learning model in my learning would enable me to accomplish tasks more quickly	4.58	0.50	7	Strongly Satisfaction
Overall, I found the learning model to be useful for my learning	4.60	0.50	6	Strongly Satisfaction
It would be easy for me to become skillful at using the learning model	4.65	0.53	5	Strongly Satisfaction
Using the learning model would make it easier for my learning	4.68	0.47	4	Strongly Satisfaction
Using the learning model would improve my learning performance	4.70	0.46	3	Strongly Satisfaction
Overall, I found the learning model to be easy to use	4.75	0.49	2	Strongly Satisfaction
Using the learning model would enhance my effectiveness on learning	4.83	0.38	1	Strongly Satisfaction
Average of total	4.61	0.50		Strongly Satisfaction

From Table 20, the average total score on students' satisfaction questionnaires indicated a high level of satisfaction (mean=4.61, S.D=0.50). Further analysis revealed the rankings based on maximum to minimum mean scores for three specific items.

The top-ranked item was "Using the learning model would enhance my effectiveness on learning" (mean=4.83, S.D=0.38). Following closely, the second-ranked item was "Overall, I found the learning model to be easy to use" (mean=4.75, S.D=0.49). Lastly, the third-ranked item was "Using the learning model would improve my learning performance" (mean=4.70, S.D=0.46).

CHAPTER V
CONCLUSION AND DISCUSSION

The research aimed to develop an online learning model using the virtual environment with scaffolding strategies to enhance learning achievements in virtual moot court for law undergraduate students in China. This was a Research and Development (R&D) project. The research findings are summarized as follows:

The objectives of this research were:

1) To study students' learning needs and problems under traditional moot court teaching

2) To develop a learning model utilizing a virtual environment with scaffolding strategies to enhance students' learning achievements in moot court teaching

3) To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

There were 3 phases:

Phase 1: To study students' learning needs and problems under traditional moot court teaching.

Phase 2: To develop a learning model utilizing a virtual environment with scaffolding strategies to enhance students' learning achievements in moot court teaching.

Phase 3: To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

The instruments of this research were:

Tool 1: Needs questionnaires about traditional moot court teaching.

Tool 2: A learning model using the virtual environment with scaffolding strategies.

Tool 3: Lesson plan.

Tool 4: Learning achievement test.

Tool 5: Students' satisfaction questionnaires.

Tool 6: Approval model form.

A Brief Summary of the Study

Phase 1: To study students' learning needs and problems under the traditional moot court teaching.

The researchers used the needs questionnaires about traditional moot court teaching to survey 96 law undergraduate students of the third year at the Faculty of Law, Jianghan University and found students' learning needs and problems under the traditional moot court teaching.

1.1 Conclusion of the needs questionnaires about traditional moot court teaching

In the assessment of students' learning needs and challenges within the traditional moot court teaching setting, the primary need identified was, "The current moot court teaching motivates you to increase your knowledge of court trials through scaffolding strategies or other tools" (PNI=3.57). Following closely, the second-ranking need was, "The current moot court teaching motivates you to increase your knowledge of substantive law through technology" (PNI=3.56), while the third-ranking need was, "The current moot court teaching motivates you to increase your knowledge of procedural law through scaffolding strategies or other tools" (PNI=3.55).

Regarding students' understanding of their learning needs and challenges in the traditional moot court teaching context, the foremost need identified was, "The current moot court teaching helps you deepen your understanding of substantive law knowledge through technology" (PNI=3.62). Subsequently, the second-ranked need was, "The current moot court teaching helps you deepen your understanding of procedural law knowledge through scaffolding strategies or other tools" (PNI=3.59), followed by the third-ranked need, "The current moot court teaching helps you deepen your understanding of the basic process of litigation through technology" (PNI=3.56).

Concerning the application of students' learning needs and challenges in the traditional moot court teaching framework, the top-ranked need identified was, "The current moot court teaching helps you use the knowledge you have learned to complete the proof and cross-examination of evidence" (PNI=0.65). This was closely followed by the second-ranked need, "The current moot court teaching helps you use the knowledge you have learned to create litigation documents" (PNI=0.55), and the third-ranked need, "The current moot court teaching helps you use the knowledge you have learned to prepare a statement of defense" (PNI=0.53).

Examining the satisfaction levels regarding students' learning needs and challenges within the traditional moot court teaching environment, the primary need identified was, "You like the content of current moot court teaching" (PNI=2.55). Following this, the second-ranked need was, "You are satisfied with the time of current moot court teaching" (PNI=2.53), and the third-ranked need was, "You like the media of current moot court teaching" (PNI=2.49).

In summary, the analysis of students' learning needs and challenges highlighted the significance of technology and scaffolding strategies or other tools within the current moot court teaching framework. These aspects appear to warrant further improvement based on the results of the needs questionnaires.

Phase 2: To develop a learning model using the virtual environment with scaffolding strategies to improve students' learning achievements in moot court teaching.

Sample Group in this phase

The sample in this phase was five model experts, who were three content experts and two technology experts.

2.1 Conclusion of the MOOT-COSE online learning model using the virtual environment with scaffolding strategies

The MOOT-COSE online learning model using the virtual environment with scaffolding strategies contained 7 components: Media, Online, Offline, Teacher, Communication, Scaffolding and Evaluation.

1) Media:

These specifically included projector and screen, text, animation, courseware, video, audio, and picture.

2) Online:

These specifically included 5 aspects.

1.Equipments included: 1)computer 2)smart phone 3)mobile tablet 4) wired network, mobile network or wi-fi, open URL with browser and enter virtual learning system.

2.Contents included: 1) operation video 2) case video 3) standard answer library.

3.Exercises: Online exercises combined with platform cases and scaffolding strategies.

4.Simulation: Simulated as Judge, Lawyer, Plaintiff and Defendant. 5.System reports: System analysis and summary.

3) Offline:

These specifically included checking preview, key and difficult knowledge explanation, system login, group discussion, operation drill in learning system, completing the system assessment, writing experiment report and experiment evaluation. All learning activity provided to students via online and onsite.

4)Teacher:

These specifically included teacher of virtual moot court and law undergraduate students. Teacher role; The teacher check students' preview situation through questioning and other methods, explain key and difficult knowledge, guide students to log in to the learning system, help students complete simulated exercises in the learning system through questioning and teacher-student discussions, and evaluate students' practice situation. Students role; Students preview relevant knowledge, enter the litigation process, and analyze cases under system prompts, select evidence, clarify litigation requests, and simulate the entire process of civil litigation, including prosecution, filing, first instance trial, appeal, and second instance trial. When encountering learning difficulties, discussed with teachers or classmates.

5) Communication:

These specifically included online teacher-student and student-student discussion; onsite teacher-student and student-student discussion. Online teacher-student and student-student discussion were conducted using QQ and WeChat.

6) Scaffolding:

These specifically included theoretical knowledge Q&A, instructional guidance, knowledge point prompts and knowledge expansion. All scaffolding were online.

7) Evaluation:

These specifically included materials and spiritual rewards, learning achievements, credits, rating level and students' satisfaction evaluation on a learning model using the virtual environment with scaffolding strategies.

The lesson plan had 32 class hours, and participants would participate in eight-week online and onsite learning and studied 4 class hours a week. There were 8 processes:

1) Check preview (onsite)

2) Key and difficult knowledge explanation (onsite)

3)Online activity with moot court (online)

4) Group discussion (online & onsite)

5) Operation drill in learning system (online)

6) Assessment (online)

7) Write experiment report (online)

8) Experiment evaluation (onsite)

8 processes:

1) Check preview (onsite): Students previewed the relevant knowledge points of the moot court in advance, and the teacher checked the preview situation through questioning and other methods.

2) Key and difficult knowledge explanation (onsite): Based on the students' preview situation, the teacher explained the key and difficult knowledge.

3) Online activity with moot court (online): The teacher guided students to log in to the learning system. Students logged in to the learning system and became familiar with the operating procedures.

4) Group discussion (online & onsite): When students encountered problems they didn't understand while practicing the learning system, they solved them through student-student discussion and teacher-student discussion.

5) Operation drill in learning system (online): Students entered the litigation process, analyzed cases, selected evidence, clarified litigation requests, and simulated the entire process of civil litigation, including prosecution, filing, first instance, appeal, and second instance.

6) Assessment (online): The teacher guided students to complete the system assessment.

7) Write experiment report (online): Students wrote experiment report in the learning system.

8) Experiment evaluation (onsite): The teacher evaluated the students' operational performance, and the students made a satisfaction evaluation of the learning model using the virtual environment with scaffolding strategies.

2.2 Conclusion of lesson plan

The average total score for the lesson plan indicated a strong level of agreement (mean=4.88, S.D=0.20), with all individual activities also reflecting a strong level of agreement.

2.3 Conclusion of approval model form

The average total score for the approval model form (components), as evaluated by five model experts, indicated a high level of acceptability (mean=4.77, S.D=0.39), with all individual items also rated as highly acceptable.

Similarly, the average total score for the approval model form (processes), assessed by five model experts, also demonstrated a high level of acceptability (mean=4.88, S.D=0.20), with all individual items receiving a highly acceptable rating.

Phase 3: To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

Sample Group in this phase

The sample in this phase was composed of 40 law undergraduate students at Jianghan University, who were selected from the third year students according to the convenient sampling procedure. Their ages ranged from 20 to 21. They had two years of law school legal knowledge so they could engage with the moot court course through a selection process.

3.1 Conclusion of learning achievement test

The researchers used a learning achievement test to assess improvements in the learning outcomes of 40 third-year law undergraduate students at the Faculty of Law, Jianghan University.

In summary, the post-test results (Mean=95.30, S.D=2.84) indicated a significant improvement compared to the pre-test scores (Mean=53.65, S.D=3.16) at a significance level of $p < 0.05$. Consequently, learning achievements demonstrated improvement in the post-test assessment.

3.2 Conclusion of students' satisfaction questionnaires

The researchers used students' satisfaction questionnaires to survey 40 law undergraduate students of the third year at the Faculty of Law, Jianghan University and found whether students were satisfied.

The average total of students' satisfaction indicated strong satisfaction (Mean=4.61). The students were satisfied with the MOOT-COSE online learning model using the virtual environment with scaffolding strategies.

Discussion

Following is the discussion regarding the research objectives:

Objective 1: To study students' learning needs and problems under the traditional moot court teaching.

For objective 1, the results of the needs assessments indicated that students had low motivation and required scaffolding from the teacher. This aspect underscores the importance of utilizing scaffolding strategies to motivate students to enhance their knowledge of moot court. This finding aligns with Nadiye O. Erdil's research in 2019, which demonstrated the effectiveness of scaffolding in motivating and engaging students' learning.

Moreover, technology can serve as a motivational tool to augment students' understanding of substantive law. This finding resonates with James Cengiz Gulek and Hakan Demirtas' research in 2005, which highlighted the capacity of technology to enhance student learning and educational outcomes.

Utilizing technology to create virtual roles enables students to engage in multi-role simulations, thereby deepening their understanding of relevant knowledge associated with different roles. This finding is consistent with Thomas M. Sherman and Barbara L. Kurshan's research in 2005, which emphasized how technologies such as graphing and computer programs facilitate students' understanding as they develop their skills.

Scaffolding strategies aim to provide students with direct operational and situational experiences to facilitate their effective use of tools and materials, enhance their understanding of knowledge, reduce cognitive load, and guide them through learning tasks step by step. This finding aligns with Benjamin D. Jee and Florencia K. Anggoro's research in 2019, which demonstrated how scaffolding assists students in identifying problem-solving factors and guides them through understanding the relevant knowledge through a series of questions.

In a virtual environment, students are trained in various trial roles, enabling them to apply the knowledge acquired to solve problems effectively. This finding corresponds with A. Loureiro and T. Bettencourt's research in 2014, which highlighted how virtual environments facilitate students' engagement in simulation experiments and practical activities, thereby promoting the application of knowledge.

Furthermore, adequate time is essential to ensure that students fully immerse themselves in the litigation process within moot court teaching, rather than merely skimming through the basic procedures. This finding is consistent with Su Jin Jez and Robert W. Wassmer's research in 2015, which demonstrated that sufficient study time allows students to plan their study schedules effectively, set goals, and engage in planned study activities, thereby enhancing their academic performance.

Additionally, the intuitiveness of media can enhance students' interest and enthusiasm in learning, improve learning achievement, and prevent knowledge acquisition solely through passive means such as static images and language descriptions. This finding resonates with Robert B. Kozma's research in 1991, which emphasized how media-assisted teaching, incorporating bright colors, graphics, and audio-visual elements, encourages active student participation and shifts learning from passive to active modes.

Objective 2: To develop a learning model utilizing a virtual environment with scaffolding strategies to enhance students' learning achievements in moot court teaching.

For objective 2, it was found that the learning model utilizing a virtual environment with scaffolding strategies comprised seven components: 1) Media, 2) Online, 3) Offline, 4) Teacher, 5) Communication, 6) Scaffolding, and 7) Evaluation. Additionally, eight processes were identified: 1) Check preview (onsite), 2) Key and difficult knowledge explanation (onsite), 3) Online activity with moot court (online), 4) Group discussion (online & onsite), 5) Operation drill in learning system (online), 6) Assessment (online), 7) Write experiment report (online), and 8) Experiment evaluation (onsite). All five model experts concurred on the efficacy of a learning model employing a virtual environment with scaffolding strategies. The subsequent discussion will highlight the significance of each process:

Process 1: Check preview (onsite), incorporating the teacher component. Teachers assessed students' preview status and promptly gauged their learning progress, facilitating timely adjustments to lesson plans and content. Student previews before practice sessions also helped reinforce fundamental knowledge. This finding

aligns with ER Schotter and M Leinenger's research in 2016, which demonstrated how previewing assists students in identifying weak links in their knowledge structures and addressing them prior to class, thereby removing barriers to comprehension.

Process 2: Key and difficult knowledge explanation (onsite), involving the media and communication components. Clarifying key and difficult knowledge helps students grasp which areas require focused understanding, minimizing classroom time wastage and enhancing efficiency. By emphasizing the explanation of key and difficult knowledge, students achieve deeper comprehension and mastery. This finding is consistent with J Rose's research in 2011, which highlighted the importance of explaining key and difficult knowledge in knowledge dissemination and communication, fostering improved thinking and analytical abilities.

Process 3: Online activity with moot court (online), incorporating the online component. Online activities on learning platforms provide flexibility in time and location, allowing learning to occur anytime, anywhere. This flexible learning environment requires minimal software or hardware and promotes convenience, as demonstrated by Fatimah Mulya Sari and Lulud Oktaviani's research in 2021, showcasing the ease of operating online activities on learning platforms with just a computer and network connection.

Process 4: Group discussion (online & onsite), involving the communication and offline components. Group discussions, both online and onsite, stimulate students' learning enthusiasm, encouraging active participation and improving learning outcomes. Through these discussions, students gain deeper understanding of course content and inspiration from classmates' contributions, as noted by Lokanath Mishra's research in 2016.

Process 5: Operation drill in learning system (online), encompassing the online component. Operation drills help students apply online-acquired knowledge to practical problem-solving, enhancing the application of learning achievements. This finding corresponds with N Sukmaningthias's research in 2020, demonstrating improved achievement following the implementation of online lesson plans.

Process 6: Assessment (online), involving the scaffolding component. During assessments, students complete system tasks with scaffolded support, enhancing the application of learning achievements. This finding is consistent with Marianne Perie and Scott Marion's research in 2009, highlighting the practicality of assessment systems in familiarizing students with assessment processes and providing standardized evaluation environments.

Process 7: Write experiment report (online), including the evaluation component. Through writing experiment reports, students consolidate knowledge, increase memory retention, and address deficiencies in a timely manner. This aligns with Mulyani and Teti Sobari's research in 2023, emphasizing the role of experiment reports in knowledge consolidation, as well as A Samad and J Mustafa's research in 2023, indicating a positive association between lesson plan implementation and student achievement.

Process 8: Experiment evaluation (onsite), involving the evaluation component. Through questionnaire surveys on student satisfaction, it was determined that students were satisfied with the learning model. This process enhances satisfaction with learning achievements and encourages students to strive for improvement. The finding was consistent with WF Tichy and P Lukowicz (1995) that in experiment evaluation, teachers could understand whether their teaching had achieved the expected goals and made corresponding adjustments and improvements by evaluating students' performance. Teachers evaluated and provided feedback to students through experiment evaluation, allowing them to understand their learning progress and shortcomings, thereby encouraging them to work harder and improve.

Objective 3: To investigate the outcomes and satisfaction levels resulting from using this online learning model with virtual environment and scaffolding strategies to improve learning achievements in moot court teaching.

For objective 3, it was found that the post-test scores were significantly higher than those of the pre-test. The researchers conducted a learning achievement test on 40 third-year law undergraduate students at the Faculty of Law, Jianghan University, to assess whether learning outcomes improved in the areas of remembering,

understanding, applying, and satisfaction with the online learning model utilizing the virtual environment with scaffolding strategies. In conclusion, the post-test scores showed a significant improvement over the pre-test scores. Learning achievements in remembering, understanding, applying, and satisfaction were significantly enhanced in the post-test.

Based on the results of data analysis, the improvement in learning achievements in remembering was primarily attributed to the utilization of theoretical knowledge Q&A and knowledge point prompts in scaffolding strategies. By employing theoretical knowledge Q&A and knowledge point prompts, teachers presented theoretical concepts to students through a series of questions. These prompts assisted students in concentrating and enhancing their learning achievements by providing appropriate support. This finding is consistent with Amanda J. Barnier's research in 2010, which demonstrated that scaffolding strategies guided learners through step-by-step question answering, facilitating the development of a comprehensive knowledge system and improving learning achievements in remembering.

Furthermore, the improvement in learning achievements in understanding was primarily attributed to the development of a learning model utilizing the virtual environment with scaffolding strategies and the rigorous implementation of the lesson plan. Through this learning model, students could immerse themselves in virtual court proceedings and experience the litigation process in an environment closely resembling reality, thereby enhancing their understanding. This finding aligns with Kunyi Jian and Peng Nai's research in 2019, which showed that constructing virtual learning models and enabling human-machine interaction improved students' ability to handle cases, developed their thinking skills, and enhanced learning achievements in understanding. Additionally, W. Banyen, C. Viriyavejakul, and T. Ratanaolarn's research in 2016 indicated that online learning models improved students' understanding of content and enhanced learning achievements in understanding.

Moreover, the improvement in learning achievements in applying was primarily attributed to the use of instructional guidance in scaffolding strategies. Through

instructional guidance and simulation exercises, students systematically reviewed learned knowledge and enhanced learning achievements in applying. This finding is consistent with Ching-Yi Chang and Patcharin Panjaburee's research in 2022, which demonstrated that online scaffolding strategies significantly improved students' learning achievements in applying in university online courses.

Lastly, the improvement in learning achievements in satisfaction was primarily attributed to the use of knowledge expansion in scaffolding strategies. Through scaffolding, students acquired new experiences, skills, and expanded knowledge, thereby improving satisfaction with learning. This finding is consistent with DK Gormley and C Colella's research in 2012, which highlighted the significant benefits of knowledge expansion in scaffolding strategies for learning, leading to increased satisfaction when students successfully utilized scaffolding strategies.

Suggestions

In this section, the researchers will offer suggestions on the use of the online learning model using the virtual environment with scaffolding strategies, and for future research.

Suggestions for use of the online learning model

(1) When using the learning model using the virtual environment with scaffolding strategies, online teaching courses were necessary, and the role of technology and media could not be ignored.

(2) Research findings could be used by law undergraduate students to improve their learning achievements in moot court courses.

(3) Due to the small number of participants, the sample size was a limitation of the present study. When employing the learning model using the virtual environment with scaffolding strategies, it is suggested that additional study be conducted with large sample sizes to further examine the effectiveness of the learning model using the virtual environment with scaffolding strategies.

Suggestions for future research

(1) The types of scaffolding strategies could be increased.

(2) The learning model should be customized to student weaknesses and problem areas in teaching.

(3) Due to the fact that the research subjects of this study were law students, the major of the research subject was a limitation of this study. Future research could explore wider topics with students from other majors.

(4) This research only studied whether students' learning achievements were improved. Future research could attempt to study other changes.

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APPENDIX

APPENDIX A

Needs questionnaire about the current moot court teaching

(Part one)

(+) means positive question (-) means negative question

5=Always

4=Frequently

3=Sometimes

2=Rarely

1=Never

Item	Question	Current status					Expect status					IOC			Suggestion
		5	4	3	2	1	5	4	3	2	1	-1	0	1	
	Remembering														
1	The current moot court teaching motivates you to increase your knowledge of substantive law through technology. (+)														
2	The current moot court teaching motivates you to increase your knowledge of procedural law through scaffolding strategies or other tools. (+)														
3	The current moot court teaching motivates you to increase your knowledge of court trials through scaffolding strategies or other tools. (+)														
4	The current moot court teaching motivates you to increase your knowledge of court debate through some tools. (+)														
5	The current moot court teaching has problems in using tools to help memorize knowledge. (-)														
6	The current moot court teaching lacks teaching equipment and software to help memorize knowledge. (-)														
7	The current moot court teaching is backward in the use of technology or tools to help memorize knowledge. (-)														
	Understanding														
8	The current moot court teaching helps you deepen your understanding of the basic process														

Item	Question	Current status					Expect status					IOC			Suggestion
		5	4	3	2	1	5	4	3	2	1	-1	0	1	
	of litigation through technology. (+)														
9	The current moot court teaching helps you deepen your understanding of substantive law knowledge through technology. (+)														
10	The current moot court teaching helps you deepen your understanding of procedural law knowledge through scaffolding strategies or other tools. (+)														
11	The current moot court teaching helps you deepen your understanding of court debate knowledge through some tools. (+)														
12	The current moot court teaching helps you deepen your understanding of court trials knowledge through scaffolding strategies or other tools. (+)														
13	The current moot court teaching has problems in using tools to aid understanding. (-)														
	Applying														
14	The current moot court teaching helps you use the knowledge you have learned to create litigation documents. (+)														
15	The current moot court teaching helps you use the knowledge you have learned to resolve legal disputes related to daily life. (+)														
16	The current moot court teaching helps you use the knowledge you have learned to complete the proof and cross-examination of evidence. (+)														
17	The current moot court teaching helps you use the knowledge you have learned to argue in court. (+)														
18	The current moot court teaching helps you use the knowledge you have learned to prepare a statement of defense. (+)														

Needs questionnaire about the current moot court teaching

(Part two)

(+) means positive question (-) means negative question

5=Very Satisfied

4= Satisfied

3= Neutral

2= Dissatisfied

1= Very Dissatisfied

Item	Question	Current status					Expect status					IOC			Suggestion
		5	4	3	2	1	5	4	3	2	1	-1	0	1	
	satisfaction														
1	The current moot court teaching is interesting. (+)														
2	You like the activity of current moot court teaching. (+)														
3	You like the media of current moot court teaching. (+)														
4	You like the content of current moot court teaching. (+)														
5	You are satisfied with the time of current moot court teaching. (+)														
6	You are satisfied with the facilities of current moot court teaching. (+)														
7	You are satisfied with current moot court teaching in an environment without the Internet. (+)														
8	You are satisfied with the current moot court teaching environment. (+)														
9	You are disappointed that you cannot fully experience the trial procedures of domestic courts in the current moot court teaching. (-)														
10	You are disappointed that the current moot court teaching is just a formality and does not match the real court. (-)														
11	You are disappointed that the current moot court teaching deviates from the teaching mode of self-study by students and supplemented by teacher guidance. (-)														
12	You are disappointed by the poor teacher-student interaction in the current moot court teaching. (-)														
13	You are disappointed by the lack of sufficient guidance from teachers to students in the current moot court														

Item	Question	Current status					Expect status					IOC			Suggestion
		5	4	3	2	1	5	4	3	2	1	-1	0	1	
	teaching. (-)														
14	You are disappointed by the inauthentic evaluation of students by teachers in the current moot court teaching. (-)														
15	You are disappointed that the mock trial don't help you understand the real trial much. (-)														
16	You are disappointed that you don't get as much learning from the current moot court teaching. (-)														

The results of the needs questionnaires about the traditional moot court teaching by IOC experts

Item	Question	IOC	Translation results
	Remembering		
1	The current moot court teaching motivates you to increase your knowledge of substantive law through technology. (+)	1	related
2	The current moot court teaching motivates you to increase your knowledge of procedural law through scaffolding strategies or other tools. (+)	1	related
3	The current moot court teaching motivates you to increase your knowledge of court trials through scaffolding strategies or other tools. (+)	1	related
4	The current moot court teaching motivates you to increase your knowledge of court debate through some tools. (+)	1	related
5	The current moot court teaching has problems in using tools to help memorize knowledge. (-)	1	related
6	The current moot court teaching lacks teaching equipment and software to help memorize knowledge. (-)	1	related
7	The current moot court teaching is backward in the use of technology or tools to help memorize knowledge. (-)	1	related
	Understanding		
8	The current moot court teaching helps you deepen your understanding of the basic process of litigation	1	related

Item	Question	IOC	Translation results
	through technology. (+)		
9	The current moot court teaching helps you deepen your understanding of substantive law knowledge through technology. (+)	1	related
10	The current moot court teaching helps you deepen your understanding of procedural law knowledge through scaffolding strategies or other tools. (+)	1	related
11	The current moot court teaching helps you deepen your understanding of court debate knowledge through some tools. (+)	1	related
12	The current moot court teaching helps you deepen your understanding of court trials knowledge through scaffolding strategies or other tools. (+)	1	related
13	The current moot court teaching has problems in using tools to aid understanding. (-)	1	related
	Applying		
14	The current moot court teaching enhances motivation to learn through technology. (+)	-1	not related
15	The current moot court teaching enhances learning efficiency through technology. (+)	-1	not related
16	The current moot court teaching increases learning engagement through technology.(+)	-1	not related
17	The current moot court teaching increases learning interactivity through technology. (+)	-1	not related
18	Cases in the current moot court teaching can be recorded with technology. (+)	-1	not related
	satisfaction		
19	The current moot court teaching is interesting. (+)	1	related
20	You like the activity of current moot court teaching. (+)	1	related
21	You like the media of current moot court teaching. (+)	1	related
22	You like the content of current moot court teaching. (+)	1	related
23	You are satisfied with the time of current moot court teaching. (+)	1	related

Item	Question	IOC	Translation results
24	You are satisfied with the facilities of current moot court teaching. (+)	1	related
25	You are satisfied with current moot court teaching in an environment without the Internet. (+)	1	related
26	You are satisfied with the current moot court teaching environment. (+)	1	related
27	You are disappointed that you cannot fully experience the trial procedures of domestic courts in the current moot court teaching. (-)	1	related
28	You are disappointed that the current moot court teaching is just a formality and does not match the real court. (-)	1	related
29	You are disappointed that the current moot court teaching deviates from the teaching mode of self-study by students and supplemented by teacher guidance. (-)	1	related
30	You are disappointed by the poor teacher-student interaction in the current moot court teaching. (-)	1	related
31	You are disappointed by the lack of sufficient guidance from teachers to students in the current moot court teaching. (-)	1	related
32	You are disappointed by the inauthentic evaluation of students by teachers in the current moot court teaching. (-)	1	related
33	You are disappointed that the mock trial don't help you understand the real trial much. (-)	1	related
34	You are disappointed that you don't get as much learning from the current moot court teaching. (-)	1	related

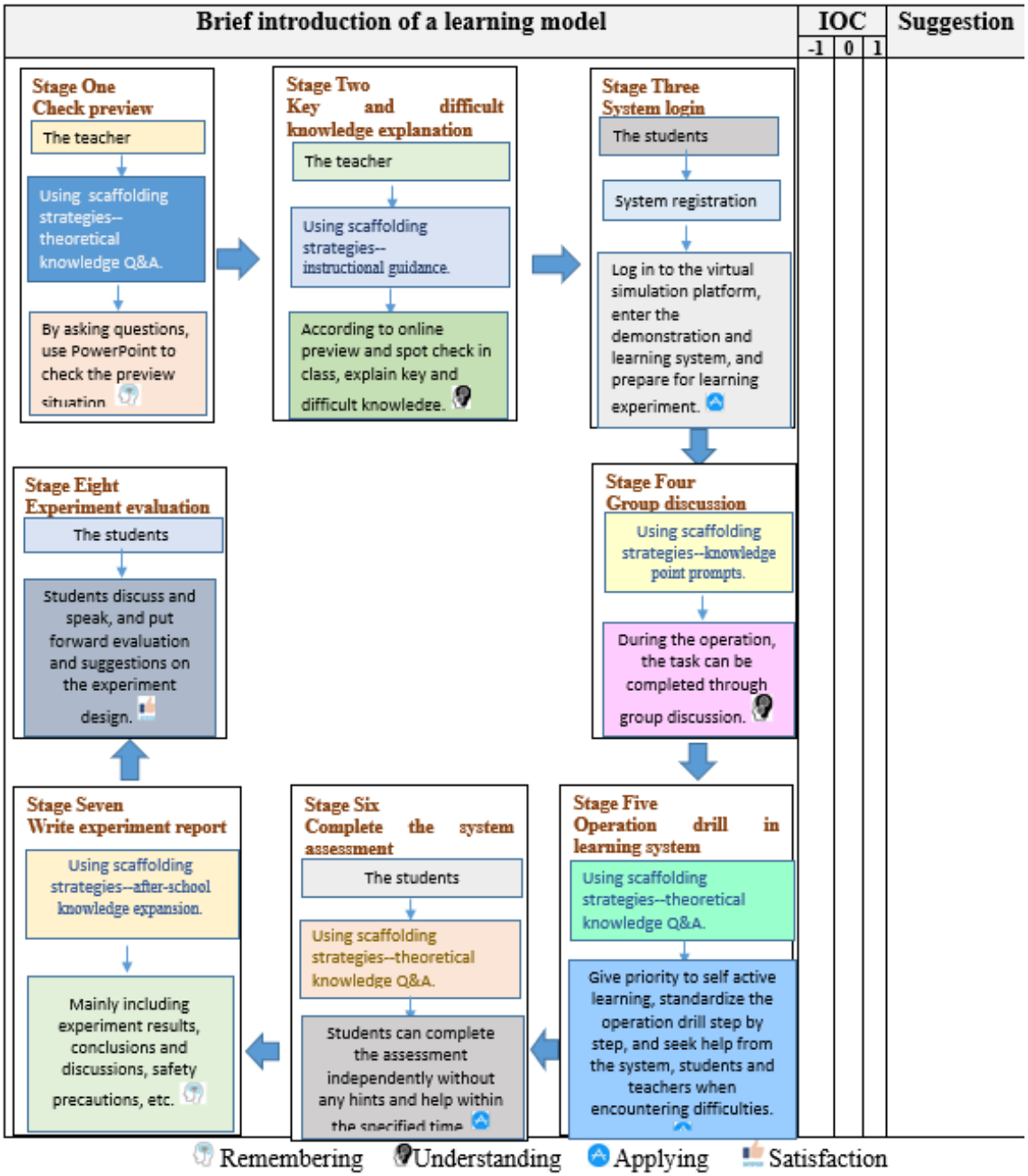
The modification results of the needs questionnaires about the traditional moot court teaching

Item	Question	IOC	Translation results
	Applying		
14	The current moot court teaching helps you use the knowledge you have learned to create litigation documents. (+)	1	related
15	The current moot court teaching helps you use the knowledge you have learned to resolve legal disputes related to daily life. (+)	1	related
16	The current moot court teaching helps you use the knowledge you have learned to complete the proof and cross-examination of evidence. (+)	1	related
17	The current moot court teaching helps you use the knowledge you have learned to argue in court. (+)	1	related
18	The current moot court teaching helps you use the knowledge you have learned to prepare a statement of defense. (+)	1	related

APPENDIX B

A learning model

using the virtual environment with scaffolding strategies



5=Strongly Agree
4=Agree
3=Neither
2=Disagree
1=Strongly Disagree

A learning model details											
Question			Evaluation level					IOC			Suggestion
			5	4	3	2	1	1	0	-1	
Teacher and student	1	Teacher of virtual moot court									
	2	Law undergraduate students									
Learning platform	1	Equipments include: 1)computer 2)smart phone 3)mobile ipad 4) wired network, mobile network or wi-fi, open URL with browser and enter virtual learning system									
	2	Contents include: 1) Operation video 2) case video 3) standard answer library									
	3	Exercises: Online exercises combined with platform cases and scaffolding strategies									
	4	Simulation: Simulate as Judge, Lawyer, Plaintiff and Defendant									
	5	System reports, analysis and summary									
Multimedia	1	Projector and screen									
	2	Text									
	3	Animation									
	4	Courseware									
	5	Video									
	6	Audio									
	7	Picture									
Lesson plan with learning	1	Check preview									
	2	Key and difficult knowledge explanation									
	3	System login									

activity	4	Group discussion									
	5	Operation drill in learning system									
	6	Complete the system assessment									
	7	Write experiment report									
	8	Experiment evaluation									
Scaffolding	1	Theoretical knowledge Q&A									
	2	Instructional guidance									
	3	Knowledge point prompts									
	4	Knowledge expansion									
Communication	1	Online teacher-student discussion									
	2	Onsite teacher-student discussion									
	3	Online student-student discussion									
	4	Onsite student-student discussion									
Evaluation	1	Material and spiritual rewards									
	2	Achievement									
	3	Credit									
	4	Rating level									

The results of a learning model using the virtual environment with scaffolding strategies by IOC experts

Question			IOC	Translation results
Teacher and student	1	Teacher of virtual moot court	1	related
	2	Law undergraduate students	1	related
Learning platform	1	Equipments include: 1)computer 2)smart phone 3)mobile iPad 4) wired network, mobile network or wi-fi, open URL with browser and enter virtual learning system	1	related
	2	Contents include: 1) Operation video 2) case video 3) standard answer library	1	related
	3	Exercises: Online exercises combined with platform cases and scaffolding strategies	1	related
	4	Simulation: Simulate as Judge, Lawyer, Plaintiff and Defendant	1	related
	5	System reports, analysis and summary	1	related
Multimedia	1	Projector and screen	1	related
	2	Text	1	related
	3	Animation	1	related
	4	Courseware	1	related
	5	Video	1	related
	6	Audio	1	related
	7	Picture	1	related

Lesson plan with learning activity	1	Check preview	1	related
	2	Key and difficult knowledge explanation	1	related
	3	System login	1	related
	4	Group discussion	1	related
	5	Operation drill in learning system	1	related
	6	Complete the system assessment	1	related
	7	Write experiment report	1	related
	8	Experiment evaluation	1	related
Scaffolding	1	Theoretical knowledge Q&A	1	related
	2	Instructional guidance	1	related
	3	Knowledge point prompts	1	related
	4	Knowledge expansion	1	related
Communication	1	Online teacher-student discussion	1	related
	2	Onsite teacher-student discussion	1	related
	3	Online student-student discussion	1	related
	4	Onsite student-student discussion	1	related
Evaluation	1	Material and spiritual rewards	1	related
	2	Achievement	1	related
	3	Credit	1	related
	4	Rating level	1	related

APPENDIX C

Lesson plan

An Example Lesson Plan for the Experimental Group

Background:

Institution: Jianghan University

Course/level: Moot court/Grade 3

Students: 40 undergraduate students, age20-21, law major

Overall course goals: Through the mock trial, students can systematically review the theoretical knowledge they have learned, and realize the consolidation and application of theoretical knowledge.

Text/materials: Moot court virtual simulation integrated teaching platform.

Lesson aim(s): Through the simulated trial, students can systematically review and master the theoretical knowledge of inheritance law, marriage law, obligatory rights law, etc., as well as the knowledge of civil procedure law, so as to realize the consolidation and application of theoretical knowledge.

Procedures

Week	Lesson Plan	links	class hours
1	Prosecution stage	Evidence selection and complaint writing	4
2	Court acceptance stage	Respondent defense and document making	4
3	Court acceptance stage	Summary of pre-trial meeting and dispute focus	4
4	Trial stage of first instance	Organize the court hearing of the first instance	4
5	Trial stage of first instance	Witness appearance and questioning	4
6	Trial stage of first instance	Organize court mediation	4
7	Trial stage of first instance	Evaluation and sentencing of first instance	4
8	Stage of appeal and second trial	Appeal and document making, organization of second instance court trial, second instance review and judgment	4

5=Strongly Agree

4=Agree

3=Neither

2=Disagree

1=Strongly Disagree

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
Week1 Stage One Check preview	1.Students understand the case. 2Master the essentials of evidence selection. 3Ability to write litigation documents.	1.Students review the case. 2.Learn how to conduct evidence selection. 3.Learn how to write litigation documents.	1.The relevant theoretical knowledge is taught by the teacher. (remembering) (instructional guidance—Micro-scripted Scaffolding). 2. Students preview relevant theoretical knowledge in advance. (understanding) (knowledge point prompts—Scaffolding strategy). 3.Check preview: By asking questions, use PowerPoint to check the preview situation. (understanding) (Theoretical knowledge Q&A--	PPT, Moot court virtual simulation integrated teaching platform, Computer, Internet, Google Chrome	learners reflect on the content learned this week	Evidence selection and litigation document writing system background learning data report								

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			Scaffolding strategy). 4.Key and difficult knowledge explanation: According to online preview and spot check in class, explain key and difficult knowledge. (remembering) (instructional guidance—Micro-scripted Scaffolding).												
Week2 Stage Two Key and difficult knowledge explanation	1. Be able to judge the time limit and type of documents produced by the court during the court acceptance stage. 2. Be able to complete the production and upload.	1.The time limit and type of documents produced by the court in the court acceptance stage. 2.How to make and upload documents.	1.System login: Log in to the virtual simulation platform, enter the demonstration and learning system, and prepare for the learning experiment. (applying) (virtual environment)	Moot court virtual simulation integrated teaching platform, Computer, Internet	Students look up relevant knowledge points and make a summary	System background learning data report in the court acceptance stage									

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
	of documents. 3. Be able to prepare a statement of defense based on the plaintiff's complaint.	3. How to prepare a statement of defense as the defendant.	2.Students view the case in the system. (applying) (virtual environment) 3.Students need to enter the role of "plaintiff" and choose evidence that is beneficial to themselves according to the type and content of evidence prompted by the system. (applying) (Theoretical knowledge Q&A -- Scaffolding strategy). 4.Preparation of litigation documents based on evidence. (understanding) (knowledge point prompts-												

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			- Scaffolding strategy). 5.Judging the time limit and type of documents produced by the court during the court acceptance stage. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 6Make and upload documents. (applying) (knowledge point prompts-- Scaffolding strategy). 7Make a statement of defense as the defendant and upload the reasons for											

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			the defense and evidence materials. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy).												
Week3 Stage Three System login	1.Students can summarize the focus of controversy. 2.Students can announce the court date asthe court.	1.Learn how to summarize the focus of controversy. 2.Learn how to announce court dates as a court party.	1.Group discussion: During the operation, the task can be completed through group discussion. (understanding) (Theoretical knowledge Q&A-- Scaffolding strategy). 2.Summarize the focus of controversy. (understanding) (instructional guidance—Micro-scripted Scaffolding). 3Announce the court date asthe court	Moot court virtual simulation integrated teaching platform, Computer, Internet	Students look up relevant knowledge points and make a summary	System background learning data report in the court acceptance stage								

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			and fill in the content of the announcement. (remembering) (Theoretical knowledge Q&A-- Scaffolding strategy).												
Week4 Stage Four Group discussion	1.Master the basic process of the first instance of civil litigation.	1.Learn the basic procedures of the first instance of civil litigation.	1.View books and related materials. (remembering) (instructional guidance—Micro-scripted Scaffolding). 2.Operation drill in learning system: Give priority to self active learning by using scaffolding strategies and virtual environment, standardize the operation drill step by step, and seek help from the system.	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT	Students summarize relevant theoretical knowledge	Trial stage of first instance system background learning data report									

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			students and teachers when encountering difficulties. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 3.Learn the basic process of the first instance of civil litigation. (understanding) (instructional guidance— Micro-scripted Scaffolding).												
Week5 Stage Five Operation drill in learning system	1.Able to preside over the trial with the court. 2.Be able to judge the facts and legal issues of the case.	1.Learn how to preside over a trial in court. 2.Learn how to judge the facts and legal issues of the case.	1.Learn to use the court to preside over the trial. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 2.Learn to control the basic rhythm of the trial. (applying)	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students summarize relevant theoretical knowledge	Trial stage of first instance system background learning data report									

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			(instructional guidance—Micro-scripted Scaffolding). 3.Learn to maintain court discipline. (applying) (instructional guidance—Micro-scripted Scaffolding). 4.Learn to judge the facts and legal issues of the case. (understanding) (Theoretical knowledge Q&A--Scaffolding strategy).												
Week6 Stage Six Complete the system assessment	1.Be able to complete the proof and cross-examination of evidence as the plaintiff 2.Be able to use the acquired	1.Learn how to present and cross-examine evidence as the plaintiff. 2.Learn how to use what you	1.Producing and cross-examining evidence as the plaintiff. (applying) (Theoretical knowledge Q&A--Scaffolding strategy).	Moot court virtual simulation integrated teaching platform, Computer,	Students conduct knowledge summarization and teacher evaluates students' debating level	Trial stage of first instance system background learning data report									

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
	knowledge to conduct court debate.	have learned to argue in court.	2.Simulated court debate. (applying) (instructional guidance—Micro-scripted Scaffolding).	Internet, PPT, Video											
Week7 Stage Seven Write experiment report	1.Be able to complete the trial as the defendant. 2.Be able to complete the proof and cross-examination of evidence. 3.Be able to use the acquired knowledge to conduct court debates as the defendant.	1.Learn how to complete a trial as the accused party. 2.Learn how to present and cross-examine evidence. 3.Learn how to use what you have learned to argue in court as the defendant.	1.Conduct the trial as the accused party. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 2.Carry out proof and cross-examination of evidence. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 3.Simulate a court debate in the capacity of the defendant. (applying)	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students conduct knowledge summarization and teacher evaluates students' debating level	Trial stage of first instance system background learning data report								

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			(instructional guidance—Micro-scripted Scaffolding).												
Week8 Stage Eight Experiment evaluation	1.Students can make and upload appeal documents. 2.Be able to preside over the trial as a court party. 3.Able to complete the trial as plaintiff. 4.Able to complete the trial as the defendant.	1.Learn how to make and upload appeal documents. 2.Learn how to preside over a trial as a court party. 3.Learn how to complete the trial as the plaintiff. 4.Learn how to complete the trial as the accused party.	1.Learn to make and upload appeal documents. (applying) (knowledge point prompts—Scaffolding strategy). 2.Learn to preside over the trial as a court party. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 3.Learn to complete the trial as the plaintiff. (applying) (Theoretical knowledge Q&A--Scaffolding strategy).	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students summarize relevant theoretical knowledge	Appeal and second-instance trial stage system background learning data report									

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			4.Learn to complete the trial as the defendant. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 5.Complete the system assessment: Students can complete the assessment independently without any hints and help within the specified time after class. (applying) (after-school knowledge expansion— Scaffolding strategy). 6Write experiment report: Mainly including experiment results, conclusions											

Evaluation list A study activity plan							Evaluation level					IOC			Suggestion
							5	4	3	2	1	-1	0	1	
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products									
			and discussions, safety precautions, etc. (applying) (virtual environment) 7. Experiment evaluation: Students discuss and speak, and put forward evaluation and suggestions on the experiment design. (applying) (virtual environment)												

The results of lesson plan by IOC experts

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
Week1 Stage One Check preview	1.Students understand the case. 2Master the essentials of evidence selection. 3Ability to write litigation documents.	1.Students review the case. 2.Learn how to conduct evidence selection. 3.Learn how to write litigation documents.	1.The relevant theoretical knowledge is taught by the teacher. (remembering) (instructional guidance—Micro-scripted Scaffolding). 2. Students preview relevant theoretical knowledge in advance. (understanding) (knowledge point prompts—Scaffolding strategy). 3.Check preview: By asking questions, use PowerPoint to check the preview situation. (understanding) (Theoretical	PPT, Moot court virtual simulation integrated teaching platform, Computer, Internet, Google Chrome	learners reflect on the content learned this week	Evidence selection and litigation document writing system background learning data report	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			knowledge Q&A -- Scaffolding strategy). 4.Key and difficult knowledge explanation: According to online preview and spot check in class, explain key and difficult knowledge. (remembering) (instructional guidance—Micro-scripted Scaffolding).					
Week2 Stage Two Key and difficult knowledge explanation	1. Be able to judge the time limit and type of documents produced by the court during the court acceptance stage. 2. Be able to complete the production and upload	1.The time limit and type of documents produced by the court in the court acceptance stage. 2.How to make and upload documents. 3. How to prepare a statement of	1.System login: Log in to the virtual simulation platform, enter the demonstration and learning system, and prepare for the learning experiment. (applying) (virtual environment)	Moot court virtual simulation integrated teaching platform, Computer, Internet	Students look up relevant knowledge points and make a summary	System background learning data report in the court acceptance stage	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
	of documents. 3. Be able to prepare a statement of defense based on the plaintiff's complaint.	defense as the defendant.	2.Students view the case in the system. (applying) (virtual environment) 3.Students need to enter the role of "plaintiff", and choose evidence that is beneficial to themselves according to the type and content of evidence prompted by the system. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 4.Preparation of litigation documents based on evidence. (understanding) (knowledge					

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			point prompts-- Scaffolding strategy). 5.Judging the time limit and type of documents produced by the court during the court acceptance stage. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 6Make and upload documents. (applying) (knowledge point prompts-- Scaffolding strategy). 7Make a statement of defense as the defendant and upload				

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			the reasons for the defense and evidence materials. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy).					
Week3 Stage Three System login	1.Students can summarize the focus of controversy. 2.Students can announce the court date atthe court.	1.Learn hov to summarize the focus of controversy. 2.Learn hov to announce court dates as a court party.	1.Group discussion: During the operation, the task can be completed through group discussion. (understanding) (Theoretical knowledge Q&A-- Scaffolding strategy). 2.Summarize the focus of controversy. (understanding) (instructional guidance—Micro-scripted Scaffolding). 3Announce the court date	Moot court virtual simulation integrated teaching platform, Computer, Internet	Students look up relevant knowledge points and make a summary	System background learning data report in the court acceptance stage	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			asthe court and fill in the content of the announcement. (remembering) (Theoretical knowledge Q&A-- Scaffolding strategy).					
Week4 Stage Four Group discussion	1.Master the basic process of the first instance of civil litigation.	1.Learn the basic procedures of the first instance of civil litigation.	1.View books and related materials. (remembering) (instructional guidance—Micro-scripted Scaffolding). 2.Operation drill in learning system: Give priority to self active learning by using scaffolding strategies and virtual environment, standardize the operation drill step by step, and seek help from the	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT	Students summarize relevant theoretical knowledge	Trial stage of first instance system background learning data report	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			system, students and teachers when encountering difficulties. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 3.Learn the basic process of the first instance of civil litigation. (understanding) (instructional guidance—Micro-scripted Scaffolding).					
Week5 Stage Five Operation drill in learning system	1.Able to preside over the trial with the court. 2.Be able to judge the facts and legal issues of the case.	1.Learn how to preside over a trial in court. 2.Learn how to judge the facts and legal issues of the case.	1.Learn to use the court to preside over the trial. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 2.Learn to control the basic rhythm	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students summarize relevant theoretical knowledge	Trial stage of first instance system background learning data report	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			of the trial. (applying) (instructional guidance—Micro-scripted Scaffolding). 3.Learn to maintain court discipline. (applying) (instructional guidance—Micro-scripted Scaffolding). 4.Learn to judge the facts and legal issues of the case. (understanding) (Theoretical knowledge Q&A-- Scaffolding strategy).					
Week6 Stage Six Complete the system assessment	1.Be able to complete the proof and cross-examination of evidence as the plaintiff	1.Learn how to present and cross-examine evidence as the plaintiff. 2.Learn how to use what you have	1.Producing and cross-examining evidence as the plaintiff. (applying) (Theoretical knowledge Q&A--	Moot court virtual simulation integrated teaching platform,	Students conduct knowledge summarization and teacher evaluates students'	Trial stage of first instance system background learning	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
	2.Be able to use the acquired knowledge to conduct court debate.	learned to argue in court.	Scaffolding strategy). 2.Simulated court debate. (applying) (instructional guidance—Micro-scripted Scaffolding).	Computer, Internet, PPT, Video	debating level	data report		
Week7 Stage Seven Write experiment report	1.Be able to complete the trial as the defendant. 2.Be able to complete the proof and cross-examination of evidence. 3.Be able to use the acquired knowledge to conduct court debates as the defendant.	1.Learn how to complete a trial as the accused party. 2.Learn how to present and cross-examine evidence. 3.Learn how to use what you have learned to argue in court as the defendant.	1.Conduct the trial as the accused party. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 2.Carry out proof and cross-examination of evidence. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 3.Simulate a court debate in the capacity	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students conduct knowledge summarization and teacher evaluates students' debating level	Trial stage of first instance system background learning data report	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			of the defendant. (applying) (instructional guidance—Micro-scripted Scaffolding).					
Week8 Stage Eight Experiment evaluation	1.Students can make and upload appeal documents. 2.Be able to preside over the trial as a court party. 3.Able to complete the trial as plaintiff. 4.Able to complete the trial as the defendant.	1.Learn how to make and upload appeal documents. 2.Learn how to preside over a trial as a court party. 3.Learn how to complete the trial as the plaintiff. 4.Learn how to complete the trial as the accused party.	1.Learn to make and upload appeal documents. (applying) (knowledge point prompts—Scaffolding strategy). 2.Learn to preside over the trial as a court party. (applying) (Theoretical knowledge Q&A--Scaffolding strategy). 3.Learn to complete the trial as the plaintiff. (applying) (Theoretical knowledge Q&A--	Moot court virtual simulation integrated teaching platform, Computer, Internet, PPT, Video	Students summarize relevant theoretical knowledge	Appeal and second-instance trial stage system background learning data report	1	related

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			Scaffolding strategy). 4.Learn to complete the trial as the defendant. (applying) (Theoretical knowledge Q&A-- Scaffolding strategy). 5.Complete the system assessment: Students can complete the assessment independently without any hints and help within the specified time after class. (applying) (after-school knowledge expansion— Scaffolding strategy). 6)Write experiment report: Mainly including					

Evaluation list A study activity plan							IOC	Translation results
Learning time	Learning objective	Learning content	Learning activity	Learning media	Measurement and Evaluation	Products		
			experiment results, conclusions and discussions, safety precautions, etc. (applying) (virtual environment) 7. Experiment evaluation: Students discuss and speak, and put forward evaluation and suggestions on the experiment design. (applying) (virtual environment)					

APPENDIX D

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
1. Party A borrows 50000 yuan from Party B, and Party B requires Party A to provide a guarantee. Party A respectively finds friends C, D, E, and Ji, and they each make the following representations. Which of them constitutes a guarantee? (Remembering) A. Party C signs "Guarantor C" on the IOU issued by Party A to Party B B. Ding issued a letter to Party B saying, "If Party A fails to repay to Party Bwhen due, I amwilling to repay 30000 yuan" C. E issued a letter to Party B saying, "If Party A fails to make repayment to Party B when due, I shall be responsible" D. A certificate has been issued to Party B stating that "if Party A fails to make repayment to Party Bwhen due, I will pay the debtwith a private house"				
2.Company A purchased 10 bags of chrysanthemum tea from Company B, and agreed: "After Company B delivers chrysanthemum tea, Company A shall pay 100000 yuan for goods." Company C provided a letter of guarantee: "If Company A fails to make payment in accordance with the agreement, Company C shall make payment on behalf of Company A." Two bags of chrysanthemum tea delivered by Company B were fumigated with sulfur and could not be drunk, worth 20000 yuan. If Company B fails to ask Company A for payment, Company B requires Company C to pay 100000 yuan. Which of the following statements are correct? (Understanding) A. If Company C knows and pays RMB 100000 to Company B, Company C can only recover RMB 80000 from Company A B. If Company C does not know about it and pays 100000 yuan to Company B, Company Bwill make improper profits C. If the limitation of action for payment debts of Company A has expired and Company C still pays RMB 80000 to Company B, Company C shall not claim compensation from Company A D. If Company Cwaives its right of defense against Company B and still pays Company B 80000yuan, Company C shall not claim compensation from Company A				
3. Party A has mortgaged its own house to the bank of Party B and has gone through mortgage registration. C enters the house by force because A does not pay back the money he owes. After the loan matures, Party A is unable to repay the debt. The house is difficult to auction due to C's illegal residence, so A is slow to exercise the right of return to C. Which of the following rights can Bank B exercise? (Understanding) A. Requesting Party A to exercise the right of return to Party C to prevent the decrease of the value of the mortgaged property B. Requesting Party A to transfer the right of return to Party C to itself C. Can subrogate to exercise the right of claim for return against C D. Can directly exercise the right of return against Party C according to the mortgage right				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
4. Company A has a creditor's right of 50000 yuan against Company B, and Company B has a creditor's right of 100000 yuan against Company C. If Company A brings a suit of subrogation against Company C, which of the following claims of Company C against Company A has legal basis? (Understanding) A. Have the right to claim the defense of Company B against Company A B. Have the right to claim the defense of Company C against Company B C. Defenses against Company A in the exercise of the right to claim subrogation D. Have the right to request the court to add Company B as the co defendant				
5. Company A borrows RMB 1 million from Bank B, Party C and Party D respectively set mortgage to Bank B with their own property, and Party E and Party D have respectively issued a letter of guarantee to Bank B to assume full responsibility. Which of the following statements are correct? (Understanding) A. Bank B may exercise the mortgage on the house property of C or D B.After assuming the guarantee liability, Party C may claim compensation from Party A, or require Party D to pay off its share C. Bank B may require Wu or have undertaken all the guarantee responsibilities D. After assuming the responsibility of the guarantee, we can claim compensation from Party A or claim that we have paid off our share				
6. When Party B borrows 200000 yuan from Party A, after the loan expires, which of the following acts of Party B causes Party B to be unable to repay the loan of Party A, Party A may apply to the court for cancellation? (Remembering) A. Party B uses all his/her property to repay his/her undue debts to others B. Party B and its debtor agree to waive the mortgage of the debtor's property C. Party B waives the division of the family's common property in the divorce agreement D. When his father dies, he gives up his right to inherit his father's estate				
7. After Party A owed Party B 300000 yuan, Party B failed to make repeated demands. A and C will go through the divorce procedures a few days after their marriage. In the Divorce Agreement, they agreed to give a house before A's marriage to C, who knows that A owes a debt to B, and handled the ownership change registration. Party B believes that Party A has infringed upon its rights and interests, and hires a lawyer to sue in the court to request the revocation of Party A's donation, for which it pays a fee of 20000 yuan to the lawyer. Which of the following options are correct? (Remembering) A. The Divorce Agreement is invalid due to malicious collusion to damage the interests of a third party B. If Party A proves that he/she has stable salary income, cars and other properties available for debt repayment, the court shall reject Party B's claim C. If Party B only takes Party A as the defendant, the court shall add Party C as the defendant D. If the court finds that the revocation right of Party B is established, it shall also support the request of Party B that Party A should bear the attorney's fees				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
8. The debts owed by Company A to Company B and Company C cannot be fully repaid. There is still a car and a house under the name of Company A. Company B went to Company A with a gift and said that you could just mortgage the house and car to me to pay my debt. Otherwise, Company C took it. Company A signed a mortgage contract with its consent. If Company A is unable to pay its debts when due, Company B applies for realizing the mortgage. Regarding this case, are the following statements correct? (Understanding) A. Company C can claim that the mortgage contract between Party A and Party B is invalid because it is not registered B. Company C can claim that the mortgage contract between companies A and B is invalid C. Company C can claim to cancel the behavior between companies A and B D. The ownership of cars and houses is still owned by Company A				
9. Mr. Chen borrowed RMB 200000 from Mr. He for 2 years. Zhang provided guarantee for the loan contract. According to the guarantee terms, Zhang will assume the guarantee responsibility when Chen fails to perform his debts, but no guarantee period is agreed. At the same time, Chen provided mortgage guarantee with his house and went through registration. As for the duration of Mr. He's mortgage and Mr. Zhang's guarantee, the following options are correct: (Remembering) A. Mr. He should exercise the mortgage right during the limitation of action of the principal creditor's right B. Mr. He can still exercise the mortgage right within two years after the end of the limitation of action for the principal creditor's rights C. Zhang's guarantee period is 6 months from the date of expiry of the main debt performance period D. Zhang's guarantee period is 2 years from the date of expiry of the main debt performance period				
10. Mr. Yu turned to Wang Hai Bank for a loan of 500000 yuan due to the company's Zhou, and Mr. Jiang acted as the joint guarantor. Two months later, another 200000 yuan was borrowed. Tell Jiang that Jiang has not made a yes or no. What is the correct statement about Jiang's guarantee responsibility? (Applying) A. Jiang can exercise the right of first instance defense against Wang Hai Bank B. As for the right of defense of Mr. Yu against Wang Hai Bank, Mr. Jiang can also claim against the bank C. Jiang should undertake the guarantee responsibility for Yu's 700000 yuan D. Jiang should undertake the guarantee responsibility for Yu's 500000 yuan				
11. Company A borrows 10 million yuan from Company B, and Company C seals under the "Guarantor" column of the loan agreement, but does not specify the guarantee method. Company D establishes a guarantee for the debt with its own house and handles mortgage registration. If Company A fails to repay the loan when it is due, Company B intends to claim rights from Company C and Company D. According to the Civil Code, which of the following is correct? (Remembering) A. Company C shall undertake the guarantee responsibility according to the general guarantee B. After assuming the responsibility, Ding has the right to claim compensation from Company C C. After assuming the responsibility, Ding has the right to claim compensation from Company A D. After assuming the guarantee responsibility, Company C has the right to claim compensation from Company A				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
12. Party A owes 100 tons of steel to Party C. In order to repay this debt, Party A and Party B entered into a sales contract for 100 tons of steel, which agreed that Party B would directly deliver steel to Party C, and Party C could also directly request Party B to perform. Party C knew about this and did not refuse. What is the correct statement? (Understanding) A. If Party B fails to deliver, Party C may request it to perform and hold it liable for breach of contract B. Party A has no obligation to Party B C. B cannot claim its defense againstA from C D. Due to the relativity of the contract, Party C cannot directly request Party B to perform its delivery obligations				
13. Zhao bought a household washing machine produced by Company A from a store. When washing clothes, the washing machine burst due to technical defects, and the impeller flew out, causing serious personal damage and clothing damage to Zhao. Which of Zhao's following appeals are correct? (Understanding) A. The shop shall be liable for breach of contract by replacing the washing machine or returning the goods, compensating for the loss of clothes and compensating for personal damage B. The shop shall replace the washing machine or return the goods according to the liability for breach of contract, or request Party A to compensate for the loss of clothes and personal damage according to the tort liability C. The shop or company A shall compensate for the damage caused by the defect of the washing machine D. The shop or company A shall compensate for material damage and moral damage				
14. There is a wooden board standing at the door of the mobile phone store of Party A, with four striking characters: "10 penalties for one fake". Party B bought a mobile phone from the store, which was identified by the relevant department as a counterfeit product, so Party B requested Party A to fulfill its commitment of "one fake and ten penalties". Which of the following is correct about this case? (Understanding) A. "Penalty of ten for one fake" excessively increases the burden of Party A, which is an invalid standard clause B. "Ten penalties for one fake" is not included in the contract, so it is not binding on Party A C. "Ten penalties for one fake" is obviously unfair, and Party A has the right to request the court to change or revoke it D. "Penalty of ten for one fake" is a voluntary declaration of true intention made by Party A, which should be recognized as valid				
15. Party A said to Party B: If you are admitted to the civil service within three years, I would like to give you a house or a BMW as a gift. Party B agrees. Two years later, B was admitted to a position in a state organ. Which of the following statements is correct about the agreement between Party A and Party B? (Remembering) A. Category debt B. Optional debt C. Joint and several debts D. Service debt				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
16. Party A, Party B and Party C have reached a Mediation Agreement on the traffic accident under the auspices of the traffic management department. Party A and Party B shall respectively compensate Party C 50000 yuan, and Party A shall immediately perform it. Party B paid 10000 yuan, and the remaining 40000 yuan was given an IOU to Party C. When Party B fails to perform after the expiration of the time limit, and Party C fails to make repeated demands, he brings a lawsuit to the court with the Mediation Agreement and the IOU. Which of the following statements is true? (Understanding) A. This case is a tort debt B. This case is a contractual debt C. If Party C is compensated forwork-related injury, Party B can claim corresponding exemption D. Party C may request Party A to continue to compensate 40000 yuan				
17. Fang left a baggage in the taxi and immediately issued a notice of finding objects, stating that he was willing to reward the returned baggage with 2000 yuan in cash. Li, the taxi driver, contacted Fang once he found the baggage and learned the notice of finding things. Now, Mr. Fang refuses to pay Mr. Li 2000 yuan. Which of the following statements is true? (Understanding) A. Fang has the right to claim the return of his belongings, and Li is obliged to return the baggage, so Fang may not pay 2000 yuan as a reward B. If Fang fails to pay 2000 yuan, Li may exercise the lien to refuse to return the baggage C. If Party A has not released the notice of finding objects, it may not pay any remuneration or fees D. Since Fang has published a notice of finding objects, he must pay a reward				
18. Party A's house is adjacent to Party B. Party B leased the house to Party C and bought fire insurance for the house from Company A. One day, A saw that B's house was on fire. Fearing that the fire would spread and damage his home, he led his family to fight the fire. The fire was controlled in time, but A was hospitalized for burns. Which of the following statements is true? (Understanding) A. Subjectively, in order to avoid damage to their own houses, Party A should bear the medical expenses on its own, which does not constitute causeless management B. Party A can only claim compensation for medical expenses from Party B on the basis of no cause management, because Party B is the owner of the house C. Party A can only claim compensation for medical expenses from Party C on the basis of no cause management, because Party C is the actual user of the house D. Party A cannot claim compensation for medical expenses from Company A on the basis of gratuitous management, because Party A lacks the subjective intention to implement management for the benefit of Company A				
19. When Tingting was one year old, her parents invited a photographer from a studio to take a commemorative photo for her at home, and asked the studio not to keep the negative film for other purposes. After the photos were washed out, the studio violated the agreement to make Tingting's photos into calendars for sale, making a lot of profits. What debt relationships exist in this case? (Remembering) A. Debt of contract of undertaking				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
B. Obligation under the entrustment contract C. Tort liability D. Unjust enrichment debt				
20. Party A's neighbor, Party B, bought building materials and planned to build a utility room behind the house. Party A thought that it would block his access and resolutely opposed it. B doesn't listen. Party A brings a lawsuit to the court and requests the court to prohibit Party B's behavior. What kind of action does the lawsuit belong to? (Remembering) A. Confirmation action B. Formative action C. Suit for payment D. Alteration action				
21. Party A sued the court for Party B's failure to pay the rent for a long time and demanded that Party B pay 6000 yuan for half a year. Before the hearing of the case, Party A submitted written materials, saying that one month had passed, and Party B should increase the rent to 7000 yuan. Which of the following options is correct about the court's handling of Party A's request for increasing rent? (Understanding) A. As a new lawsuit, it shall be jointly heard B. Alteration as the subject matter of litigation shall be heard separately C. Continue the trial as an additional claim D. Reject the case and inform Party A to file a separate lawsuit				
22. Which of the following is correct about the description of the classification of litigation? (Understanding) A. Sun applied to the court to confirm that his wife has no civil capacity, which is a confirmation action B. Zhou applied to the court to declare his marriage with Wu invalid, which is a change action C. After the divorce agreement between Zhang and Wang, Zhang filed a lawsuit with the court to claim for divorce damages, which is a payment lawsuit D. Zhao appealed to the court on behalf of his daughter for his ex-wife to increase the alimony from 1000 yuan to 2000 yuan per month, which is a payment action				
23. Which of the following options is correct about the description of the type of litigation? (Remembering) A. Company A sued to the court for termination of the contract on the ground of breach of contract by Company B, which is a change action B. Company A sued to the court for company B's continued performance on the grounds that company B's performance did not conform to the agreement, which is a payment action C. Party A filed a lawsuit with the court against Party B for the repayment of the loan of 1000 yuan. Party B said that he had never borrowed money from Party A, and the lawsuit was a confirmation lawsuit D. Company A sues Company B to require Company B to immediately stop construction or take effective measures to reduce noise, which is a change action				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
24. In August 2003, Company A, which was established in the same administrative region, ordered 40 computers from Company B. The agreement agreed that Company B would deliver the computers before January 31, 2004, and Company A would pay off the purchase price before March 15, 2004. Company B delivered 40 computers to Company A on schedule, but Company A only paid 29 computers to Company B in March 2004, and the remaining 11 computers have not been paid. In January 2005, Company B filed a lawsuit to require Company A to pay the balance and its interest. The court accepted the case. Company A believes that the computer quality of Company B is unqualified and is ready to file a counterclaim. Which of the following are correct answers to counterclaims? (Understanding) A. The counterclaim of Company A meets the counterclaim conditions in terms of subject, jurisdiction and involvement B. The counterclaim shall be filed before the expiry of the defense period C. The acceptance fee required for counterclaim is charged by half compared with the ordinary prosecution D. The counterclaim has exceeded the limitation of action, and the court shall rule not to accept it according to law				
25. Which of the following statements is correct about counterclaim? (Remembering) A. The counterclaim shall be submitted to the court that accepts the case, and the court shall also have jurisdiction over the case involved in the counterclaim B. The claim in the counterclaim is independent and will not be withdrawn due to the withdrawal of the action C. If the counterclaim is established, it will have the legal consequences that the claim of this lawsuit is rejected according to law D. The litigants of this lawsuit and counterclaim are identical, so the litigants have the same litigation status in this lawsuit and counterclaim				
Knowledge of Inheritance Law and Marriage Law Choose this question for indefinite items				
26. Party A and Party B are husband and wife. Party A publishes the novel Yesterday before marriage, and receives royalties after marriage. B published the novel "Today" during the marriage, and received royalties the next day after the divorce. A authored the novel Tomorrow during the marriage, published it after divorce and received royalties. Which of the following is correct? (Applying) A. The contribution fee of Yesterday belongs to A's personal property before marriage B. The contribution fee of Today belongs to the joint property of husband and wife C. The contribution fee of Tomorrow belongs to the joint property of husband and wife D. The contribution fees for Yesterday, Today and Tomorrow belong to the joint property of husband and wife				
27. A man and B woman fell in love through online chat. Later, B proposed to break up and was threatened by A, so B had no choice but to go through marriage registration with A. After marriage, Party B learns that before				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
marriage, Party A suffered from a disease that should not be married medically and could not be cured for a long time, so Party B files a divorce lawsuit with the court. Which of the following statements is true? (Applying) A. The court shall annul the marriage B. The court shall pronounce the marriage null and void C. The trial of the case should be mediated D. The party concerned may appeal against the court's decision according to law				
28. Mr. Huang and Mr. Tang voluntarily reached a divorce agreement and agreed on an equal distribution of property. All debts during the marriage relationship will be repaid by Mr. Tang. According to the investigation, Huang borrowed 100000 yuan from Liu in his own name during the marriage to buy the marriage house. Which of the following statements is true? (Remembering) A. Liu can only ask Tang to repay 100000 yuan B. Liu can only ask Huang to repay 100000 yuan C. If Huang repays 100000 yuan, he has the right to recover 100000 yuan from Tang D. If Tang repaid 100000 yuan, he has the right to recover 50000 yuan from Huang				
29. Zhang and Liu opened a hairdressing shop after their marriage, which was operated by Liu. The two have lived apart since June 2005, and Zhang filed a divorce suit with the local court in December 2005. During the hearing, it was found that Liu borrowed 20000 yuan from others in September 2005 for the operation of the hair salon. Which of the following options are correct? (Remembering) A. The salon belongs to the joint property of husband and wife B. This debt is a joint debt of husband and wife, which should be paid off with common property C. This debt is a joint debt of husband and wife, and Zhang should bear half of the repayment responsibility D. The debt was born after the two separated, not for the couple's life together, and Liu should be solely responsible for paying off the debt				
30. Party A and Party B have been married for many years. Because Party A is addicted to online games, the two parties agree to divorce. Party A agrees that the main property of the family should be obtained by Party B. Shortly after the divorce, Party B found that Party A had privately purchased two properties and registered them in his own name during the marriage, so he filed a lawsuit against Party A, demanding that the property be divided again and that Party A bear the liability for damages. Which of the following options are correct? (Understanding) A. Party B has no right to claim damages from Party A B. The court should award both properties to B C. The limitation of action for requesting the division of the property shall be two years from the day after Party B discovers or should discover Party A's hidden property act D. If the court decides that Party B will share the house property, Party B will acquire the ownership of the house on the effective date of the judgment				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
31. In May 2003, Mr. Wang (male) and Mr. Zhao married, and both parties agreed in writing that their income would be owned by themselves after marriage. In October 2005, Wang used his income to buy a house. In November 2005, Zhao was laid off and took care of his daughter and Wang. In August 2008, Wang filed for divorce. Zhao learned that Wang and Zhang had lived together for many years. Which of the following propositions should the court support? (Understanding) A. Zhao has paid more obligations for raising his daughter and taking care of Wang's life, and Wang should compensate B. After divorce, Zhao did not have a house, and the house purchased by Wang should be judged as the joint property of husband and wife according to the principle of fairness C. Wang and Zhang live together, resulting in divorce, and should compensate Zhao D. Zhang and Wang live together and destroy their family. They should apologize to Zhao				
32. The old couple Wang Dong and Zhang Xia have a son Wang Xi and a daughter Wang Nan. Wang Xi has a son Wang Xiaoli after marriage. Wang Dong and Zhang Xia had agreed that Wang Dong owned the front room and the house. On August 9, 2012, Wang Dong handled a notarial will and confirmed that Zhang Xia and Wang Xi jointly inherited the front room. On July 10, 2013, Wang Dong sold the front room to others and handled the transfer formalities. In December 2013, Wang Dong died, and soon Wang Xi died. Which of the following statements is wrong about the inheritance of housing and selling house prices? (Understanding) A. Zhang Xia has partial inheritance right B. Wang Nan has partial inheritance right C. Wang Xiaoli has partial inheritance right D. Wang Xiaoli has partial inheritance right to the house and full inheritance right to the price of the house				
33. Old man Xu had an only child who died young. His daughter-in-law lived with him and took care of him. Later, his daughter-in-law remarried with Tian. Three years ago, he gave birth to his son, Xiaotian. One year ago, his daughter-in-law died unfortunately. Six months ago, Tian also died one after another. If old man Xu dies and inherits in the future, can Oda? (Understanding) A. Subrogation B. Retrocession C. No inheritance right D. Appropriately share the estate				
34. Mr. Li left a house and hundreds of thousands of savings after his death, but he did not make a will before his death. Li has three daughters and adopted a son. The eldest daughter died of illness in middle age, leaving a son. The adopted son is rich in income, but refuses to support Li. During the funeral of the two daughters, the youngest daughter died of an accident due to a traffic accident, leaving a daughter behind. Which of the following options are correct? (Remembering) A. The daughter of the second daughter and the daughter of the youngest daughter are the heirs in the first order B. The son of the eldest daughter inherits Li's estate in subrogation C. The daughter of the youngest daughter belongs to the heir				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
D. When distributing the inheritance, the adopted son should be given no or less				
35. Wang and Li are husband and wife. They took their daughters on a trip. They were all killed in a car accident, but the time of death cannot be determined. Which of the following options are correct? (Remembering) A. It is presumed that Wang and Li died before their daughter B. It is presumed that Wang and Li died at the same time C. Wang and Li do not inherit from each other D. Daughter inherits Wang and Li as the first heir				
36. Qian and Hu had children A and B after their marriage. Later, Qian divorced Hu, and Hu raised them. Hu married Wu. At that time, A was working while B was under age. B followed Hu to live with Wu. Later, Hu and Wu gave birth to a daughter C, and Wu and his former wife had a son D. Which of the following statements is correct when Qian and Wu died successively? (Understanding) A. Hu, A and B can inherit Qian's inheritance B. A and B can inherit Wu's inheritance C. Hu and C can inherit Wu's inheritance D. B and Ding can inherit Wu's inheritance				
37. Uncle Guo's daughter died five years ago, leaving a son. Son in law B has been living with Uncle Guo and has done his main duty of support. Although Uncle Guo's stepson C has no supporting relationship with him, he also comes back from other places to visit him from time to time. Uncle Guo also has an adopted son who has lost the ability to work. When Uncle Guo died of illness, which of the following options is correct about his inheritance? (Applying) A. A is the successor in the first order B. Party B may distribute more property C. C has no right to inherit D. Give consideration to Ding when distributing the inheritance				
38. Zhang and Li are husband and wife. They have a son, Zhang Jia, and a daughter, Zhang Yi. Zhang Jia died unexpectedly in 2007, and there was a woman named C. Zhang died in 2010 and owned a set of personal real estate before his death, which was disposed of to Li in his will. Which of the following statements are correct about the inheritance of the property? (Understanding) A. Mr. Li can inherit the property through Mr. Zhang's will B. C can divide the property by subrogation C. The successor obtained the ownership of the property since the death of Mr. Zhang D. The successor has obtained the ownership since the change of registration of the property				
39. A has two children, B and C. A made a will before he died, and after his death, B inherited his house. B married Ding and had a daughter Wu. After B died before A due to illness, D took over B to support A. C is unmarried. A left a house and cash after his death. Which of the following statements are correct? (Applying)				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
A. Wuke inherits by subrogation B.V. Ding has no right to inherit cash C. C and D are the first successors D. C has no right to inherit the house				
40. In a written will, Party A will leave all the inheritance to the eldest son B and make it clear that the second son C cannot inherit. After their marriage, B and Ding had a daughter Wu and a son. The time of death of Hou B and Ding in a car accident cannot be determined. A became ill with grief and soon died. Mother Ding is healthy. Which of the following statements are correct? (Applying) A. Party A, Party E and Party B have the right to inherit the inheritance of Party B B. Mother Ding has the right to inherit from Party B C. E. Ji and Ding's mother have the right to inherit Ding's inheritance D. C has the right to inherit, andWu He has the right to inherit by subrogation				
41. When A (male) and B (female) marry and their son Xiaoming is 20 years old, A and B divorce. After the remarriage of A and C (female), C Xiaojiang was 8 years old and lived with A and C. After Xiaojiang became an adult and married, A and C felt very lonely. They adopted the orphan Xiaoguang as their adopted son, which was regarded as having left, and did not go through the adoption procedures. When C dies, who are the first successors of his estate? (Understanding) A. Xiao Ming B. Xiaojiang C. A D. Small light				
42. After Xiong and Yang got married, Xiaojiang, the son of Yang and his ex husband, was raised by them all the time. Xiong died without making a will. Before Xiong died, Yang was pregnant with a pair of dragon and phoenix fetuses. After Xiong died, the baby boy was dead and the baby girl was alive but died immediately. Which of the following options are correct about inheriting Xiong's heritage? (Understanding) A. Yang and Xiaojiang are the first legal successors B. After the death of the baby girl, legal subrogation shall occur C. Yang and Xiaojiang inherit the share of inheritance reserved for the baby boy D. Yang inherits the share of inheritance reserved for baby girls				
43. Huang has a son and a daughter, Huang Wei and Huang Mei. Huang has always lived with his son Huang Wei. Huang Mei and her ex husband Zhao had a daughter, Zhao Xiaoxing, who remarried with Lu and raised Lu Xiaodong, the son of Lu and his ex-wife, until he came of age. On January 1, 2021, Huang Mei died of a car accident. On February 1 of the same year, Mr. Huang died of illness, leaving three commercial houses. Which of the following statements is correct about Huang's inheritance? (Understanding) A. Lu Xiaodong has the right to inherit B. HuangWei has the right to inherit				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
C. Zhao Xiaoxing has the right to inherit D. Lu has the right to inherit				
44. Which of the following actions can cause the consequences of waiving the right of inheritance? (Applying) A. Zhang gave up the right of inheritance orally, which I acknowledged in writing B. Wang gave up the right of inheritance after the division of the estate C. Li gave up his right of inheritance to his parents in writing on the premise that he would no longer support his parents D. Zhao and his father jointly issued a written statement to break off the relationship between father and son				
45. He left a house worth 60000 yuan and 40000 yuan in cash after his death. He made a will. The cash of 40000 yuan was shared equally among the four children. The ownership of the house was not handled. He's daughter offered to give up the inheritance right of the house, so the three sons sold the house, and each of them got 20,000 yuan. The present creditor claims that Mr. He borrowed 120000 yuan from him before his death, and the receipt is evidence. Which of the following statements are wrong? (Applying) A. He is dead, and the creditor debtor relationship is terminated B. The four children shared equally, and each of them repaid 30000 yuan C. The four children use their inheritance income to pay off debts, and the remaining 20000 yuan is shared equally by the four people D. The four children use their inheritance income to pay off their debts, and the remaining four can not pay off the debts of 20000 yuan				
46. Party A makes a notarized will, leaving most of his property to his son B and a small part of his savings to his daughter C. Later, B was sentenced for theft. A was extremely sad. He burned his will in front of his relatives and friends on his bed and died soon. After being released from prison, Party B requests to inherit the estate according to the content of the will. Which of the following is correct? (Applying) A. Party B has the right to inherit according to the content of the will B. B can only inherit according to the provisions of statutory inheritance C. B has no right to inherit any inheritance D. Can be divided into appropriate inheritance				
47. Party A and baby sitter B agree that Party B will take care of Party A before he dies, and all the inheritance after his death will belong to Party B. B has been taking good care of A. After that, the daughter C of A returned home and took care of A together with B, and A died half a year later. C believes that he is the successor in the first order and has fulfilled his obligations, claiming that the agreement between A and B is invalid. Which of the following statements is true? (Understanding) A. Legacy upbringing agreement is valid B. The agreement is partially invalid, and Party C can inherit half of Party A's inheritance C. The agreement is invalid and should be treated as legal inheritance D. The agreement is valid and should be handled according to testamentary succession				

Questions and options	IOC			Suggestion
	1	0	-1	
Knowledge of Procedural Law and Creditor's Right Law Choose this question for indefinite items				
48. A has a son and a daughter, and the two have hired a nanny to take care of A. In order to thank Party B, Party A wrote a will, saying that his three houses were shared equally by his two children, and all cash was given to Party B. Later, A made a written will to distribute all his cash to his two children. Soon A died. Which of the following options are incorrect? (Applying) A. A's previous will is invalid B. The latter will of A is invalid C. All cash shall belong to Party A's two children D. All cash shall belong to Party B				
49. A has two children, B and C. A made a will before he died, and after his death, B inherited his house. B married Ding and had a daughter Wu. After B died before A due to illness, D took over B to support A. C is unmarried. A left a house and cash after his death. Which of the following statements are correct? (Applying) A. Wuke inherits by subrogation B. V. Ding has no right to inherit cash C. C and D are the first successors D. C has no right to inherit the house				
50. In 2015, Party A made a notarized will: after his death, all his inheritance will go to his eldest son B. In 2016, Party A went to the same notary office to make a notarial will: after death, all the inheritance will go to Second Son C. Due to his son's unfilial behavior, in 2017, A wrote a will in his own hand at home, stating that all his inheritance would go to his eldest daughter, Ding, after his death, and indicating the date. Later, A was hospitalized due to illness, and the youngest daughter, Wu, took care of her carefully. In 2018, A was critically ill. After the death of the oral will, all the inheritance belonged to the youngest daughter, Wu, and the two nurses present could witness it. The posterior nail died. Which of the following statements are correct about this case? (Understanding) A. The first notarized will made by Party A in 2015 is invalid B. The second notarized will made by Party A in 2016 is valid C. Ding has no right to inherit A's inheritance D. Wu has the right to inherit all of A's inheritance				

The results of learning achievement test by IOC experts

Questions and options	IOC	Translation results
1. Party A borrows 50000 yuan from Party B, and Party B requires Party A to provide a guarantee. Party A respectively finds friends C, D, E, and Ji, and they each make the following representations. Which of them constitutes a guarantee? (Remembering) A. Party C signs "Guarantor C" on the IOU issued by Party A to Party B B. Ding issued a letter to Party B saying, "If Party A fails to repay to Party B when due, I am willing to repay 30000 yuan" C. E issued a letter to Party B saying, "If Party A fails to make repayment to Party B when due, I shall be responsible" D. A certificate has been issued to Party B stating that "if Party A fails to make repayment to Party B when due, I will pay the debt with a private house"	1	related
2.Company A purchased 10 bags of chrysanthemum tea from Company B, and agreed: "After Company B delivers chrysanthemum tea, Company A shall pay 100000 yuan for goods." Company C provided a letter of guarantee: "If Company A fails to make payment in accordance with the agreement, Company C shall make payment on behalf of Company A." Two bags of chrysanthemum tea delivered by Company B were fumigated with sulfur and could not be drunk, worth 20000 yuan. If Company B fails to ask Company A for payment, Company B requires Company C to pay 100000 yuan. Which of the following statements are correct? (Understanding) A. If Company C knows and pays RMB 100000 to Company B, Company C can only recover RMB 80000 from Company A B. If Company C does not know about it and pays 100000 yuan to Company B, Company B will make improper profits C. If the limitation of action for payment debts of Company A has expired and Company C still pays RMB 80000 to Company B, Company C shall not claim compensation from Company A D. If Company C waives its right of defense against Company B and still pays Company B 80000 yuan, Company C shall not claim compensation from Company A	1	related
3. Party A has mortgaged its own house to the bank of Party B and has gone through mortgage registration. C enters the house by force because A does not pay back the money he owes. After the loan matures, Party A is unable to repay the debt.	1	related

Questions and options	IOC	Translation results
The house is difficult to auction due to C's illegal residence, so A is slow to exercise the right of return to C. Which of the following rights can Bank B exercise? (Understanding) A. Requesting Party A to exercise the right of return to Party C to prevent the decrease of the value of the mortgaged property B. Requesting Party A to transfer the right of return to Party C to itself C. Can subrogate to exercise the right of claim for return against C D. Can directly exercise the right of return against Party C according to the mortgage right		
4. Company A has a creditor's right of 50000 yuan against Company B, and Company B has a creditor's right of 100000 yuan against Company C. If Company A brings a suit of subrogation against Company C, which of the following claims of Company C against Company A has legal basis? (Understanding) A. Have the right to claim the defense of Company B against Company A B. Have the right to claim the defense of Company C against Company B C. Defenses against Company A in the exercise of the right to claim subrogation D. Have the right to request the court to add Company B as the co defendant	1	related
5. Company A borrows RMB 1 million from Bank B, Party C and Party D respectively set mortgage to Bank B with their own property, and Party E and Party D have respectively issued a letter of guarantee to Bank B to assume full responsibility. Which of the following statements are correct? (Understanding) A. Bank B may exercise the mortgage on the house property of C or D B. After assuming the guarantee liability, Party C may claim compensation from Party A, or require Party D to pay off its share C. Bank B may require Wu or have undertaken all the guarantee responsibilities D. After assuming the responsibility of the guarantee, we can claim compensation from Party A or claim that we have paid off our share	1	related
6. When Party B borrows 200000 yuan from Party A, after the loan expires, which of the following acts of Party B causes Party B to be unable to repay the loan of Party A, Party A may apply to the court for cancellation? (Remembering) A. Party B uses all his/her property to repay his/her undue debts to others B. Party B and its debtor agree to waive the mortgage of the debtor's property	1	related

Questions and options	IOC	Translation results
C. Party B waives the division of the family's common property in the divorce agreement D. When his father dies, he gives up his right to inherit his father's estate		
7. After Party A owed Party B 300000 yuan, Party B failed to make repeated demands. A and C will go through the divorce procedures a few days after their marriage. In the Divorce Agreement, they agreed to give a house before A's marriage to C, who knows that A owes a debt to B, and handled the ownership change registration. Party B believes that Party A has infringed upon its rights and interests, and hires a lawyer to sue in the court to request the revocation of Party A's donation, for which it pays a fee of 20000 yuan to the lawyer. Which of the following options are correct? (Remembering) A. The Divorce Agreement is invalid due to malicious collusion to damage the interests of a third party B. If Party A proves that he/she has stable salary income, cars and other properties available for debt repayment, the court shall reject Party B's claim C. If Party B only takes Party A as the defendant, the court shall add Party C as the defendant D. If the court finds that the revocation right of Party B is established, it shall also support the request of Party B that Party A should bear the attorney's fees	1	related
8. The debts owed by Company A to Company B and Company C cannot be fully repaid. There is still a car and a house under the name of Company A. Company B went to Company A with a gift and said that you could just mortgage the house and car to me to pay my debt. Otherwise, Company C took it. Company A signed a mortgage contract with its consent. If Company A is unable to pay its debts when due, Company B applies for realizing the mortgage. Regarding this case, are the following statements correct? (Understanding) A. Company C can claim that the mortgage contract between Party A and Party B is invalid because it is not registered B. Company C can claim that the mortgage contract between companies A and B is invalid C. Company C can claim to cancel the behavior between companies A and B D. The ownership of cars and houses is still owned by Company A	1	related

Questions and options	IOC	Translation results
9. Mr. Chen borrowed RMB 200000 from Mr. He for 2 years. Zhang provided guarantee for the loan contract. According to the guarantee terms, Zhang will assume the guarantee responsibility when Chen fails to perform his debts, but no guarantee period is agreed. At the same time, Chen provided mortgage guarantee with his house and went through registration. As for the duration of Mr. He's mortgage and Mr. Zhang's guarantee, the following options are correct: (Remembering) A. Mr. He should exercise the mortgage right during the limitation of action of the principal creditor's right B. Mr. He can still exercise the mortgage right within two years after the end of the limitation of action for the principal creditor's rights C. Zhang's guarantee period is 6 months from the date of expiry of the main debt performance period D. Zhang's guarantee period is 2 years from the date of expiry of the main debt performance period	1	related
10. Mr. Yu turned to Wang Hai Bank for a loan of 500000 yuan due to the company's Zhou, and Mr. Jiang acted as the joint guarantor. Two months later, another 200000 yuan was borrowed. Tell Jiang that Jiang has not made a yes or no. What is the correct statement about Jiang's guarantee responsibility? (Applying) A. Jiang can exercise the right of first instance defense against Wang Hai Bank B. As for the right of defense of Mr. Yu against Wang Hai Bank, Mr. Jiang can also claim against the bank C. Jiang should undertake the guarantee responsibility for Yu's 700000 yuan D. Jiang should undertake the guarantee responsibility for Yu's 500000 yuan	1	related
11. Company A borrows 10 million yuan from Company B, and Company C seals under the "Guarantor" column of the loan agreement, but does not specify the guarantee method. Company D establishes a guarantee for the debt with its own house and handles mortgage registration. If Company A fails to repay the loan when it is due, Company B intends to claim rights from Company C and Company D. According to the Civil Code, which of the following is correct? (Remembering) A. Company C shall undertake the guarantee responsibility according to the general guarantee	1	related

Questions and options	IOC	Translation results
B. After assuming the responsibility, Ding has the right to claim compensation from Company C C. After assuming the responsibility, Ding has the right to claim compensation from Company A D. After assuming the guarantee responsibility, Company C has the right to claim compensation from Company A		
12. Party A owes 100 tons of steel to Party C. In order to repay this debt, Party A and Party B entered into a sales contract for 100 tons of steel, which agreed that Party B would directly deliver steel to Party C, and Party C could also directly request Party B to perform. Party C knew about this and did not refuse. What is the correct statement? (Understanding) A. If Party B fails to deliver, Party C may request it to perform and hold it liable for breach of contract B. Party A has no obligation to Party B C. B cannot claim its defense against A from C D. Due to the relativity of the contract, Party C cannot directly request Party B to perform its delivery obligations	1	related
13. Zhao bought a household washing machine produced by Company A from a store. When washing clothes, the washing machine burst due to technical defects, and the impeller flew out, causing serious personal damage and clothing damage to Zhao. Which of Zhao's following appeals are correct? (Understanding) A. The shop shall be liable for breach of contract by replacing the washing machine or returning the goods, compensating for the loss of clothes and compensating for personal damage B. The shop shall replace the washing machine or return the goods according to the liability for breach of contract, or request Party A to compensate for the loss of clothes and personal damage according to the tort liability C. The shop or company A shall compensate for the damage caused by the defect of the washing machine D. The shop or company A shall compensate for material damage and moral damage	1	related
14. There is a wooden board standing at the door of the mobile phone store of Party A, with four striking characters: "10 penalties for one fake". Party B bought a mobile	1	related

Questions and options	IOC	Translation results
phone from the store, which was identified by the relevant department as a counterfeit product, so Party B requested Party A to fulfill its commitment of "one fake and ten penalties". Which of the following is correct about this case? (Understanding) A. "Penalty of ten for one fake" excessively increases the burden of Party A, which is an invalid standard clause B. "Ten penalties for one fake" is not included in the contract, so it is not binding on Party A C. "Ten penalties for one fake" is obviously unfair, and Party A has the right to request the court to change or revoke it D. "Penalty of ten for one fake" is a voluntary declaration of true intention made by Party A, which should be recognized as valid		
15. Party A said to Party B: If you are admitted to the civil service within three years, I would like to give you a house or a BMW as a gift. Party B agrees. Two years later, B was admitted to a position in a state organ. Which of the following statements is correct about the agreement between Party A and Party B? (Remembering) A. Category debt B. Optional debt C. Joint and several debts D. Service debt	1	related
16. Party A, Party B and Party C have reached a Mediation Agreement on the traffic accident under the auspices of the traffic management department. Party A and Party B shall respectively compensate Party C 50000 yuan, and Party A shall immediately perform it. Party B paid 10000 yuan, and the remaining 40000 yuan was given an IOU to Party C. When Party B fails to perform after the expiration of the time limit, and Party C fails to make repeated demands, he brings a lawsuit to the court with the Mediation Agreement and the IOU. Which of the following statements is true? (Understanding) A. This case is a tort debt B. This case is a contractual debt C. If Party C is compensated for work-related injury, Party B can claim corresponding exemption D. Party C may request Party A to continue to compensate 40000 yuan	1	related

Questions and options	IOC	Translation results
17. Fang left a baggage in the taxi and immediately issued a notice of finding objects, stating that he was willing to reward the returned baggage with 2000 yuan in cash. Li, the taxi driver, contacted Fang once he found the baggage and learned the notice of finding things. Now, Mr. Fang refuses to pay Mr. Li 2000 yuan. Which of the following statements is true? (Understanding) A. Fang has the right to claim the return of his belongings, and Li is obliged to return the baggage, so Fang may not pay 2000 yuan as a reward B. If Fang fails to pay 2000 yuan, Li may exercise the lien to refuse to return the baggage C. If Party A has not released the notice of finding objects, it may not pay any remuneration or fees D. Since Fang has published a notice of finding objects, he must pay a reward	1	related
18. Party A's house is adjacent to Party B. Party B leased the house to Party C and bought fire insurance for the house from Company A. One day, A saw that B's house was on fire. Fearing that the fire would spread and damage his home, he led his family to fight the fire. The fire was controlled in time, but A was hospitalized for burns. Which of the following statements is true? (Understanding) A. Subjectively, in order to avoid damage to their own houses, Party A should bear the medical expenses on its own, which does not constitute causeless management B. Party A can only claim compensation for medical expenses from Party B on the basis of no cause management, because Party B is the owner of the house C. Party A can only claim compensation for medical expenses from Party C on the basis of no cause management, because Party C is the actual user of the house D. Party A cannot claim compensation for medical expenses from Company A on the basis of gratuitous management, because Party A lacks the subjective intention to implement management for the benefit of Company A	1	related
19. When Tingting was one year old, her parents invited a photographer from a studio to take a commemorative photo for her at home, and asked the studio not to keep the negative film for other purposes. After the photos were washed out, the studio violated the agreement to make Tingting's photos into calendars for sale, making a lot of profits. What debt relationships exist in this case? (Remembering) A. Debt of contract of undertaking	1	related

Questions and options	IOC	Translation results
B. Obligation under the entrustment contract C. Tort liability D. Unjust enrichment debt		
20. Party A's neighbor, Party B, bought building materials and planned to build a utility room behind the house. Party A thought that it would block his access and resolutely opposed it. B doesn't listen. Party A brings a lawsuit to the court and requests the court to prohibit Party B's behavior. What kind of action does the lawsuit belong to? (Remembering) A. Confirmation action B. Formative action C. Suit for payment D. Alteration action	1	related
21. Party A sued the court for Party B's failure to pay the rent for a long time and demanded that Party B pay 6000 yuan for half a year. Before the hearing of the case, Party A submitted written materials, saying that one month had passed, and Party B should increase the rent to 7000 yuan. Which of the following options is correct about the court's handling of Party A's request for increasing rent? (Understanding) A. As a new lawsuit, it shall be jointly heard B. Alteration as the subject matter of litigation shall be heard separately C. Continue the trial as an additional claim D. Reject the case and inform Party A to file a separate lawsuit	1	related
22. Which of the following is correct about the description of the classification of litigation? (Understanding) A. Sun applied to the court to confirm that his wife has no civil capacity, which is a confirmation action B. Zhou applied to the court to declare his marriage with Wu invalid, which is a change action C. After the divorce agreement between Zhang and Wang, Zhang filed a lawsuit with the court to claim for divorce damages, which is a payment lawsuit D. Zhao appealed to the court on behalf of his daughter for his ex-wife to increase the alimony from 1000 yuan to 2000 yuan per month, which is a payment action	1	related

Questions and options	IOC	Translation results
23. Which of the following options is correct about the description of the type of litigation? (Remembering) A. Company A sued to the court for termination of the contract on the ground of breach of contract by Company B, which is a change action B. Company A sued to the court for company B's continued performance on the grounds that company B's performance did not conform to the agreement, which is a payment action C. Party A filed a lawsuit with the court against Party B for the repayment of the loan of 1000 yuan. Party B said that he had never borrowed money from Party A, and the lawsuit was a confirmation lawsuit D. Company A sues Company B to require Company B to immediately stop construction or take effective measures to reduce noise, which is a change action	1	related
24. In August 2003, Company A, which was established in the same administrative region, ordered 40 computers from Company B. The agreement agreed that Company B would deliver the computers before January 31, 2004, and Company A would pay off the purchase price before March 15, 2004. Company B delivered 40 computers to Company A on schedule, but Company A only paid 29 computers to Company B in March 2004, and the remaining 11 computers have not been paid. In January 2005, Company B filed a lawsuit to require Company A to pay the balance and its interest. The court accepted the case. Company A believes that the computer quality of Company B is unqualified and is ready to file a counterclaim. Which of the following are correct answers to counterclaims? (Understanding) A. The counterclaim of Company A meets the counterclaim conditions in terms of subject, jurisdiction and involvement B. The counterclaim shall be filed before the expiry of the defense period C. The acceptance fee required for counterclaim is charged by half compared with the ordinary prosecution D. The counterclaim has exceeded the limitation of action, and the court shall rule not to accept it according to law	1	related
25. Which of the following statements is correct about counterclaim? (Remembering) A. The counterclaim shall be submitted to the court that accepts the case, and the court shall also have jurisdiction over the case involved in the counterclaim	1	related

Questions and options	IOC	Translation results
B. The claim in the counterclaim is independent and will not be withdrawn due to the withdrawal of the action C. If the counterclaim is established, it will have the legal consequences that the claim of this lawsuit is rejected according to law D. The litigants of this lawsuit and counterclaim are identical, so the litigants have the same litigation status in this lawsuit and counterclaim		
Knowledge of Inheritance Law and Marriage Law Choose this question for indefinite items		
26. Party A and Party B are husband and wife. Party A publishes the novel Yesterday before marriage, and receives royalties after marriage. B published the novel "Today" during the marriage, and received royalties the next day after the divorce. A authored the novel Tomorrow during the marriage, published it after divorce and received royalties. Which of the following is correct? (Applying) A. The contribution fee of Yesterday belongs to A's personal property before marriage B. The contribution fee of Today belongs to the joint property of husband and wife C. The contribution fee of Tomorrow belongs to the joint property of husband and wife D. The contribution fees for Yesterday, Today and Tomorrow belong to the joint property of husband and wife	1	related
27. A man and B woman fell in love through online chat. Later, B proposed to break up and was threatened by A, so B had no choice but to go through marriage registration with A. After marriage, Party B learns that before marriage, Party A suffered from a disease that should not be married medically and could not be cured for a long time, so Party B files a divorce lawsuit with the court. Which of the following statements is true? (Applying) A. The court shall annul the marriage B. The court shall pronounce the marriage null and void C. The trial of the case should be mediated D. The party concerned may appeal against the court's decision according to law	1	related

Questions and options	IOC	Translation results
28. Mr. Huang and Mr. Tang voluntarily reached a divorce agreement and agreed on an equal distribution of property. All debts during the marriage relationship will be repaid by Mr. Tang. According to the investigation, Huang borrowed 100000 yuan from Liu in his own name during the marriage to buy the marriage house. Which of the following statements is true? (Remembering) A. Liu can only ask Tang to repay 100000 yuan B. Liu can only ask Huang to repay 100000 yuan C. If Huang repays 100000 yuan, he has the right to recover 100000 yuan from Tang D. If Tang repaid 100000 yuan, he has the right to recover 50000 yuan from Huang	1	related
29. Zhang and Liu opened a hairdressing shop after their marriage, which was operated by Liu. The two have lived apart since June 2005, and Zhang filed a divorce suit with the local court in December 2005. During the hearing, it was found that Liu borrowed 20000 yuan from others in September 2005 for the operation of the hair salon. Which of the following options are correct? (Remembering) A. The salon belongs to the joint property of husband and wife B. This debt is a joint debt of husband and wife, which should be paid off with common property C. This debt is a joint debt of husband and wife, and Zhang should bear half of the repayment responsibility D. The debt was born after the two separated, not for the couple's life together, and Liu should be solely responsible for paying off the debt	1	related
30. Party A and Party B have been married for many years. Because Party A is addicted to online games, the two parties agree to divorce. Party A agrees that the main property of the family should be obtained by Party B. Shortly after the divorce, Party B found that Party A had privately purchased two properties and registered them in his own name during the marriage, so he filed a lawsuit against Party A, demanding that the property be divided again and that Party A bear the liability for damages. Which of the following options are correct? (Understanding) A. Party B has no right to claim damages from Party A B. The court should award both properties to B C. The limitation of action for requesting the division of the property shall be two years from the day after Party B discovers or should discover Party A's hidden property act	1	related

Questions and options	IOC	Translation results
D. If the court decides that Party B will share the house property, Party B will acquire the ownership of the house on the effective date of the judgment		
31. In May 2003, Mr. Wang (male) and Mr. Zhao married, and both parties agreed in writing that their income would be owned by themselves after marriage. In October 2005, Wang used his income to buy a house. In November 2005, Zhao was laid off and took care of his daughter and Wang. In August 2008, Wang filed for divorce. Zhao learned that Wang and Zhang had lived together for many years. Which of the following propositions should the court support? (Understanding) A. Zhao has paid more obligations for raising his daughter and taking care of Wang's life, and Wang should compensate B. After divorce, Zhao did not have a house, and the house purchased by Wang should be judged as the joint property of husband and wife according to the principle of fairness C. Wang and Zhang live together, resulting in divorce, and should compensate Zhao D. Zhang and Wang live together and destroy their family. They should apologize to Zhao	1	related
32. The old couple Wang Dong and Zhang Xia have a son Wang Xi and a daughter Wang Nan. Wang Xi has a son Wang Xiaoli after marriage. Wang Dong and Zhang Xia had agreed that Wang Dong owned the front room and the house. On August 9, 2012, Wang Dong handled a notarial will and confirmed that Zhang Xia and Wang Xi jointly inherited the front room. On July 10, 2013, Wang Dong sold the front room to others and handled the transfer formalities. In December 2013, Wang Dong died, and soon Wang Xi died. Which of the following statements is wrong about the inheritance of housing and selling house prices? (Understanding) A. Zhang Xia has partial inheritance right B. Wang Nan has partial inheritance right C. Wang Xiaoli has partial inheritance right D. Wang Xiaoli has partial inheritance right to the house and full inheritance right to the price of the house	1	related
33. Old man Xu had an only child who died young. His daughter-in-law lived with him and took care of him. Later, his daughter-in-law remarried with Tian. Three years ago, he gave birth to his son, Xiaotian. One year ago, his daughter-in-law died	1	related

Questions and options	IOC	Translation results
unfortunately. Six months ago, Tian also died one after another. If old man Xu dies and inherits in the future, can Oda? (Understanding) A. Subrogation B. Retrocession C. No inheritance right D. Appropriately share the estate		
34. Mr. Li left a house and hundreds of thousands of savings after his death, but he did not make a will before his death. Li has three daughters and adopted a son. The eldest daughter died of illness in middle age, leaving a son. The adopted son is rich in income, but refuses to support Li. During the funeral of the two daughters, the youngest daughter died of an accident due to a traffic accident, leaving a daughter behind. Which of the following options are correct? (Remembering) A. The daughter of the second daughter and the daughter of the youngest daughter are the heirs in the first order B. The son of the eldest daughter inherits Li's estate in subrogation C. The daughter of the youngest daughter belongs to the heir D. When distributing the inheritance, the adopted son should be given no or less	1	related
35. Wang and Li are husband and wife. They took their daughters on a trip. They were all killed in a car accident, but the time of death cannot be determined. Which of the following options are correct? (Remembering) A. It is presumed that Wang and Li died before their daughter B. It is presumed that Wang and Li died at the same time C. Wang and Li do not inherit from each other D. Daughter inherits Wang and Li as the first heir	1	related
36. Qian and Hu had children A and B after their marriage. Later, Qian divorced Hu, and Hu raised them. Hu married Wu. At that time, A was working while B was under age. B followed Hu to live with Wu. Later, Hu and Wu gave birth to a daughter C, and Wu and his former wife had a son D. Which of the following statements is correct when Qian and Wu died successively? (Understanding) A. Hu, A and B can inherit Qian's inheritance B. A and B can inherit Wu's inheritance C. Hu and C can inherit Wu's inheritance	1	related

Questions and options	IOC	Translation results
D. B and Ding can inherit Wu's inheritance		
37. Uncle Guo's daughter died five years ago, leaving a son. Son in law B has been living with Uncle Guo and has done his main duty of support. Although Uncle Guo's stepson C has no supporting relationship with him, he also comes back from other places to visit him from time to time. Uncle Guo also has an adopted son who has lost the ability to work. When Uncle Guo died of illness, which of the following options is correct about his inheritance? (Applying) A. A is the successor in the first order B. Party B may distribute more property C. C has no right to inherit D. Give consideration to Ding when distributing the inheritance	1	related
38. Zhang and Li are husband and wife. They have a son, Zhang Jia, and a daughter, Zhang Yi. Zhang Jia died unexpectedly in 2007, and there was a woman named C. Zhang died in 2010 and owned a set of personal real estate before his death, which was disposed of to Li in his will. Which of the following statements are correct about the inheritance of the property? (Understanding) A. Mr. Li can inherit the property through Mr. Zhang's will B. C can divide the property by subrogation C. The successor obtained the ownership of the property since the death of Mr. Zhang D. The successor has obtained the ownership since the change of registration of the property	1	related
39. A has two children, B and C. A made a will before he died, and after his death, B inherited his house. B married Ding and had a daughter Wu. After B died before A due to illness, D took over B to support A. C is unmarried. A left a house and cash after his death. Which of the following statements are correct? (Applying) A. Wuke inherits by subrogation B. V. Ding has no right to inherit cash C. C and D are the first successors D. C has no right to inherit the house	1	related

Questions and options	IOC	Translation results
40. In a written will, Party A will leave all the inheritance to the eldest son B and make it clear that the second son C cannot inherit. After their marriage, B and Ding had a daughter Wu and a son. The time of death of Hou B and Ding in a car accident cannot be determined. A became ill with grief and soon died. Mother Ding is healthy. Which of the following statements are correct? (Applying) A. Party A, Party E and Party B have the right to inherit the inheritance of Party B B. Mother Ding has the right to inherit from Party B C. E. Ji and Ding's mother have the right to inherit Ding's inheritance D. C has the right to inherit, and Wu He has the right to inherit by subrogation	1	related
41. When A (male) and B (female) marry and their son Xiaoming is 20 years old, A and B divorce. After the remarriage of A and C (female), C Xiaoliang was 8 years old and lived with A and C. After Xiaoliang became an adult and married, A and C felt very lonely. They adopted the orphan Xiaoguang as their adopted son, which was regarded as having left, and did not go through the adoption procedures. When C dies, who are the first successors of his estate? (Understanding) A. Xiao Ming B. Xiaoliang C. A D. Small light	1	related
42. After Xiong and Yang got married, Xiaogiang, the son of Yang and his ex husband, was raised by them all the time. Xiong died without making a will. Before Xiong died, Yang was pregnant with a pair of dragon and phoenix fetuses. After Xiong died, the baby boy was dead and the baby girl was alive but died immediately. Which of the following options are correct about inheriting Xiong's heritage? (Understanding) A. Yang and Xiaogiang are the first legal successors B. After the death of the baby girl, legal subrogation shall occur C. Yang and Xiaogiang inherit the share of inheritance reserved for the baby boy D. Yang inherits the share of inheritance reserved for baby girls	1	related
43. Huang has a son and a daughter, Huang Wei and Huang Mei. Huang has always lived with his son Huang Wei. Huang Mei and her ex husband Zhao had a daughter, Zhao Xiaoxing, who remarried with Lu and raised Lu Xiaodong, the son of Lu and his ex-wife, until he came of age. On January 1, 2021, Huang Mei died of a car	1	related

Questions and options	IOC	Translation results
accident. On February 1 of the same year, Mr. Huang died of illness, leaving three commercial houses. Which of the following statements is correct about Huang's inheritance? (Understanding) A. Lu Xiaodong has the right to inherit B. Huang Wei has the right to inherit C. Zhao Xiaoxing has the right to inherit D. Lu has the right to inherit		
44. Which of the following actions can cause the consequences of waiving the right of inheritance? (Applying) A. Zhang gave up the right of inheritance orally, which I acknowledged in writing B. Wang gave up the right of inheritance after the division of the estate C. Li gave up his right of inheritance to his parents in writing on the premise that he would no longer support his parents D. Zhao and his father jointly issued a written statement to break off the relationship between father and son	1	related
45. He left a house worth 60000 yuan and 40000 yuan in cash after his death. He made a will. The cash of 40000 yuan was shared equally among the four children. The ownership of the house was not handled. He's daughter offered to give up the inheritance right of the house, so the three sons sold the house, and each of them got 20,000 yuan. The present creditor claims that Mr. He borrowed 120000 yuan from him before his death, and the receipt is evidence. Which of the following statements are wrong? (Applying) A. He is dead, and the creditor debtor relationship is terminated B. The four children shared equally, and each of them repaid 30000 yuan C. The four children use their inheritance income to pay off debts, and the remaining 20000 yuan is shared equally by the four people D. The four children use their inheritance income to pay off their debts, and the remaining four can not pay off the debts of 20000 yuan	1	related
46. Party A makes a notarized will, leaving most of his property to his son B and a small part of his savings to his daughter C. Later, B was sentenced for theft. A was extremely sad. He burned his will in front of his relatives and friends on his bed and	1	related

Questions and options	IOC	Translation results
died soon. After being released from prison, Party B requests to inherit the estate according to the content of the will. Which of the following is correct? (Applying) A. Party B has the right to inherit according to the content of the will B. B can only inherit according to the provisions of statutory inheritance C. B has no right to inherit any inheritance D. Can be divided into appropriate inheritance		
47. Party A and baby sitter B agree that Party B will take care of Party A before he dies, and all the inheritance after his death will belong to Party B. B has been taking good care of A. After that, the daughter C of A returned home and took care of A together with B, and A died half a year later. C believes that he is the successor in the first order and has fulfilled his obligations, claiming that the agreement between A and B is invalid. Which of the following statements is true? (Understanding) A. Legacy upbringing agreement is valid B. The agreement is partially invalid, and Party C can inherit half of Party A's inheritance C. The agreement is invalid and should be treated as legal inheritance D. The agreement is valid and should be handled according to testamentary succession	1	related
48. A has a son and a daughter, and the two have hired a nanny to take care of A. In order to thank Party B, Party A wrote a will, saying that his three houses were shared equally by his two children, and all cash was given to Party B. Later, A made a written will to distribute all his cash to his two children. Soon A died. Which of the following options are incorrect? (Applying) A. A's previous will is invalid B. The latter will of A is invalid C. All cash shall belong to Party A's two children D. All cash shall belong to Party B	1	related
49. A has two children, B and C. A made a will before he died, and after his death, B inherited his house. B married Ding and had a daughter Wu. After B died before A due to illness, D took over B to support A. C is unmarried. A left a house and cash after his death. Which of the following statements are correct? (Applying) A. Wuke inherits by subrogation	1	related

Questions and options	IOC	Translation results
B. V. Ding has no right to inherit cash C. C and D are the first successors D. C has no right to inherit the house		
50. In 2015, Party A made a notarized will: after his death, all his inheritance will go to his eldest son B. In 2016, Party A went to the same notary office to make a notarial will: after death, all the inheritance will go to Second Son C. Due to his son's unfilial behavior, in 2017, A wrote a will in his own hand at home, stating that all his inheritance would go to his eldest daughter, Ding, after his death, and indicating the date. Later, A was hospitalized due to illness, and the youngest daughter, Wu, took care of her carefully. In 2018, A was critically ill. After the death of the oral will, all the inheritance belonged to the youngest daughter, Wu, and the two nurses present could witness it. The posterior nail died. Which of the following statements are correct about this case? (Understanding) A. The first notarized will made by Party A in 2015 is invalid B. The second notarized will made by Party A in 2016 is valid C. Ding has no right to inherit A's inheritance D. Wu has the right to inherit all of A's inheritance	1	related

APPENDIX E

Students' satisfaction questionnaires on a learning model

using the virtual environment with scaffolding strategies

Faculty of Law, Jianghan University

(+) means positive question (-) means negative question

Direction: Please select the appropriate option

Part1 Students' information

1.Gender _____Male ____Female

Part2 Satisfaction with a learning model using the virtual environment with scaffolding strategies

Item	Dimensions	Options	IOC			Suggestion
			-1	0	1	
	Usefulness					
1	Using the learning model in my learning would enable me to accomplish tasks more quickly (+)	(1)strongly disagree (2)disagree (3) uncertainty (4)agree (5)strongly agree				
2	Using the learning model would improve my learning performance (+)	(1)strongly disagree (2)disagree (3) uncertainty (4)agree (5)strongly agree				
3	Using the learning model in my learning would increase my productivity (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
4	Using the learning model would enhance my effectiveness on learning (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
5	Using the learning model would make it easier for my learning (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
6	Overall,I found the learning model to be useful for my learning (+)	(1)strongly disagree (2)disagree (3)uncertainty				

Item	Dimensions	Options	IOC			Suggestion
			-1	0	1	
	Usefulness					
		(4)agree (5)strongly agree				
	Ease of use					
7	Learning to operate the learning model would be easy for me (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
8	I would find it easy to use the learning model to do what I want to do (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
9	My interaction with the learning model would be clear and understandable (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
10	I would find the learning model to be flexible to interact with (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
11	It would be easy for me to become skillful at using the learning model (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				
12	Overall,I found the learning model to be easy to use (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree				

The results of students' satisfaction questionnaires on a learning model using the virtual environment with scaffolding strategies by IOC experts

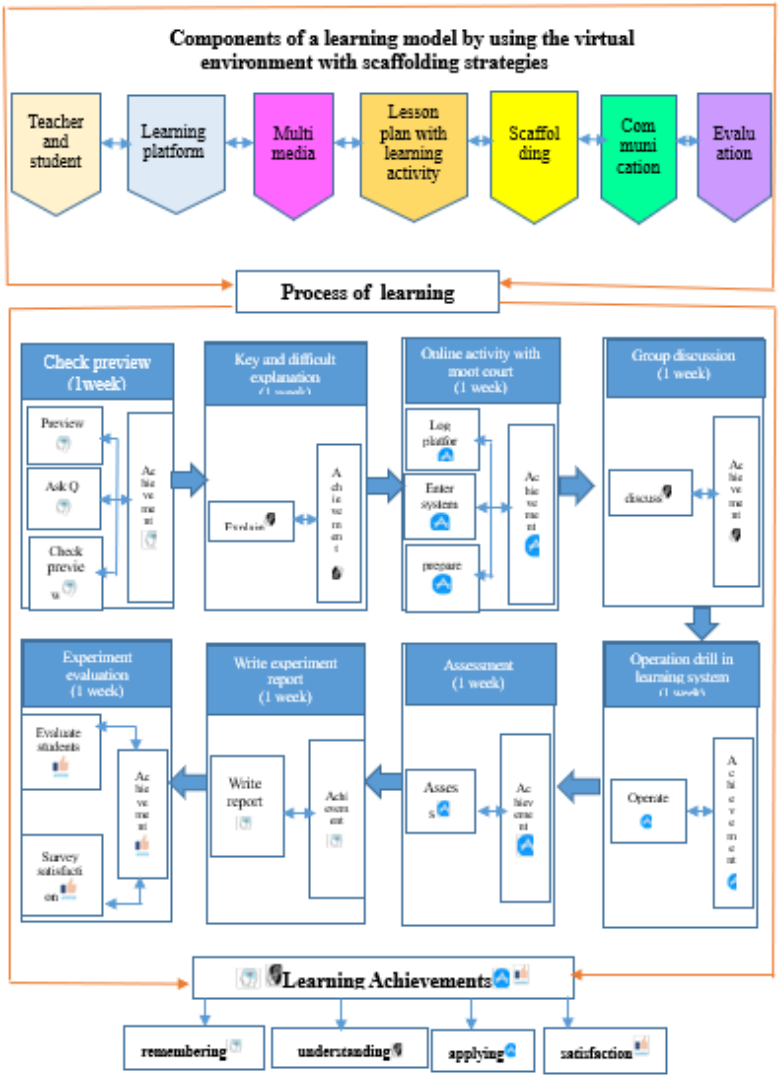
Item	Dimensions	Options	IOC	Translation results
	Usefulness			
1	Using the learning model in my learning would enable me to accomplish tasks more quickly (+)	(1)strongly disagree (2)disagree (3) uncertainty (4)agree (5)strongly agree	1	related
2	Using the learning model would improve my learning performance (+)	(1)strongly disagree (2)disagree (3) uncertainty (4)agree (5)strongly agree	1	related
3	Using the learning model in my learning would increase my productivity (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
4	Using the learning model would enhance my effectiveness on learning (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
5	Using the learning model would make it easier for my learning (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
6	Overall,I found the learning model to be useful for my learning (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
	Ease of use			
7	Learning to operate the learning model would be easy for me (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
8	I would find it easy to use the learning model to do what I want to do (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
9	My interaction with the learning model would be clear and understandable (+)	(1)strongly disagree (2)disagree	1	related

Item	Dimensions	Options	IOC	Translation results
	Usefulness			
		(3)uncertainty (4)agree (5)strongly agree		
10	I would find the learning model to be flexible to interact with (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
11	It would be easy for me to become skillful at using the learning model (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related
12	Overall,I found the learning model to be easy to use (+)	(1)strongly disagree (2)disagree (3)uncertainty (4)agree (5)strongly agree	1	related

APPENDIX F

Approval model form
5=Strongly Agree 4=Agree
3=Neither
2=Disagree 1=Strongly Disagree

Approval model form	Evaluation level					IOC			Suggestion
	5	4	3	2	1	-1	0	1	



Development of a Learning Model using the Virtual Environment with Scaffolding Strategies to Improve Learning Achievements in Moot Court Teaching for Law Undergraduate Students in China

1.The IOC experts will rate each project for its suitability for research purposes. The specific list is as follows:

3 IOC Experts (1 Measurment+1 Technology+ 1 Instructional)

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2. The expert group evaluating the lesson plan that using a learning model using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching for law undergraduate students in China.The specific list is as follows:

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3. The model expert group will use the learning model using the virtual environment with scaffolding strategies to improve learning achievements in moot court teaching for law undergraduate students in China.The specific list is as follows:

5 Model Experts (2 Technologies + 3 Content experts who use technology in their teaching)

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Tool list			
Phase	**Tool**	**Tool name**	**Remarks**
Phase1	Tool1	The needs questionnaires about the traditional moot court teaching.	Appendix A
Phase2	Tool2	A learning model using the virtual environment with scaffolding strategies.	Appendix B
	Tool3	Lesson plan.	Appendix C
	Tool4	Learning achievement test.	Appendix D
Phase 3	Tool5	Lesson plan.	Appendix C
	Tool6	Learning achievement test.	Appendix D
	Tool7	Students' satisfaction questionnaires.	Appendix E
	Tool8	Approval model form.	Appendix F

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