Research on Teaching Application of Simulation Experiment Method in the Design Patent Application Process

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Abstract: As a practical course, Patent Law Practice gave rise to the simulation experimental teaching method, which enhances students' abilities in patent rights acquisition, protection, application, and strategic planning. Unlike traditional legal education, the simulation experiment method has advantages in future career orientation of legal education, focusing on cultivating interdisciplinary and constructivist legal vocational technicians. This paper takes the design patent application process class as an example to demonstrate the application process of the simulation experimental teaching method in patent application practice and to establish a close connection between patent law theory and practice. The development of the simulation experimental teaching method in future legal education should adhere to problem orientation, evaluation system, improve the use of technical means, and shape the choice of application-oriented talent training path.

1. Introduction

For a long time, the value and utility of inventions and creations, which embody the creative intellectual labor results of inventors, have been regarded as property that requires protection. ^[1] Patent law affirms the intellectual labor results of inventors and designers through the method of public authorization and plays a crucial role in the creation, management, application, and protection of scientific and technological innovation and development. Unlike other laws studied at the undergraduate level, patent law is unique in that it requires not only rigorous legal logic, system architecture, and thinking mode, but also involves factual areas such as technical problems, solutions, effects, and fields. Therefore, many students often struggle when faced with technical problems, believing that patent law, like medical law and financial tax law, should not be included in traditional legal education classes. They may even think that legal professionals without a second specialty are often at a loss when dealing with patent technical problems or specific cases. In light of this, this study focuses on the "Patent Law Practice" course at Law School, Guangzhou College of Commerce, specifically examining the course design of the application process of Design Patents, and jointly exploring ways to improve the training mechanism for applied law professionals.

2. Course Introduction

"Patent Law Practice" is a practical course in the field of intellectual property rights within legal studies. The course includes theoretical lectures, practical simulations using patent practice software, course exams, and other relevant content. It is a highly practical course that aims to teach the significance of patent applications, the different categories of patent applications, the conditions for patent authorization, and other theoretical content. Additionally, the course aims to train students in practical knowledge such as the process of patent applications, writing patent applications, understanding the determination of patent protection objects, novelty, creativity, practicality, patent re-examination and invalidation procedures, handling methods for patent ownership disputes, patent infringement dispute handling processes, the patent review procedure of the National Intellectual Property Administration, the service mode of patent agency institutions, enterprise patent layout and analysis, and international patent affairs. The course aims to enhance students' abilities in patent rights

acquisition, protection, application, and strategic planning implementation.

The scope of protection for design patents differs from that of invention and utility model patents. Design patents do not protect technical solutions, but rather design schemes with aesthetic characteristics. In judicial practice, the scope of protection for inventions and utility models is limited through patent claims. The advantage of language protection for patents is that it can describe the basic ideas of the protected technical solutions, thus obtaining more general and extensive protection. ^[2] Conversely, the design features protected by design patents can be judged intuitively through objects, and using language descriptions might result in ambiguity. Therefore, design patents mainly depict the content of patent rights through images, as opposed to the language descriptions of inventions and utility models. Usually, the statement of patent claims does not intuitively reflect its protection scope, requiring the use of other tools or interpretation methods to accurately define the scope of patent protection. The drafting standards for patent claims in the application process for invention and utility model patents are very high. Slight carelessness can easily result in the patent being declared invalid due to an overly broad scope of protection, or the scope being narrowed due to overly detailed descriptions.

Therefore, the application process for design patents is relatively simple and can serve as a preparatory course for the practical study of invention and utility model patent applications. As previously mentioned, the scope of protection for design patents is primarily determined by pictures or photos, and when necessary, a brief description can be included to clarify the scope of protection for the design patent rights. ^[3] Drawing skills and language expression in design descriptions are crucial for design patent applications. Prior to the practical course, students are trained in the process of drawing and adjusting different view pages of the product. After mastering these skills, students are asked to simulate the writing of application documents and brief descriptions for virtual case design patents. In the brief description, the applicant should state the design points of the product using the appearance design, the color to be protected, and whether there are any omissions in the design.^[4] This is the most essential content in teaching the appearance design application process.

3. Feasibility Discussion of the Simulation Experimental Teaching Method in Legal Application

The simulation experimental method immerses students in a specific, artificial scenario that presents various complex and challenging situations. This approach enables students to independently confront and handle the requirements of the parties involved, building upon their existing knowledge. The best way to achieve this is to immerse them in real-world environments. The teaching method typically consists of five parts: creating scenarios, identifying problems, independent learning, cooperative learning, and outcome evaluation. ^[5] The essence of simulation teaching lies in creating scenarios and fostering an independent learning environment. The former involves selecting practice modules that match students' theoretical knowledge, while the latter involves creating a conducive learning environment that allows students to actively utilize various tools and internet resources to achieve their learning objectives. Common applications of the simulation experimental teaching method in law include litigation role-playing, negotiation training, advocacy training, and legal document writing exercises. ^[6] With the gradual development of the professionalization phase of legal education, the simulation experimental teaching method may become the mainstream teaching method for practical courses in the future due to its advantages in training professional skills and constructing knowledge.

3.1. The trend of career-oriented legal education

For a long time, the training goals and directions of law undergraduates have been mainly divided into three paths: first, the elite education model, which trains top legal scholars; second, the vocational education model, which trains outstanding lawyers, judges, prosecutors, and other legal professionals; and third, the general education model, which emphasizes education on values and spiritual indices. Among these, the vocational education model of law is the most important direction of legal education, especially for schools aiming at applied undergraduates. In their talent training model, the number of in-class experimental hours has been increased, such as mock courts, mock arbitration tribunals, criminal justice practices, administrative law enforcement practices, etc. As elective students of patent law practice, they have previously studied theoretical modules of patent law and have a preliminary understanding of case handling in practice through laboratory hardware equipment.

With the development of the socialist market economy, there is an increasing demand for highquality talents in society. This necessitates law students to not only possess a strong theoretical foundation but also to emphasize professional skill training and practical experience in the process of legal education, in order to promote cross-integration and a thorough understanding of knowledge. At this stage, theoretical education cannot avoid vocational education. This is also a dynamic requirement for cultivating applied talents. By strengthening students' service to society and selfreflection through practical study hours, it shifts from content-centered teaching to result-centered course arrangements, enabling law students to understand what they should know and what they can do. They will know what they should do on the first day of their practice.^[7] Many law Schools now emphasize the training of compound talents to adapt to the constantly changing social demands. As a compound talent in patent law, there are three main paths to consider: firstly, training foreign-related patent law professionals with an international perspective, closely related to international treaties, combined with foreign-related patent retrieval, cultivating overseas patent layout and patent litigation professionals. Secondly, it is important to cultivate professionals who possess both science and engineering knowledge and patent law expertise, emphasizing practical patent agency operations and prioritizing the application and response process for patent documents. Specific training should be provided for different professionals based on their respective scientific and engineering fields. Thirdly, we aim to develop professionals who integrate patent law and business management, fostering talent that can handle intellectual property audits in enterprises and internal intellectual property management. The focus is on the cycle and improvement of intellectual property management within enterprises, emphasizing the contributions of patent professionals within these entities. Simulation experiments primarily provide advanced training on skills, honing professionals' thinking habits and problem-solving abilities through various talent development methods.

In practice, professionals tend to begin exploring a completely new field by starting from familiar areas and conducting systematic and creative searches to find solution paths. They evaluate each path to determine whether it can achieve the preset goal. If a method under exploration is found to be incompatible with the final goal, the search may need to be restarted to find new methods. These methods are then evaluated and combined based on their pros and cons to select the most practical approach. Simulation experiments provide students with the opportunity to explore completely new fields and make mistakes in advance. This allows them to regain confidence and find common ground when they encounter similar cases in similar environments in the future, making the transition from difficult to easy work easier.

3.2. The Demand for Linking Theory and Practical Teaching Models

Law School have a long-standing tradition of prioritizing theoretical discourse over practical application, often creating a divide between theory and practice that hinders the development of students' practical skills. In courses that combine substantive and procedural law, practical content is often artificially segregated due to course structure and scheduling. An excessive emphasis on theoretical education can result in students spending a significant amount of time digesting, mastering, and analyzing legal theory in the classroom, leading them to focus solely on legal theory and statutory provisions while neglecting practical skills and the resolution of legal issues for parties involved. This can make it difficult for students to readily infer and argue for the application of laws and cases when faced with familiar legal issues. To bridge the gap between theory and practice, it is necessary to incorporate practical courses. Many law schools now offer practical legal services courses, such as legal clinics and legal aid, and aim to construct a student-centered model that transforms students from passive recipients of external stimuli and indoctrination into knowledge constructors. This new teaching model combines teaching and learning, theory and practice. The simulated experimental method leverages the advantages of information technology platforms, internalizing knowledge through teaching and practice activities, and verifying and deepening the understanding and mastery

of known content.

As a student who chose to study patent law practice, the theoretical module content of patent law within the field of intellectual property law has already been covered. By utilizing laboratory hardware equipment and software resources, a preliminary understanding of case handling in patent law practice can be gained. The acquired theoretical knowledge can also be examined and applied through simulated experimental activities. The focus is on presenting intuitive and operational experimental content in the classroom, highlighting the cultivation of procedural knowledge among students through experiential teaching methods. By employing experimental training, analytical and logical reasoning abilities can be enhanced, enabling a comprehension that theory and practice are not opposing forces. Purely studying legal theory cannot adequately reflect legal concepts or reflect the practical aspects of contemporary legal practices. Through simulated experimental teaching, the transition from being a student to becoming a professional in society can be facilitated. Similarly, just as clinical doctors calmly analyze the patient's condition based on past case experiences in order to diagnose and treat, the ideal scenario would be for law School to provide students with simulated or real-life contexts for learning, presenting challenging problems to cultivate lifelong learning skills and practical judgment abilities.

4. The Process of Simulated Experimental Teaching

4.1. Understanding Patent Documents

Patent documents contain the details of inventions and creations, and the information within them is a product of the patent system. The patent system mandates that applicants must submit documents describing the technical content of their invention or creation, as well as defining the scope of patent protection. Understanding patent documents is a prerequisite for designing patent applications. The recording, international classification, illustrations, abstracts, title pages, instructions, rights claims, and brief descriptions in patent documents form the basis for writing patent applications and brief descriptions. Therefore, in practical courses, it is necessary to have a preliminary understanding of the information contained in design patent documents, particularly patent certificate information.

The previous patent retrieval course has enabled students to acquire the skills of conducting patent searches and downloading patent certificates. During the review of key knowledge points, students are reminded of the download process. For instance, to download the electronic patent certificate for the design patent named "Car", with patent number ZL201930467897.2, one can utilize the official patent search website of the National Intellectual Property Administration. Alternatively, commercial databases like Baiten and SooPAT can also be used for patent searches.

After reviewing the downloaded patent certificate, the first step is to guide students in understanding the patent document information presented on the title page. The title page of the patent contains important information that needs to be comprehended, including the arrangement rule of the patent application number. For instance, in the case of a car design patent with application number CN201930467897.2, the prefix "ZL" represents the patent number if the patent application is successful. Additionally, the arrangement of the application number itself follows specific rules. The first four digits indicate the year of the patent application, while the fifth digit represents the type of patent applied for. In the downloaded patent certificate, the fifth digit is "3", indicating that the patent type is a design patent. Secondly, it is essential to understand the meaning of the patent document entries "(19), (21)..." on the title page. Students should conduct their own research to explore the significance of these entries, which represent various features of patent information. The establishment of a universal entry international standard is also for the convenience of searchers from other countries. Thirdly, the patent document title page contains important information marked as "

¹²⁻⁰⁸⁽¹²⁾ ", which refers to the Locarno Agreement on the Classification of Industrial Designs for members of the 1971 Paris Convention. This agreement is used to classify and search patents, and in 1996, China joined the Locarno Agreement to make more effective use of design patent documents and avoid the problem of reclassification due to different classification systems in various countries. As the Locarno Classification for Designs is updated frequently, students can refer to the official Locarno Classification table when necessary. In practice, product classification is often a prerequisite for judging design infringement. According to the "Patent Infringement Judgment Guidelines (2017)" of the Beijing High Court, determining whether the accused infringing product infringes on the design patent should prioritize reviewing whether the accused infringing product and the patented product belong to the same or similar type of product. For instance, if the protected content of a design patent is the appearance of a car and the accused infringing product is a model toy car, although their appearances are the same or similar, they do not constitute design patent infringement because the types of products are different.

Secondly, it is important to understand the images that are protected by the design patent, as they form the basis for describing the scope of design protection. Typically, there are six orthographic views, such as the rear view and right view (refer to Table 1). These names are standardized below the views, and the surface corresponding to the main view should be the surface that is usually facing the consumer or reflecting the overall product design to the greatest extent possible. In determining infringement, it is not the physical product that is compared, but rather the design features contained in the product views are compared with those of the accused infringing product. If all design features are identical or equivalent, and the differences are only minor ones that consumers are unlikely to notice, it can be determined that the accused product constitutes an infringement.

Table 1 Partial Product Views from the Design Patent Certificate.



Finally, it is important to understand the information provided in the brief description of the design. In the case of design patents, the brief description can be used to explain the product information represented by pictures or photos. The brief description should specify the design name, purpose, design highlights, and a picture or photo that best represents the design highlights. Additionally, any omitted views, such as the left and right views in a symmetrical structure or interfaces that consumers do not often notice under normal use, must also be mentioned in the brief description. While the brief description does not replace the picture as the substantive element for judging infringement, it can limit the scope of patent protection to a certain extent. For example, if a patent brief description mentions that the color to be protected is yellow, and the shape of the accused infringing product is identical to the patented product, but the color of the product is red, the accused infringing product lacks the yellow design feature and is therefore determined not to constitute infringement.

4.2. Production of the Design Patent Application

In practice, it is crucial to consider the selection of cases, as it involves the organization and transmission of knowledge, particularly in professional skills training. During the initial stages, when students encounter unfamiliar subjects and lack experiential training or cognitive components, cases can provide practical teaching that meets their needs. ^[8] For beginners, selecting products that are encountered in daily life often resonates with students, and their familiarity with the product can provide genuine feedback when writing applications and creating brief descriptions. In the design phase of this experiment, the 3D rendering of the product has been completed (refer to Table 2), and the creative preliminary stage has been accomplished. Students are required to write a patent application and brief description based on this, which is often the task of a patent agency in practice.

Upward View	Top View	Rear View
	• • •	
Front View	Three-dimensional View	Right View

Table 2 Six Views of the Mini Bluetooth Speaker Product.

Nowadays, the majority of patent applications are submitted electronically. The National Intellectual Property Administration (hereinafter referred to as the 'National Intellectual Property Office') provides an application template which includes detailed explanations for the design application points. The template consists of 23 sections, some of which are completed by the National Intellectual Property Office. During the filling process, students should pay close attention to specific details in certain sections.

(1) Writing the name: For the design patent, the name of the product should match the certificate image and should be concise and clear. When writing the name, firstly, promotional language should be avoided, especially incorporating trademarks into the name, for example, Xiaomi phone, Gree air conditioner. Secondly, we should refrain from using higher-level product concepts, such as calling a product 'stationery' when its name is an automatic pencil lead box. Thirdly, descriptive features or technical effects should not appear in the product, for example, a six-prism pencil that prevents rolling, a large desk. Fourthly, apart from universally used English abbreviations, foreign languages should not be used in the name, for example, 'Black' bottle opener. Fifthly, when it comes to the protection of graphical user interface design, because the design patent is a combination of product and design, the user interface is merely a design separate from the product. When applying for such design patents, the overall product design should be submitted, and the name should indicate a product with a user interface, for example, a tablet with a graphical user interface.

(2) Whether to divide the application for design patents and exceptions to unity. In terms of form design, it is required that only one design should be included in each application. This requirement is primarily to facilitate examiners in conducting searches to determine if the applied design meets the novelty requirement. Additionally, it is convenient for recordation and grading during the patent licensing and transfer process, promoting rights implementation. Furthermore, the filing date of a design patent remains unchanged after division, which provides advantages in determining novelty for the divided patents. However, there are limitations to dividing applications, as they must meet the requirements of the same product category, and the timing of filing for division must comply with the submission time regulations. In certain situations, although an applicant may submit multiple design patents, a joint application can be filed if they are closely related inventions. In most cases, the design patents included in a joint application should serve the same purpose and fall within the same product category. Multiple design patents can be included in a single application as long as they share a common purpose.^[9] For example, similar designs of the same product, such as nesting dolls, can be included in one application. Additionally, multiple designs for a set of products, such as a four-piece bedding set or a teapot and teacup, which are used and sold together, can also be included in one application.

(3) Whether to request a novelty grace period and priority: The novelty certification witnesses the process of a design patent "from nothing to something". It involves whether the design patent has

novelty, that is, it judges that the application does not constitute an existing design, there is no objection to the application. In special cases, some open situations are not considered as loss of novelty. However, the novelty grace period does not imply the effect of priority, and novelty is still judged based on the actual application date. The revised patent law in 2020 supplemented the domestic priority system of design patents, implying that the design patent will take the priority date as the novelty judgment base date under the condition of enjoying priority.

(4) Whether it involves the protection of partial design: The 2020 revision of the patent law stipulates that design protection not only covers the entire product, but also partial design patents. This means that if certain parts of a product have aesthetic features, they can also be protected by design patents. For example, Japanese Design No. 1606896 (refer to Table 3) protects the specific content with solid lines.

Table 3 Japanese Design No. 1606896.



4.3. Drafting of Brief Description

In the design patent application documents of the National Intellectual Property Administration, a brief description section needs to be drafted. As previously mentioned, the brief description can, to some extent, limit the scope of patent protection. Therefore, the following points should be noted when drafting the brief description: Firstly, for design patent applications that request protection of color in the brief description, the color of the submitted product view should be solidly colored and not easily faded. Generally, as an agent, to expand the scope of patent protection, the protected color should be mentioned as little as possible in the brief description. Secondly, the product name in the brief description should be consistent with the product name in the request. Thirdly, the brief description should clearly state the purpose of the product to help determine the product category. If there are multiple uses, all should be clearly stated. For example, a law enforcement recorder is a design product used for police equipment. It can be used for video recording, sound recording, photography, and voice intercom, among other purposes. The purpose of the product is the basis for determining the product category and is a precondition for the determination of infringement. Fourthly, the key aspects of the design should be clearly stated and a picture or photograph that best illustrates these key aspects should be provided. Fifthly, if the design product is a set of products, it is necessary to specify the corresponding product names for each set. For example, application number CN201830398872.7 is named as a set of pens, pen holders, and pen stands. The brief description should specify the set contents as follows: "Set 1 includes a pen, set 2 includes a pen holder, and set 3 includes a pen stand. Sets 1, 2, and 3 can be sold as a set or separately." Sixthly, if multiple similar designs of the same product are proposed in one design patent application, one should be specified as the basic design in the brief description. For instance, application number CN202030136168.1 is named as a crawler-type washing truck. In the brief description, Design 1 is specified as the basic design of this similar design case, while Design 2 and Design 3 are similar designs based on the basic design.

In regards to drafting a brief description for the Bluetooth headset mentioned above, students will receive instructions on how to write the description. The description should cover several aspects: 1. The name of the Bluetooth speaker (including the model and name in brackets) should not include the word "Mini"; 2. The purpose of this design product is to play music via Bluetooth; 3. The key design elements of this product include its overall shape, pattern, and combination; 4. The best picture or photo to demonstrate the key design elements is a three-dimensional view.

5. Effect and Reflection of Simulation Experiment Method Teaching

5.1. Teaching Effect

In the drafting of patent application documents, students first understand that they should log in to the official website of the National Intellectual Property Administration to find successfully applied design patents, especially products of the same category (Bluetooth speakers), which will help them form opinions on patent application professional skills, and explore what common features and individual choices exist in practical tasks. In reviewing the students' drafting of the patent application, since many of the fields to be filled in have set prerequisite conditions, the six views in the patent application are placed in strict accordance with the documents issued by the National Intellectual Property Administration. Overall, the content completion is generally high. However, regarding the detailed content of the brief description, students still made some common mistakes after independent drafting while referencing successfully applied patent samples (refer to Table 4).

Student	Drafting Situation	Drafting Evaluation
Student A	1. Name of this design product: Mini Bluetooth Speaker.	The name does not need to specify the
	2. Purpose of this design product: Used for speakers. 3.	"Mini" model. The purpose should
	Key points of the design of this product: The position	specify recording or playing music.
	where the sound is played and the button in the middle of	Design points should not only include
	the speaker. 4. Picture or photo that best represents the	button settings but also the overall shape.
	design points: 3D rendering.	The picture of design points should be
		specifically pointed out.
Student B		The product purpose does not need to
	2. Purpose of the design product: 3D sound guide cone	specify structural issues. Design points
	structure, play HD music;	should be described according to the
	3. Key points of the design: (1) Lightweight and exquisite,	definition of design, specifically the
	small and portable; (2) Easy to hang; (3) High-value shape,	shape, pattern or color and their
	beautiful and outstanding; (4) Piano baking paint, need to	combination. Descriptive features make
	protect color; (5) Simple operation keys, operation is	the patent document drafting not concise
	handy;	enough.
Student C	1. Name of this design product: mini Bluetooth speaker.	The name does not need to specify
	2. Purpose of this design product: This design product is a	"Mini". The purpose of the product does
	Bluetooth speaker powered by a charging battery with a	not need to specify product components.
	USB interface.	The description of design points and the
	3. Key points of the design of this product: lies in the	picture indicating design points are
	overall shape of the product.	accurate.
	4. Picture or photo that best represents the design points:	
	3D view.	
Student D	1. Name of this design product: Speaker (mini Bluetooth	The product name is correctly written,
	speaker).	the product model and features can be
	2. Purpose of this design product: Used for amplifying	described in brackets, the purpose can be
	audio signals, then played back by the speaker itself, can	more concise, and both the design points
	be placed on the desktop for work.	and the picture indicating design points
	3. Key points of the design of this product: The shape and	are accurately described.
	structure of the product.	
	4. Picture or photo that best represents the design points:	
~ 1 5	3D view.	
Student E	1. Name of this design product: mini speaker.	The naming was wrong, and the choice
	2. Use of this design product: for the speaker.	of the image demonstrating the design
	3. The key points of this design product: lies in its shape.	points was also incorrect. However, it's
	4. The image or photo that best demonstrates the design	worth mentioning that this student also
	points: 3D rendering.	wrote about the special case of omitting
	5. The left view and the right view are symmetrical, so the	the view.
	left view is omitted.	

Table 4 Bluetooth Speaker Brief Description Drafting.

Through this writing activity on design patents, students have mastered the basic procedures of patent application. By writing patent application documents, students have summarized the design features related to the product, as well as its purpose. Additionally, they have gained a deeper

understanding of patent law, including record information, patent literature, novelty, priority, partial appearance design, joint application, and more. Through research, communication, and writing, students can perform legal analysis and factual investigation on unclear and controversial content in patent literature, and prepare patent application documents accordingly. The simulation method provides students with a testing ground to ensure that the insight, observation, and creativity trained by simulation technology remain stable and accurate in real-life situations.^[10]

5.2. Teaching Reflection

As the simulation experimental method requires students to exercise their self-learning abilities and stimulates their learning enthusiasm, the following methods can enhance the motivation for self-learning and promote the organic integration of knowledge teaching and vocational skills teaching:

5.2.1. Stick to problem-oriented teaching

All forms of practical teaching involve problem-solving as the basis of the learning process. In simulated experiments, students are given specific task requirements, which require transforming the complexity and uncertainty of practical activities into variables that students can grasp, leading to certain outcomes. For students, the ability to analyze legal issues and solve specific problems is particularly important. Firstly, in the process of theoretical teaching, the guidance on legal application that students receive is limited. Therefore, the allocation of teaching hours in legal education should be readjusted to ensure that practical training courses also contribute to students' recognition of foundational theoretical learning. Simulated teaching methods should primarily focus on imparting students with basic knowledge and theories, and building responses to fundamental questions. For example, in the practice of patent law, challenging aspects such as patent characteristics, novelty, priority rights, and unity can be incorporated into course experiments. By using real-life cases to drive learning, students can reflect on how to describe anticipated outcomes from the perspective of legal practice. Secondly, when selecting practical cases, guiding the problem options towards content that students encounter in their daily lives and find interesting can make the course more engaging and diverse for students. This approach motivates students' autonomy, emphasizes the considerations and trade-offs they should make when taking action in problem situations, and contributes to a harmonious classroom atmosphere.

5.2.2. Improve the student assessment mechanism

Encourage students to engage in self-learning and require them to write an experiment log at the end of each experiment class. The log should record the process of the experiment operation and regularly document their personal thoughts and learning progress. As a teacher, the experiment log can also be included in the final exam score as a grading basis, thereby improving the standard of process assessment. Additionally, for students' practical homework, constructive feedback from teachers can help students understand the deficiencies in their document writing, provide opportunities for students to learn from their mistakes, and reinforce their learning through subsequent practical tasks. This approach can also serve to recognize and reward students who actively engage in the learning process.

5.2.3. Improving the utilization of technical means

With the blooming development of the Internet and the advancement of science and technology, we aim to integrate the benefits of scientific and technological progress into the teaching of the "Patent Law Practice" course. We utilize tools such as Rain Classroom to enhance students' communication and interaction. Students are encouraged to develop their internet literacy and utilize the internet to improve their learning abilities and expand their knowledge acquisition channels. Furthermore, the school's course selection platform should be optimized to enable students to choose courses in management, economics, science, and other disciplines to enrich their knowledge. Only by equipping ourselves with advanced technological tools can we fully unleash the potential of patent law teaching, and keep pace with the educational level and development of other law disciplines.

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