Investigation and Analysis of Deep Learning of Law Courses from the Perspective of Mixed Teaching

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Abstract: In 2018, the Ministry of Education of the People's Republic of China clearly proposed the "Internet + Law" teaching model in its Guidelines on Professional Training Plan of Cultivating Outstanding Legal Talents Who Possess both Moral Integrity and Legal Knowledge, Version 2.0. With the use of excellent MOOCs, and to reduce the amount of time spent offline on theoretical instruction, the study of judicial documents was successfully implemented in the Property Law course through the research-learning approach. Through investigation and analysis by the SPSSAU software, it has been determined that after students utilize mixed teaching in the course of Property Law, the shallow learning of students is excellent, offline deep learning is second-best, and online deep learning still needs to be improved. This results has shown that teachers should provide precise teaching instructions, and timely course feedback. When conditions permit, teachers may experiment with small class size teaching to actually increase students' deeper learning through mixed teaching.

1 INTRODUCTION

A case-based approach is traditionally used for teaching Property Law, as it is a highly practical subject. The condensed cases lack material variety and fail to build students' abilities to tackle complicated problems, let alone allow students to integrate theory with practice. Consequently, the study of judicial documents, an essential aspect of the law, progressively made a comeback to the realm of legal education. "Only by using the case as a medium and attentively poring over the judicial documents can legal scholars comprehend the specific and genuine difficulties that arise in judicial practice, conduct specialized discussions, and provide effective answers" (Xie 2014).

However, a careful reading of judicial documents would be time-consuming and cannot be fully implemented in the classroom. "The constraints of the traditional teaching model gave rise to the development of online teaching, and the mixed online and offline teaching model has become the norm in legal education" (Shu, Dong, 2021). Rich and varied Internet learning materials provide effective assurance for students' independent study and dynamically prolong their learning time. "Internet + "Law undergraduate teaching is not only an urgent requirement of the reality of the network society but also an inherent requirement for the information flow attribute that is inherently compatible with law undergraduate teaching and to increase the speed of information flow and improve the manner in which information flows"(Yang, Du, 2019). What is the best way to use the Internet to both compensate for the lack of class time and implement the objectives of the judicial documents in the Property Law study?

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2 DESIGN AND IMPLEMENTATION OF MIXED TEACHING APPROACH ON JUDICIAL DOCUMENTS STUDY

The adoption of any teaching method must be motivated by the desire to serve students. Consider the independent college where the author works as an illustration. 30 credit hours are devoted to theory, whereas 6 credit hours are devoted to practicing. The ratio of school hours between the two is 5:1. The theoretical substance is organized around four themes: property, property rights, fundamental principles of property law, and property changes. The practical content is carried out through case practice and in the form of a mock court. Research-based teaching approach to judicial documents study, on the other hand, alters the allocation of hours between theory and practice in the curriculum and concentrates primarily on practical hours, allocating one-third of the hours (12 sessions) to theory and two-thirds of the hours (24 sessions) to practice.

In the theoretical lecture session, the flipped classroom teaching was applied through the Chinese University (MOOC) and the SuperStar Fanya platform. MOOCs use the information teaching technology to fully share the course resources, breaking through the traditional single teaching mode. People can learn anytime and anywhere with the help of the Internet. The flipped classroom aims to improve students' autonomy. With the help of Internet resources, students can make rich pre-class preparation under the guidance of teachers, turn passivity into initiative in class, and then deepen learning. The specific implementation methods are as follows: first, each week, the instructor will distribute comprehensive learning guidance, and students will first independently studying the basic theory of Property Law by Liu Jia'an on the Chinese University (MOOC). Second, students will study additional resources provided by the instructor or participate in relevant discussions on the SuperStar Fanya platform. And with these self-directed learning contents, the students then engage the classroom learning. In the lecture portion of the course, instructors will implement flipped teaching through summary, questioning, and discussion to ensure that students learn the fundamental notion of property law. Through online learning, it is not only possible to ensure students have enough exposure to the theory of property rights, but also to directly

reduce the number of hours required for offline theoretical courses.

The course practice focuses mostly on the study of judicial documents study and group discussions. By selecting course-related judicial documents and arranging them according to the textbook's catalog, students have access to them for reading and analysis. Students can learn about the claims or defenses of the client to the judgment, the facts presented, the evidence offered, and the court's investigations through debate or contextualization. As part of the course, students will analyze the focus of disputes, pay attention to logical reasoning and evidence support, and sort the relevant theories of property law involved in the judgment, thus consolidating the fundamental theory of property law in the course practical link and implementing a closed loop between theory and practice. Through guidance, teachers allow students to master the difference between life facts and juristic facts, the methods of evidence and fact identification, and how to integrate procedural process and legal application to further cultivate the ability of students to litigate cases of disputes fairly and impartially.

3 INVESTIGATION AND ANALYSIS ON THE TEACHING EFFECT

3.1 Questionnaire Design

The author conducted a questionnaire survey after a year of teaching reform to determine the impact of the research-based teaching approach on judicial documents study after its implementation in the course of Property Law course.

The author has devised a questionnaire with two primary components, namely the learning effect and the role of the teacher, by drawing on the notion of deep learning. The learning effect includes shallow learning, online deep learning, and offline deep learning; the role of the teacher includes teacher's instruction, teacher-student interaction, instructional design, and instructional organization. The questionnaire was designed with a total of 17 questions, using a five-point Likert scale. The framework of the questionnaire design is shown in Table 1.

Measurement Items	Measurement Indicators	
	Shallow Learning	
Learning Effect	Online Deep Learning	
	Offline Deep Learning	
	Teacher's Instruction	
The Role of the Teacher	Teacher-student Interaction	
	Instructional Design	
	Instructional Organization	

Table 1: Framework for Questionnaire Design.

3.2 Distribution of Questionnaires

The survey was randomly distributed through the Wenjuan.com to 302 students in the class of 2020 who took the author's course on Property Law, of whom 95 were male and 207 were female. Before taking the course of Property Law, they had all studied Jurisprudence, Legal Logic, The General Principles of Civil Law, and other professional foundation courses related to this course.

The questionnaire was distributed for two weeks, from August 29 to September 11, 2022. The collection of 156 surveys yielded 147 valid questionnaires and a response rate of 94.2%. Among these 147 questionnaires, 32 were from male students representing 33.68 % of all male students in the Class of 2020, and 117 were from female students representing 56.52 % of all female students in the Class of 2020. The lack of a statistically significant difference between the two proportions indicates that the questionnaire reflects the genuine situation of the current round of teaching reform and the areas that require additional development.

3.3 Questionnaire Analysis

3.3.1 Analysis on Reliability and Validity of Questionnaire

Through SPSSAU data analysis, the reliability coefficient of this questionnaire, Cronbach's alpha coefficient, was 0.716, which is greater than 0.7, indicating that the quality of reliability of the research data is good; the validity coefficient of the questionnaire, KMO value, was 0.710, which is greater than 0.7, reflecting good validity from the side, indicating that the research data is appropriate for information extraction. See Table 2 for details.

Table 2: Reliability Analysis and Validity Analysis

Number	Sample	Cronbach Alpha	KMO
of Items	Size	Coefficient□	Value
17	147	0.716	

3.3.2 Descriptive Analysis

In the descriptive analysis performed by the Wenjuan.com, the percentage of respondents who selected "always" and "often" for each item regarding the three aims of "shallow learning," "online deep learning," and "offline deep learning" is presented in Table 3.

Objective	Question Number	Percentage of People Who Choose "often do"	Percentage of People Who Choose "always"	Percentage of the Total for Both Options	Composite Percentage
Shallow	Q1	41.50%	41.50% 40.82% 82.32%	97 400/	
Learning	Q2	28.57%	63.95%	92.52%	87.42%
Online Deep Learning	Q3	55.78%	10.88%	66.66%	
	Q4	39.46%	10.20%	49.66%	58.05%
	Q5	48.98%	8.84%	57.82%	
Offline Deep Learning	Q6	48.30%	17.01%	65.31%	
	Q7	51.70%	13.61%	65.31%	68.93%
	Q8	49.66%	26.53%	76.19%	

Table 3: Descriptive Analysis

From the analysis of the above data it can be seen that in the current round of teaching reform, students have fared relatively well in terms of shallow learning, as evidenced by their ability to "read the judicial documents thoroughly" and "follow the teacher's instructions to accomplish the fundamental tasks." The number of students who were better at shallow learning accounted for 87.42% of the total number of students. The outcome surpassed the author's anticipations. Having been teaching at an independent college for more than 10 years, the author has observed that students are generally unmotivated to study, procrastinate, lack autonomy and self-discipline, and are heavily reliant on their instructors. "The emotional experience of learners is the dynamic base of cognition and the premise and bridge of good teaching" (Zou, Hu, Lin, Xu, 2022). The fact that students are able to achieve a fine quality level of learning at a shallow level, or even close to excellent, is an indication to some extent of the high level of acceptance of the research-based approach to judicial documents study among students.

In terms of deep learning, the average online deep learning rate was 57.98% and the average offline deep learning rate was 68.93%. There are only 73 students who can choose "I can complete the learning tasks without interference during the online learning process." This represents 49.66% of the total number of students, indicating that the author's students' have significant potential for growth in their self-management skills. The findings are also largely consistent with the fact that students at undergraduate independent colleges are less self-motivated in their studies than students at major undergraduate institutions. In online deep learning, "learners with poor self-control suffer from the lack of direct teacher supervision, while those with self-learning habits are at peace" (Zou, Hu, Lin, Xu, 2022). Offline deep learning is generally more effective than online deep learning, being about 10% higher in percentage terms. However, in terms of offline deep learning, the questionnaire set out two questions, question one is "When reading the judicial documents, I will relate my new knowledge to my previous knowledge" and question two: "During the study of the judicial documents, I ask myself questions to ensure that I understand the knowledge points in the course ", only 65.31% of the students were able to choose "often or always", which is not a high percentage. Undoubtedly, the ratio is consistently superior to online deep learning and illustrates the significance of teachers in the teaching reform in the class.

3.3.3 Correlation Analysis

Using SPSSAU, correlation analysis was performed on these research data, and the correlation coefficients and p-values were analyzed as follows. **Teacher's Guidance Has a Positive Correlation with Teaching Effect.** The value of the correlation coefficient between teacher's guidance and teaching effect was 0.335 and showed significance at the 0.01 level, thus indicating a significant positive relationship between teacher's guidance and teaching effect. See Table 4.

Table 4: Pearson Correlation Analysis between Teacher's Guidance and Teaching Effect

Pearson Correlation Analysis Table		
		Teaching Effect
Teacher's Guidance	Correlation Coefficient	0.335**
	p Value	0

* p<0.05 ** p<0.01

Teacher-Student Interaction Has a Positive Correlation with Teaching Effect. The correlation coefficient value between teacher-student interaction and teaching effect was 0.541 and showed significance at the 0.01 level, thus indicating a significant positive correlation between teacher-student interaction and teaching effect. See Table 5.

Table5:PearsonCorrelationAnalysisBetweenTeacher-student Interaction and Teaching Effect

Pearson Correlation Analysis Table		
		Teaching Effect
Teacher-student Interaction	Correlation Coefficient	0.541**
	p Value	0
* = <0.05 ** = <0.01		

* p<0.05 ** p<0.01

Instructional Design has a Positive Correlation with Teaching Effect. The value of the correlation coefficient between instructional design and teaching effect was 0.348 and showed significance at the 0.01 level, thus indicating a significant positive relationship between instructional design and teaching effect. See Table 6.

Pearson Correlation Analysis Table		
		Teaching Effect
Instructional Design	Correlation Coefficient	0.348**
	p Value	0
* <0.05 ** <0.01		

Table6PearsonCorrelationAnalysisBetweenInstructional Design and Teaching Effect

* p<0.05 ** p<0.01

Instructional Organization Has a Positive Correlation with Teaching Effect. The value of the correlation coefficient between teaching organization and teaching effect was 0.303 and showed significance at the 0.01 level, thus indicating a significant positive relationship between teaching organization and teaching effect. See Table 7.

Table 7 Pearson Correlation Analysis Between Teaching Organization and Teaching Effect

Pearson Correlation Analysis Table		
		Teaching Effect
Teaching Organization	Correlation Coefficient	0.303**
	p Value	0.000
* p<0.05 ** p<0.01		

4 CONCLUSIONS AND SUGGESTIONS

4.1 Deep Learning Is Consistent with Students' Existing Level of Knowledge, but We Should Increase the Use of MOOCs and Deepen Our Participation in the Flipped Classroom

From the survey data and descriptive analysis, it is clear that for the implementation of the study of the judicial documents based on a research-based teaching strategy, students do better with shallow learning, whereas their self-discipline places constraints on their capacity for deep learning. This outcome is essentially consistent with the present state of learning in independent colleges. However, more than half of the students were able to enter deep learning, indicating that students of independent institutions have a high level of acceptance and a degree of adaptability when it comes to adopting a challenging teaching model.

4.2 Teaching Behaviour is Strongly Correlated with Teaching Effect Thus Teachers Should Increase Their Subjective Initiative

The correlation between teaching behavior and teaching effect reveals that the more teachers "provide clear guidance on how to participate in the teaching activities of judicial documents study," the more " timely feedback" is provided, and the more students are encouraged to "reflect throughout the course," the greater the teaching effect. The more students are helped to "participate in fruitful discussions", the more students agree with the judicial documents' research-based teaching and the more students agree with the statement "judicial documents research-based teaching can effectively help me learning." Even though students are the primary focus of the research-based teaching reform on judicial documents study, The extent of the teacher's initiative and the level of the teacher's initiative will unavoidably impact the efficacy of the reform. "We are teachers when it comes to giving knowledge to youngsters, but we are even more so when it comes to igniting their enthusiasm" (Montesquieu, 2015). Therefore, it is suggested that teachers first provide accurate teaching guidelines, feedback timelv on lessons, and more encouragement for students to explore when conducting blended teaching reform in the judicial documents research-based teaching study; second, closely integrate teaching with research, and scientific research, promote teaching with research, and draw research inspiration from active teaching; third, improve the teaching design based on the interaction with the students, use the teaching effect as a guide, enhance the self-learning drive, arouse the student's interest in learning, and ultimately, enhance the student's level of deep learning under mixed teaching.

4.3 Schools can Selectively Promote Small Class Teaching

The dynamic role of the teacher is important in the implementation of judicial documents study by using the research-based approach, but the teacher's energy is also limited. The greater the student denominator, the less instructor attention each individual receives for the same amount of energy. The larger the denominator of students in a teaching reform classroom with higher standards for interactivity, the fewer opportunities there are for people to speak and the fewer opportunities there are to interact with teachers. Hence a gap exists between the reform effect and the ideal state. In order to improve the efficacy of students' study, it is recommended that the teacher-to-student ratio be increased in future classes on judicial documents study by using the research-based approach so that teachers can adequately meet students' need for depth of discussion in classroom lectures and provide more detailed input in students' judicial documents presentations.

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