



# Application and Countermeasure Research of Situational Simulation Teaching Method Under Big Data Analysis in the Teaching of Criminal Law in Colleges and Universities

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**Abstract.** This paper mainly discusses the meaning of big data analysis situational simulation teaching method, expounds the advantages of criminal law situational simulation teaching, points out the requirements of criminal law situational simulation teaching, and puts forward the procedures and methods of organizing and implementing criminal law situational simulation teaching.

**Keywords:** Big data analysis · Scenario simulation · Teaching methods · Criminal law

## 1 Introduction

In the new situation, in order to cultivate a large number of high-quality criminal law talents, we must reform the traditional teaching methods of criminal law, adopt some new teaching methods to expand students' knowledge field, shorten the adaptation period of school theoretical study and social practice work, so that students can not only learn theoretical knowledge, but also exercise their legal work skills, So that they can adapt to the needs of their jobs in a short period of time after graduation from university and become a competent socialist legal worker. Based on the teaching purpose and teaching requirements, the author discusses the application of situational simulation teaching method in the teaching of criminal law according to the course practice of criminal law.

## 2 The Meaning of Situational Simulation Teaching Method

### 2.1 The Theoretical Basis of Situational Simulation Teaching Method

A Situational simulation teaching method is a new teaching method based on constructivism learning theory [1]. Constructivists believe that knowledge is not acquired by teachers, but by means of meaning construction with the help of other people (including teachers and learning partners) in a certain situation, that is, social and cultural

background. From the perspective of learners, it focuses on how individuals construct knowledge based on their original experience, psychological structure and belief. By interacting with the surrounding social environment, learners interact the memory information and information processing strategies stored in the human brain with the current environmental information received, actively select, pay attention to, perceive, organize, store and activate information, and actively construct the meaning of information. This means that learners are not passively stimulated to move knowledge from the outside world to their memory. They should actively select and process the external information through the existing cognitive structure (including the original knowledge experience and cognitive strategies), and actively construct the meaning of information. The meaning of external information is not determined by the information itself, on the contrary, Meaning is formed by learners' repeated and two-way interaction process of new knowledge and experience.

**2.2 Characteristics of Situational Simulation Teaching Method**

The meaning of knowledge is distributed in all the environments we create. A concept often exists in many different situations. By participating in the activities in the situation, students can get a complete, complex and three-dimensional understanding of a concept from different situations, fully understand the meaning of knowledge, and truly master knowledge. Situation dependence. Through continuous interaction, cooperation and conversation in the whole cultural context, learners use knowledge constantly in different environments, and finally realize meaning construction, and rely on these situational activities to build a rich knowledge system with flesh and blood [2]. The guiding situational simulation of teaching should provide the basis for students to understand the construction documents, guide the students to learn, and at the same time, leave the students with broad construction space, so that students can take appropriate strategies according to the specific situation, form an appropriate cognitive structure, and explore and experience the meaning of knowledge concepts from different angles, And grasp the connotation of knowledge from these situational activities. Situational simulation teachers should adopt "pure natural learning evaluation", that is, according to the students' activities and learning achievements in the learning process, carry out a kind of evaluation which is completely combined with the situation of knowledge, real and natural. S The process of scene simulation teaching is shown in Fig. 1.



Fig. 1. Teaching system flow

The learning advantage combination evaluation function is as follows

$$good(team1) \begin{cases} 1 & \text{smarllerthanb} \\ 0 & \text{otherwise} \end{cases} \tag{1}$$

### **3 Advantages of Situational Simulation Teaching Method in the Teaching of Criminal Law**

#### **3.1 It is Beneficial to Optimize the Leading Role of Teachers and Students**

The highest realm of classroom teaching is the best combination of teachers' leading role and students' main role. Situational simulation teaching method is that teachers and students participate in the activities in the created situation, discuss, analyze, summarize and summarize the cases, so as to master and understand the professional knowledge. Therefore, the application of situational simulation teaching method in the teaching of criminal law can get rid of the general teaching mode of "teachers teach students to take notes". In the situational simulation teaching activities, teachers are in a dominant position. They are responsible for selecting learning topics, creating situations, providing necessary cognitive structures, organizing situational activities, guiding knowledge learning, and evaluating learning results. As an active participant, students carefully study the legal norms, deeply understand the connotation of knowledge, analyze and think about cases independently, actively participate in classroom discussion, and make correct judgments and choices, so as to get rid of the passive acceptance status in traditional teaching.

#### **3.2 It is Helpful to Improve the Teaching Quality and Teaching Effect**

On the one hand, situational simulation teaching method puts forward higher requirements for teachers' knowledge structure, teaching ability, work attitude and teaching responsibility than traditional teaching methods. It requires teachers to have profound professional theoretical knowledge, rich practical experience, and integrate theory and practice; it requires teachers to constantly update teaching contents and supplement teaching plans, It also requires teachers to pay more attention to the actual situation of the society, keep highly sensitive to the problems in reality, and constantly seek suitable cases of situational simulation teaching from social practice [3]. This high requirement can mobilize the only polarity of teachers' lesson preparation, better play the leading role of teachers in teaching, so that the curriculum teaching activities are always in a state of living and enterprising, constantly push the old and bring forth the new, and improve the quality of teaching.

#### **3.3 It is Helpful to Improve Students' Comprehensive Ability and Quality**

The process of situational simulation teaching in criminal law is actually a demonstration and exercise of students' comprehensive quality. The situational teaching of criminal law often focuses on real cases, so that students can learn to use the basic theories and knowledge of criminal law to analyze and solve practical problems. Experiencing the whole process of reading cases, analyzing questions, classroom discussions, simulating questions and writing analysis reports is not only a test of students' theoretical knowledge and application ability, but also a comprehensive exercise of analysis, judgment, communication, creativity and sound personality. It cultivates the comprehensive ability and quality of students' expression ability, reaction ability and collective cooperation ability, and enhances their adaptability to work in the society in the future.

## 4 Situational Teaching Method in Criminal Law

Based on the situation created by the simulation, the students are further familiar with the case, fully grasp the data, information and facts provided in the case, identify the key problems according to the needs of the case, analyze the causes of the problems, and seek evidence support. It is the central link of situational simulation teaching to carry out high-quality classroom discussion around questions. The course discussion should focus on the key issues, describe the understanding, analysis, judgment, demonstration and decision-making process of the case, explain the implementation plan to solve the problem, and reanalyze the decision-making plan. The speech should integrate theory with practice, be logical and concise [4]. After a student has spoken, other students can ask questions, put forward different opinions or debate. Through classroom discussion and debate, we can achieve the purpose of brainstorming, sharing views, complementary advantages and correct decision-making, so as to achieve the teaching effect of knowledge construction (see Fig. 2).

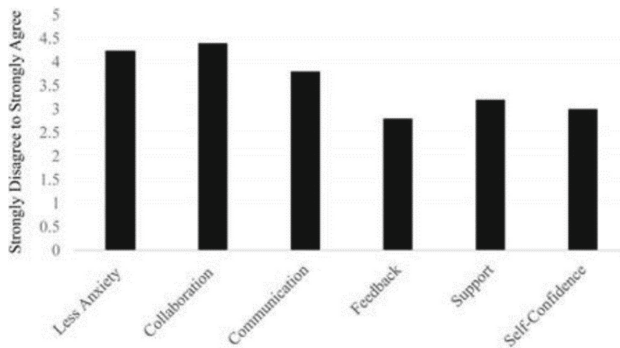


Fig. 2. Simulation of teaching method in criminal law

## 5 The Concept and Characteristics of Situational Simulation Teaching Method

### 5.1 The Concept of Simulation Teaching Method

The word “situation” is defined as “situation and environment”. Dewey, an American educator, first expounded the concept of “situation” in teaching activities [5]. He believed that situation is composed of conditions that promote or hinder, stimulate or contain the unique activities of a species. In the context of educational significance, Dewey believes that the transmission of beliefs, emotions and knowledge to teenagers must be realized through the media of context. Context allows individuals to participate in the activities of arousing and strengthening some impulses, having some purposes, and requiring them to bear some consequences, so as to shape their spiritual and emotional tendencies in behavior. Dewey’s “environment” refers to the situation that can interact with the

learning subject. Li Jilin, a child educator, first introduced the concept of “situation” into the field of education and teaching in China. In situational education: a trilogy of main themes, she explains that “the best learning environment” is a “pleasant”, “rich”, “safe” and “environment in which to live”. The situational education advocated by Li Jilin is to enable students to learn knowledge in the interaction with teachers and peers and in connection with the world and life. The “situation” we want to explore in this paper refers to the “real problems” needed by the school law to carry out the rule of law education, which can be used for teachers and students to carry out full simulation. Of course, it also includes the material environment, organizational structure and cultural system of the school rule of law education, It also includes the atmosphere that these organizations and things need to create to carry out the rule of law education activities, as well as various preparatory activities to be carried out and so on [6].

## 5.2 The Characteristics of Situational Simulation Teaching Method

Simulation is the most significant feature of situational simulation teaching method. “Imitation” refers to simulation and imitation; “truth” refers to real things and situations. In other words, situational simulation teaching method is to create a situation highly similar to the real situation, so that students can carry out simulation behavior in the created simulation situation. “Simulation situation” is based on the real life situation and formed by simple or complex special processing around the teaching objectives. Students should participate in the simulation activities to complete tasks or solve problems, complete a “real behavior” in the “simulation scene”, and feel the complex factors that may occur in a certain life scene on the basis of their own experience and learning, and experience their feelings and attitudes towards people, things and things in a certain scene, so as to explore specific strategies to solve problems [7].

Transfer is an important feature of situational simulation teaching method [8]. The theory of knowledge transfer points out that human society should not only use and express its knowledge repeatedly, but also understand it well and solve similar and related problems. Knowledge transfer is mainly affected by situational factors and personal factors. The transfer experience stored in people’s mind is in an inert state. Only when people realize that there is a certain relationship between the new situation and the original knowledge, will knowledge transfer take place actively. According to the theory of knowledge transfer, the creation of situations in the process of teaching should focus on the learning content, and should also consider the possibility of future transfer. The “legal knowledge” imparted by the rule of law education has obvious characteristics of application or skill. Learning this kind of knowledge itself is not the goal. The deep purpose of teachers imparting this kind of knowledge to students is to enable them to apply what they have learned and consciously participate in the orderly construction and activities of the rule of law society. The transfer characteristics of situational simulation teaching method can meet this actual demand. Students can exercise in the simulated situation and apply the transfer of legal knowledge to life practice, so as to play a role in the growth of teenagers into qualified legal talents [9, 10].

## 6 The Application Foundation of Situational Simulation Teaching Method in Teenagers' Legal Education

### 6.1 The Theoretical Basis of the Application of Situational Simulation Teaching Method

Marx and Engels summed up the experience of human thinking and the rational thought of previous philosophy, and pointed out that the essence of cognition is the active reflection of subject to object on the basis of practice, that is, cognition is the reflection of objective existence. But the cognition activity must take the objective things as the prototype, and has the reflection and the description to the objective things [11]. Therefore, the cognition must contain the content of reflecting or describing some objective things. The Enlightenment of epistemology to educators is that learning belongs to the category of cognitive activities, and its gradual process also conforms to the law of development from perceptual to rational, from concrete to abstract. Therefore, teaching practice should follow the principle of epistemology and enrich students' understanding of the objective world on the basis of practice by creating situations close to the real world. And the simulated teaching situation is to show the real situation that students are not easy to contact in the classroom, but these simulated teaching situations are specially simplified and optimized by teachers, which are more suitable for carrying out legal education. It can be imagined that when students personally promote the development of things in the specially created situation, their understanding develops with the development of things in the situation. The content, atmosphere, character relationship and other specific elements of the situation make students feel the object directly through vision, hearing, smell, etc. in practice, emotional activities can be triggered, exploration interest and learning enthusiasm will rise, and the education effect will naturally be improved. The application of situational simulation teaching method is shown in Fig. 3.

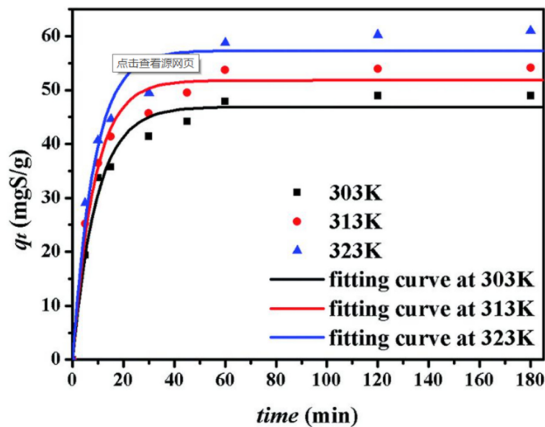


Fig. 3. Application of situational simulation teaching method

## 6.2 The Practical Basis of the Application of Situational Simulation Teaching Method

“The outline of the rule of law education for young people” is the latest guiding principle for the development of the rule of law education in China [12]. It clearly puts forward the main points of the current rule of law education for young people in China, and cultivates students’ concept and consciousness of the rule of law, which puts forward higher requirements for the front-line teachers of the rule of law to carry out teaching. Situational simulation teaching method, as a high simulation, experience oriented and easy to move teaching method, can make up for the shortcomings of traditional teaching methods, realize the gradual progress from “general law popularization” to “real feeling of law”, and enable students to deeply transform their feelings of the rule of law from emotion to idea. In addition, in the section of “teaching methods”, the syllabus also clearly puts forward the application suggestions of “situational simulation (such as court simulation)” teaching method, and introduces the typical cases into the real situation, so as to provide rich resources and practical support for the rule of law teaching. If the systematic construction of situational simulation teaching can be realized in online teaching, and the whole teaching process can be opened up and improved, then students will be able to plant the seeds of the rule of law in the simulation practice again and again, so that the concept of the rule of law can be rooted in the heart, and the belief in the rule of law can take root [13].

From the perspective of developmental psychology, the period from the age of twelve to the age of eighteen belongs to the period of adolescence, which is mainly concentrated in the senior grade of primary school, junior high school and senior high school. During this period, people’s psychological cognition and social development speed will reach a peak [14]. From the point of view of physiological changes, the child’s body shape will grow rapidly at this stage, and the brain and nervous system will gradually develop and improve. Due to the change of students’ appearance, they have the psychological needs of “adult feeling”, and their self-consciousness is gradually formed. At this time, it is “pushing the boat with the current” to carry out legal education through the practice form of situational simulation. However, because the brain and nerves of teenagers are in the period of development from immature to mature, the education in this period should give consideration to learning and activities, and pay attention to the combination of work and rest. To a certain extent, situational simulation is just a kind of teaching activity, which makes students not need to keep nervous in their study, and gradually establish correct values and the concept of rule of law in the cooperative action with their classmates. From the perspective of cognitive characteristics, teenagers can perceive specific things, and their abstract logical thinking is also in a high development period. Logical thinking often needs the direct support of perceptual experience. They can feel emotions and ideas from specific situations, and then make general induction. The experience they get can guide practice, so as to develop and expand knowledge in a circular way. Obviously, the learning path of “refining and summarizing specific cases one by one and guiding practice” followed by situational simulation teaching can make students feel the authority of law, establish the concept of rule of law, and lay the foundation for orderly life in the future [15].

## 7 The Overall Construction of Situation Simulation Teaching System in the Education of the Rule of Law for Teenagers

Situational simulation teaching needs to rely on specific cases for implementation, so the author thinks that the project of situational simulation teaching design is conducive to teaching application, that is, to design a variety of situational simulation projects from typical cases that meet the content of legal education and have the significance of legal education, and carry out targeted teaching through the design and implementation of the project. This kind of project teaching is not only conducive to improving the operability of practical teaching, but also conducive to the concretization and routinization of innovative teaching mode. Any teaching activity must be based on teaching design, and situational simulation teaching project also needs careful structural design. This kind of structural design refers to the typical form of project design, which should be in line with the goal, cognitive law and operational law of youth legal education, and requires that the absorption of legal knowledge and exercise of practical skills can be scientifically arranged in teaching. Secondly, due to the wide range of legal education content and complex knowledge, we should analyze the legal education content of students at all stages, extract and classify the content suitable for project-based teaching, so as to reasonably design teaching projects and develop teaching guidance in different knowledge objectives. The preparation stage is the main stage of students' autonomous learning in carrying out the situation simulation project. According to the complexity of the situation simulation project, it is necessary to set up "Preparation Class" to provide sufficient time for students to complete the task. "Preparing for class" is divided into two parts, one is "introducing projects and assigning tasks one by one", that is, teachers introduce project types and project cases to students, and issue grouping tasks to prompt and guide the key and difficult points in the tasks. At the same time, they should pay attention to the reasonable assignment of tasks to each student, and should not assign tasks to some students [16]. The "presentation results discussion summary" means that after the students have completed their homework and submitted their learning results, the teachers should arrange class hours for discussion summary. In this part, the students in each group can present the way and process of completing the task, and show the written results of the group. The rest of the students can ask questions to them. After listening to the students' reports, the teachers can comment on their learning results and put forward supplementary and modification opinions. Through the public presentation of achievements and process introduction, students can realize the significance of giving, get a sense of achievement, and stimulate their enthusiasm in the situation simulation project. In addition, in the "Preparation Class", students ask and answer each other's questions, and teachers give comments and guidance. In the atmosphere of communication and discussion, the preparation of the whole scenario simulation project is also improved and promoted, which lays a solid foundation for the next demonstration.

## 8 Conclusion

The situation simulation teaching method makes the role of teachers and students relocate. From the essence of inquiry learning, it puts forward a sustainable development



learning view. It shows the way people know the world and discover the world. This is the revolution of teaching method which is happening around us. With the development of modern education technology, multimedia technology, Internet technology and virtual reality technology are becoming more and more mature, it provides an ideal teaching environment for the creation of situation in situational teaching method, and can realize the teaching purpose and teaching effect of scenario simulation teaching method.

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