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Exploration of the Path and Effect of Integrating Traditional Rule of Law Culture into the Teaching of Ideological and Political Courses in Colleges and Universities

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Abstract Civic and political classroom teaching in colleges and universities is not only the key course to implement the fundamental task of establishing moral education, but also the first position to popularize the rule of law education. This paper integrates the traditional culture of the rule of law into the virtual reality classroom teaching of college Civics, proposes a virtual reality classroom teaching design model for college Civics, and explores its impact on the comprehensive ability level, Civics performance and rule of law conceptualization literacy of college students. Taking X university in G city of Ningxia Hui Autonomous Region of China as the research site, experimental and control classes were set up to carry out the experiments on the virtual reality classroom teaching of Civics in colleges and universities, and the results of the data were analyzed by independent samples t-tests. The students in the experimental class are higher than the students in the control class in terms of the mean value of the comprehensive ability level, the dimensions of the concept of rule of law literacy and the performance of Civic and Political Science, and the Sig value is less than 0.05, showing a significant difference. The virtual reality classroom teaching design model of Civics in colleges and universities proposed in this paper can have a positive impact on students' comprehensive ability level, Civics achievement and rule of law literacy.

Index Terms independent sample t-test, civics teaching, rule of law culture, virtual reality technology

I. Introduction

Comprehensively promoting the rule of law requires adherence to the socialist rule of law system with Chinese characteristics and the construction of a socialist culture of the rule of law [1]. And college students, as an important group of people receiving education on the rule of law in the new era, are also the force of law popularization in the new era, and in the future, they are more responsible for building a strong country under the rule of law [2]. Integrating the traditional rule of law culture into the ideological and political education of college students is an important way to cultivate the rule of law thinking of college students, an important part of modernizing the governance of colleges and universities, and an important embodiment of comprehensively promoting the rule of law [3]-[5]. By creatively strengthening the role of the rule of law culture in the ideological and political education work of college students in teaching, campus management and services, it will make an important contribution to the in-depth implementation of the concept of governing by law and the reform and stabilization of colleges and universities [6]-[8].

Some studies have shown that integrating interactive methods into the whole process of ideological and political education in colleges and universities can effectively enhance the consciousness of the rule of law culture of college students [9], [10]. The interactive method emphasizes that the integration of the rule of law culture into the ideology and politics should be all-embracing, all-process, all-encompassing, and make full use of the ways and means of the ideological and political education work and the environmental atmosphere, so that the rule of law and the ideological and political education can go together and promote each other [11]-[13]. And virtual reality technology enables users to establish contact with scenes, objects, characters and so on in the virtual environment through vision, hearing, touch, kinaesthesia and so on, generating interactive, multi-sensory experience, which plays an important role in innovating the content of ideological and political teaching, improving the attractiveness of the classroom and improving the quality of teaching [14]-[17]. Therefore, how to use virtual reality technology to make a high degree of integration between ideological and political teaching and traditional rule of law and cultural content, to enhance the sense of the times and attractiveness at the same time, and to implement the key of moral education, has been highly valued by educational researchers in the new era.

This paper integrates the traditional rule of law culture into the teaching of college civic politics classroom, relying on virtual reality technology, and designs the teaching design model of college civic politics virtual reality classroom, in which the basic process includes three phases such as the preparation phase, the implementation phase, and the evaluation phase, as well as five civic politics teaching links such as theoretical introduction, creation of situation, interactive operation, enhancement and consolidation, and summary and evaluation. Through the literature research method to search and organize the relevant research on the college civic politics virtual reality classroom, and designed with the “traditional rule of law culture into the college civic politics virtual reality classroom students comprehensive ability level status questionnaire” and “college students' view of the rule of law status questionnaire” questionnaire, as the experimental data acquisition. Using the experimental method, the experimental class and the control class were set up to carry out the teaching experiment of the Civics virtual reality classroom in colleges and universities. The results of the experiment are analyzed using the independent sample T-test analysis method to explore the impact of this paper's college Civics virtual reality classroom teaching design model on students' comprehensive ability level, Civics performance and the concept of rule of law literacy.

II. Civics virtual reality classroom model incorporating traditional rule of law culture

With the development of education informatization, more and more Civics teaching activities are implemented with the help of multimedia computer network, and rich and diverse Civics teaching modes are gradually formed, but the existing teaching modes can't play the advantages of virtual reality technology well [18]. Through the exploration of the design mode of virtual reality Civics teaching in colleges and universities, and the integration of traditional Civics culture into the Civics teaching in colleges and universities, we can better apply and master this kind of teaching mode, and provide an effective practical path for the development and implementation of virtual reality teaching in subject teaching.

II. A. Connotation of Virtual Reality Civics Teaching Mode in Colleges and Universities

Teaching mode is the structural framework of teaching activities and activity procedures established under the guidance of certain teaching theories, which is the intermediary and bridge for the interconnection of theory and practice, with both theoretical and practical components, and sets up a bridge for the mutual transformation of theory and practice. Virtual Reality Civic and Political Teaching Mode in Colleges and Universities is an emerging mode constructed by adopting virtual reality technology to meet the needs of education and teaching in colleges and universities.

This study believes that the connotation of virtual reality civic and political teaching mode refers to the use of virtual reality technology to synchronize the establishment of virtual reality teaching on the basis of classroom teaching, forming a new mode of civic and political teaching through the mutual supplementation of virtual and reality, online and offline. Under the guidance of certain teaching theories and technical support, the virtual reality civics teaching mode in colleges and universities applies virtual reality civics teaching resources and platforms to provide a civics teaching environment combining virtual and reality, thus enriching the learning resources and integrating the traditional culture of the rule of law to cultivate students' concept of the rule of law in the new era. Combined with interactive practice and data-based learning management, it provides students with a personalized learning experience, makes learning more visual, in-depth and efficient, and fosters a new mode of Civics and Politics teaching for composite talents with a certain degree of creative consciousness and innovation ability. Its main features are immersion, interactivity, diversity and combination of reality and reality.

II. B. Components of Virtual Reality Teaching Model in Colleges and Universities

In this study, the components of the virtual reality teaching model in colleges and universities are divided into the theoretical basis of virtual reality teaching, virtual reality teaching objectives, virtual reality teaching resources, virtual reality teaching method, virtual reality teaching process, virtual reality teaching evaluation, as shown in Figure 1. The following mainly focuses on the elements of virtual reality teaching objectives, virtual reality teaching, virtual reality pedagogy, and teaching evaluation in detail.

1) Virtual Reality Civics Teaching Objective is the Direction

Civics teaching objectives as the first element of civics teaching activities determine the direction of the implementation of civics teaching activities and the expected results, affecting and restricting many factors of civics teaching activities. Clarifying the teaching objectives is a crucial step in the design of virtual reality teaching in colleges and universities, and it is of great significance to summarize the whole situation.

2) Virtual reality Civics teaching resources are the guarantee.

Virtual reality ideology and politics teaching resources realize the important guarantee mechanism of virtual reality ideology and politics teaching, is the premise and foundation of virtual reality ideology and politics teaching activities,

and is an important influence factor to make the ideology and politics teaching mode effective. In this study, virtual reality Civics teaching resources mainly refer to the collection of information technology that can promote learners' effective learning in a narrow sense.

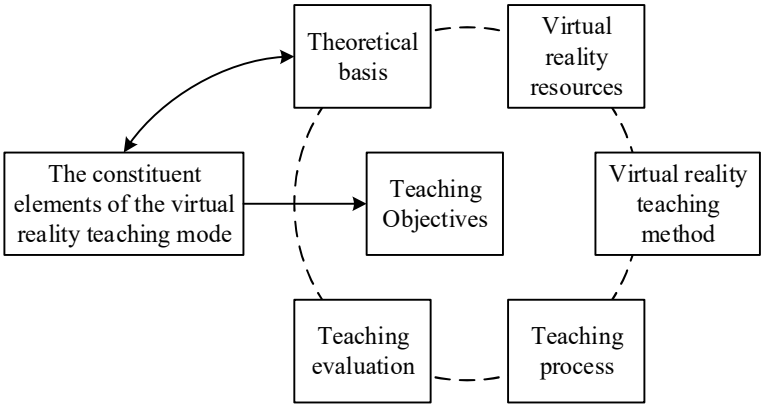

Figure 1: Elements of virtual reality teaching

3) Virtual Reality Civics Teaching Methods are Key

Civics teaching method refers to a kind of Civics teaching method or means for realizing Civics teaching goals, according to the Civics teaching conditions and the Civics teaching content set up, using specific Civics teaching methods to cooperate with each other to carry out Civics teaching activities. Virtual Civics teaching method is the core element of the effectiveness of virtual reality Civics teaching in colleges and universities, and it is a specific way to realize virtual reality Civics teaching.

4) The evaluation of virtual reality Civics teaching is the standard

Civics teaching evaluation refers to the systematic, scientific and objective evaluation of the process of Civics teaching, Civics teaching effect and the quality of Civics teaching process, and it is an important basis for feedback on the completion of Civics teaching objectives and students' learning. Civics teaching evaluation is an important standard of the whole virtual reality Civics teaching activities, Civics teaching evaluation can play an important role in understanding the effect of Civics teaching, improving the Civics teaching method, stimulating the enthusiasm of teachers for Civics teaching, guiding the full development of students, and promoting education reform.

II. C.The Basic Process of Virtual Reality Teaching in Colleges and Universities

The basic process of virtual reality teaching in colleges and universities is mainly composed of three phases (preparation phase, implementation phase, and evaluation phase) and five teaching links (theory introduction, context creation, interactive operation, enhancement and consolidation, and summarization and evaluation), as shown in Figure 2.

1) Preparation stage of virtual reality Civics teaching in colleges and universities

(1) Learner analysis

In the teaching of virtual reality ideology and politics in colleges and universities, it is necessary to focus on the developmental characteristics, knowledge level and learning styles of college students, etc. By analyzing these situations of the learners, the objectives of the course and the characteristics of virtual reality technology are combined to determine the teaching objectives, teaching methods, and teaching contents.

(2) Teaching content analysis

In virtual reality teaching, teachers should pay more attention to the organic integration of virtual reality technology and the content of Civics teaching, grasp the characteristics of the current Civics teaching content and Civics teaching difficulties, for which contents in the teaching materials are suitable for virtual teaching methods, which contents are suitable for real teaching methods to be able to clearly locate, and to analyze the learners' situation, and determine the teaching objectives, teaching methods, and teaching content by analyzing the course objectives and the characteristics of virtual reality technology.

(3) Analysis of teaching objectives

Virtual reality teaching objectives should be formulated around the content of the Civics course and the students' learning activities, to be challenging, according to different Civics teaching methods to develop targeted teaching objectives; to be student-centered, develop multi-dimensional teaching objectives, the formation of knowledge and

skills, emotions and behaviors, and other aspects of the Civics teaching tasks, the ultimate goal of the teaching is to improve the learning effect of the students, so that they better understand and master the content of the Civics. The ultimate goal of teaching is to improve students' learning effect and make them better understand and master the contents of Civics teaching.

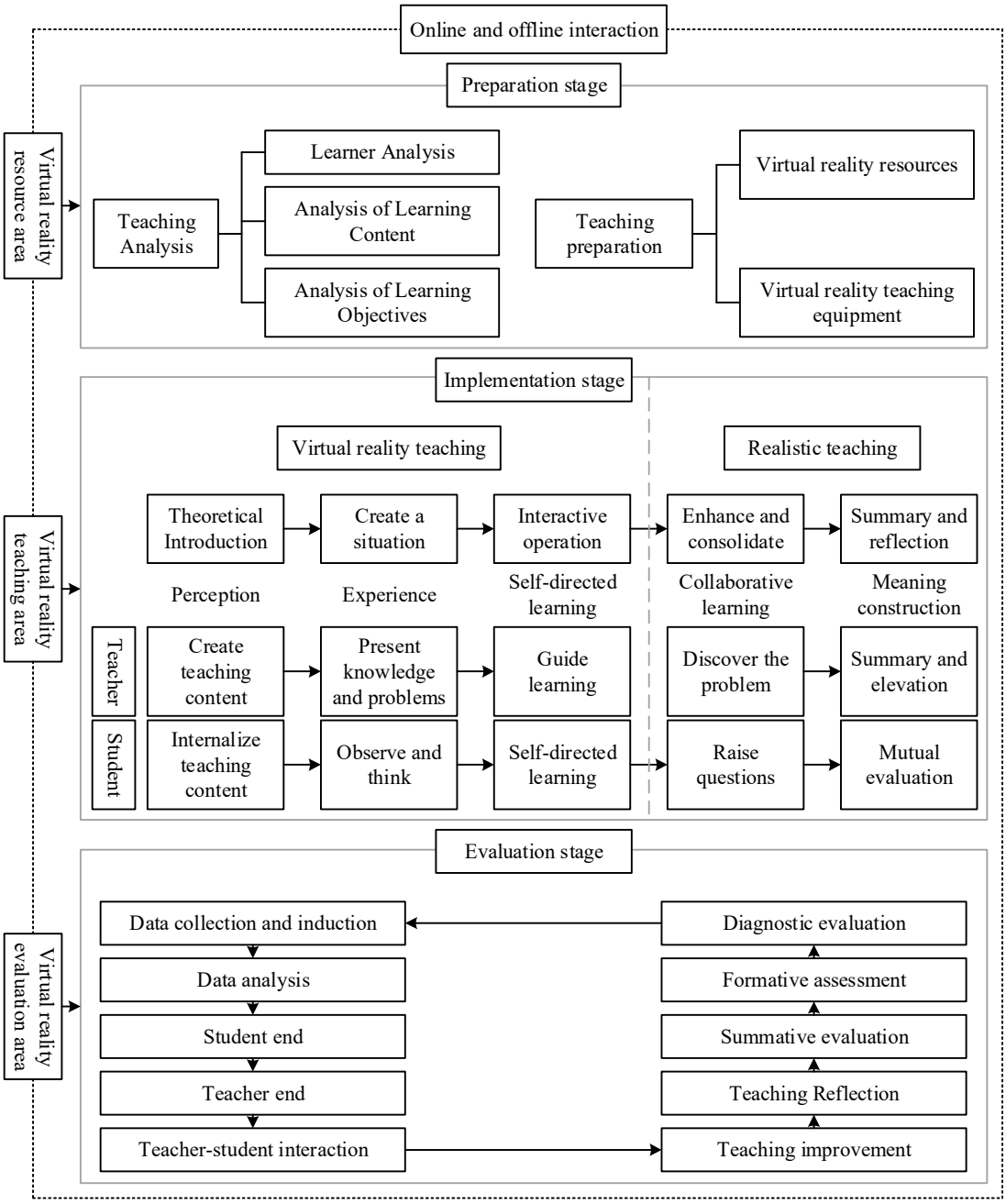

Figure 2: Virtual reality teaching mode framework

(4) Preparation for Civics Teaching

In addition to the teaching elements required for virtual reality teaching and traditional courses, the most important thing is the virtual reality teaching resources (materials), teaching equipment and teaching platforms that match the content of Civics teaching, so the preparation for teaching includes the preparation of basic virtual reality-related resources, equipment and so on.

2) Implementation stage of virtual reality teaching in colleges and universities

Virtual reality teaching practice links are divided into five, respectively, the theory of introduction, create a situation, interactive experience learning, enhancement and consolidation, summarize and reflect, the five links between the layers of progressive, interconnected, together to achieve on-line and off-line interconnection, the formation of an open learning field.

3) Virtual reality evaluation stage

The evaluation of virtual reality teaching should follow the scientific and diversified, mainly including the evaluation of virtual reality teaching content, interactivity, experience, teaching effectiveness, as well as environmental adaptability and sustainable development.

III. Research design of virtual reality classroom teaching for high school civics and politics

In this chapter, the research question, research object, research methodology, and research process will be specified.

III. A. Research questions

Guided by previous literature reviews and theoretical foundations, this study explores the following three questions through questionnaires and interviews:

1) What is the impact of the Civics virtual reality classroom model integrating traditional rule of law culture proposed in this paper on students' comprehensive ability level?

2) The effect of the Civics virtual reality classroom model integrating traditional rule of law culture proposed in this paper on students' performance in Civics?

3) What is the impact of the Civics virtual reality classroom model integrating traditional rule of law culture on students' rule of law conceptualization and literacy as proposed in this paper?

III. B. Subjects of the study

This study was implemented in X university in G city, Ningxia Hui Autonomous Region, China, and the questionnaire survey was conducted on a total of 100 students randomly selected from all grades of the university. The questionnaire survey on students of different grades can clearly understand the current situation of the integration of the traditional rule of law culture into the Civic and Political Virtual Reality classroom of the university, which will make the results of the study more persuasive.

III. C. Research methodology

III. C. 1) Literature research method

Literature research is the foundation of research work. According to the research theme of the virtual reality classroom of ideology and politics in colleges and universities, the researcher collects and consults the monographs on the integration of the traditional rule of law culture into the virtual reality classroom of ideology and politics in colleges and universities as well as the relevant journals and master's theses in recent years, and synthesizes the results of their research, to understand the connotation, the current situation, and the characteristics of the traditional rule of law culture and the virtual reality classroom of ideology and politics.

III. C. 2) Questionnaire method

Questionnaire survey method is a quantitative research method with positivism as the methodology, which is a research method by distributing or mailing the standardized questionnaires to the relevant people, and then recovering and organizing the questionnaires and analyzing the data, so as to derive the results of the study [19].

In this study, two questionnaires are designed: “Questionnaire on the Status of Students’ Comprehensive Competence Level of Traditional Rule of Law Culture Integrated into the Civics and Political Science Virtual Reality Classroom in Colleges and Universities” and “Questionnaire on the Status of College Students’ View of the Rule of Law”. Both questionnaires were tested accordingly and passed the reliability and validity test of the questionnaire.

III. C. 3) Test methods

The method of pre and post-test is used in the practice of virtual reality classroom teaching of Civics in colleges and universities. First, a pre-test was conducted to understand the degree of students' knowledge of the rule of law culture, and an implementation program was designed. After the implementation of the teaching program, a post-test was conducted to verify the effectiveness of the virtual reality classroom teaching of civics with the integration of traditional rule of law culture. The data were collected for subsequent analysis. By comparing the results of students' pre- and post-tests, it can present a clearer and more intuitive picture of the teaching effect of integrating the traditional rule of law culture into the English classroom, so the choice of the test method is more reasonable.

III. C. 4) Independent samples t-test analysis methods

The t-test is divided into a single overall test and a double overall test. The single overall t-test will not be repeated, focusing on the double overall t-test, double overall t-test is to test whether the difference between two sample means and their respective representative of the overall significant. The double overall t-test is subdivided into two cases, one is the independent samples t-test and the other is the (related samples) paired samples t-test [20].

The independent small sample t-test statistic is:

$$t=\frac{\bar{x}_1-\bar{x}_2}{\sqrt{\frac{(n_1-1)s_1^2+(n_2-1)s_2^2}{n_1+n_2-2}}}=\frac{\bar{x}_1-\bar{x}_2}{\sqrt{s^2\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}} \tag{1}$$

where $\bar{x}_1,\bar{x}_2$ is the mean of the two samples; s_1,s_2 is the standard deviation of the two samples; and s^2 is the confluence variance of the two samples i.e., $s^2=\frac{\sum x_1^2-(\sum x_1)^2/n_1+\sum x_2^2-(\sum x_2)^2/n_2}{n_1+n_2-2}$; $df=n_1+n_2-2$.

The paired small sample t-test statistic is:

$$t=\frac{\bar{x}_1-\bar{x}_2}{\sqrt{\frac{s_1^2+s_2^2-2rs_1s_2}{n}}}=\frac{\bar{x}_1-\bar{x}_2}{\sqrt{\frac{\sum D^2-(\sum D)^2/n}{n(n-1)}}} \tag{2}$$

where $\bar{x}_1,\bar{x}_2$ is the two-sample mean; s_1,s_2 is the two-sample standard deviation; r is the correlation coefficient of the paired samples; and D is the number of differences in the data i.e., $D=x_1-x_2$; $df=n-1$.

The double overall (σ_1,σ_2 unknown, $n\le 30$) t-test steps are:

The first step establishes the original hypothesis $H_0:\mu_1=\mu_2$, the alternative hypothesis $H_1:\mu_1\neq\mu_2$, and determines the significance level $a=0.05$.

The second step calculates the t-value of the test statistic.

The third step to determine the form of the test: the use of two-sided test (the left side of the test, the right side of the test of the original hypothesis, alternative hypothesis and two-sided test is different).

The fourth step of the statistical decision, according to the t-test statistical decision rules for judgment: the acceptance of the original hypothesis or the rejection of the original hypothesis.

III. D. Research process

This paper combines the Civics virtual reality classroom model incorporating traditional rule of law culture proposed in this paper to carry out a college Civics virtual reality classroom teaching experiment within X college. One hundred randomly selected students will be randomly divided into experimental class and control class, each class has 50 students. The experimental class will adopt the Civics virtual reality classroom model of integrating traditional rule of law culture proposed in this paper for Civics teaching, while the control class will still maintain the traditional teaching method for Civics teaching. In addition, both the experimental class and the control class will add the traditional rule of law culture into the Civics course during the experiment, and the new course content of both sides is the same. The time span of the experiment is from mid-September to mid-December 2024, which is about 12 weeks long.

IV. Analysis of the results of the experiment on virtual reality classroom teaching of civics in higher education institutions

In this chapter, we will analyze the results of the pre and post-tests of the experimental class and the control class of the Civics Virtual Reality Classroom Teaching Experiment in Colleges and Universities, which mainly include three aspects: the level of students' comprehensive competence, their performance in Civics and the view of the rule of law.

IV. A. Differential analysis of the level of comprehensive capacity

1) Analysis of the differences in the results of the comprehensive ability post-test in the experimental class control class

In this study, the independent sample t-test was used to analyze the mean values of the specific scores of the students in the two classes of experimental class control class in the four dimensions of independent learning ability,

problem solving ability, communication and cooperation ability and innovation and creativity ability after the experiment of different teaching methods, and the test results are shown in Table 1. According to the test results, the average value of each dimension of independent learning ability, problem solving ability, communication and cooperation ability and innovation and creativity ability of the experimental class is larger than that of the control class, and the P-value of each dimension of the students of the experimental class and the control class (0.024, 0.003, 0.002, and 0.038) is less than 0.05. Thus, it can be inferred that there is a significant difference between the implementation of the Civic Science and Politics Virtual Reality Classroom Teaching and Learning Design Mode of the universities in this paper in terms of the enhancement of the There is a significant difference in the comprehensive ability of students, and the implementation effect is significantly better than the traditional teaching mode.

Table 1: Comparison of comprehensive ability differences

Dimensions	Class	Mean	standard deviation	P
Self-learning ability	Experimental class	11.73	1.1577	0.024
	Control class	11.05	1.2062	
Problem solving ability	Experimental class	12.2	1.5302	0.003
	Control class	11.24	1.6001	
Communication and cooperation ability	Experimental class	12.16	1.2307	0.002
	Control class	11.29	1.4122	
Innovation and creation ability	Experimental class	11.92	1.557	0.038
	Control class	11.35	1.2558	

2) Analysis of the difference between the pre- and post-test results of the comprehensive ability of the experimental class

By analyzing the difference between the comprehensive ability level of students in the experimental class and the control class after the experiment, it is understood that the teaching experiment has a certain effect on improving the comprehensive ability level of students, but it can only prove horizontally that the comprehensive ability level of the experimental class is higher than that of the control class, and it can't prove vertically that the Civic and Political Science Virtual Reality Classroom Teaching Design Mode of this paper can effectively enhance the comprehensive ability of the experimental class students. Therefore, it is also necessary to analyze the difference between the comprehensive ability level of the experimental class students before and after the experiment.

The comprehensive ability level of the experimental class students in the pre- and post-test is shown in Table 2. It can be seen that the mean values obtained by the experimental class students in independent learning ability, problem solving ability and other dimensions of the test after the experiment are higher than those obtained in the pre-experiment test, with an increase of 0.87, 0.82, 1.08 and 0.97 respectively.

Table 2: The pre-test and post-test of students ' comprehensive ability level

Dimensions	Test	Mean	Standard deviation	Average standard error
Self-learning ability	Post-test	11.69	1.3174	0.23106
	Pre-test	10.82	1.22183	0.22312
Problem solving ability	Post-test	12.10	1.50791	0.17399
	Pre-test	11.28	0.96197	0.07885
Communication and cooperation ability	Post-test	12.18	1.2026	0.12751
	Pre-test	11.10	0.86811	0.10259
Innovation and creation ability	Post-test	12.00	1.50524	0.28509
	Pre-test	11.03	0.88949	0.06278

Paired-sample t-test was utilized to explore the differences between the pretest and posttest scores of the experimental class students in the four dimensions of independent learning ability, problem solving ability, communication and cooperation ability and innovation and creativity ability, and the results of the test are specifically shown in Table 3. The Sig values (0.003, 0.002, 0.000, 0.000) of the four dimensions of independent learning ability, problem solving ability, communication and cooperation ability, and innovation and creativity ability are all less than 0.05, which reaches a highly significant level. It indicates that there is a significant difference between the pre-test and post-test scores of each dimension. Therefore, the following conclusion can be obtained: the posttest scores of

the students in the experimental class are significantly higher than the pretest scores, indicating that the comprehensive ability of the students has been significantly improved after accepting this paper's Civics Virtual Reality Classroom Mode that incorporates traditional rule of law culture.

Table 3: Sample T test results

Dimensions	Test	Average value	Standard deviation	Average value of standard error	Difference 95 % confidence interval		T	Degree of freedom	Sig. (Double-tailed)
					Lower limit	Upper limit			
Self-learning ability	Post-test Pre-test	0.744	1.671	0.225	0.281	1.218	3.188	48	0.003
Problem solving ability	Post-test Pre-test	0.958	1.952	0.272	0.382	1.535	3.425	48	0.002
Communication and cooperation ability	Post-test Pre-test	0.958	1.488	0.226	0.516	1.378	4.468	48	0.000
Innovation and creation ability	Post-test Pre-test	0.886	1.586	0.217	0.427	1.366	3.946	48	0.000

IV. B. Analysis of Variance in Civics Achievement Results

1) Analysis of differences in pretest results of Civics and Political Science scores of experimental and control classes

In this study, SPSS software was used to conduct independent samples t-test on the pretest results of students in the experimental and control classes. The pre-test scores of the experimental and control classes are shown in Table 4. The average pre-test scores of the students in the experimental and control classes are 79.22 and 79.45 respectively, and the standard deviation is 9.368 and 9.215 respectively, indicating that the average pre-test scores of the students in the two classes are close to each other and the degree of dispersion is basically the same.

Table 4: Pre-test scores of the experimental class and the control class

Class	Mean	Standard deviation	Standard error of mean
Experimental class	79.22	9.357	1.552
Control class	79.45	9.226	1.524

The independent samples t-test of the pretest scores of the experimental and control classes is shown in Table 5. The Sig value of the independent samples T-test of the pretest scores of the students in the experimental and control classes is 0.884, which is greater than 0.05, indicating that there is no statistically significant difference between the pretest scores of the two classes, i.e., there is no statistically significant difference between the students of the two classes prior to the experiment, and the two classes can be used as subjects for the teaching experiment.

Table 5: Independent sample T test of pretest scores

-	Levene test of variance equation		T	Df	Sig. (bilateral)	T test of mean equation		95 % confidence interval of difference	
	F	Sig.				Mean difference	Standard error value	Lower limit	Upper limit
Suppose the variance is equal.	0.074	0.785	-0.138	71	0.884	-0.312	2.166	-4.647	4.025
Suppose the variance is not equal.	-	-	-0.138	70.86	0.884	-0.312	2.166	-4.647	4.026

2) Differential analysis of the results of the post-test of Civics in the experimental class and control class

In order to clarify the effect of this Civics teaching experiment, the experimental class and the control class were given a Civics test at the end of the experiment, with a total score of 100 points. The post-test results of the experimental class and the control class are shown in Table 6. Through horizontal comparison, it can be seen that the average post-test scores of students in the experimental class and the control class are 89.58 and 80.71 respectively, and the difference between the average scores is 8.87, with a standard deviation of 4.664 and 9.632 respectively, which indicates that the difference between the average post-test scores of the students in the two classes and the degree of dispersion is extremely significant. Through vertical comparison, it can be seen that the post-test scores of students in the experimental class and the control class have been greatly improved compared with the mid-test, with an increase of 13.08% and 1.59% respectively, and the increase of students' scores in the experimental class is larger than that of the control class and the average score gap is obviously widened.

Table 6: Post-test scores of the experimental class and the control class

Class	Mean	Standard deviation	Standard error of mean
Experimental class	89.58	4.664	0.7685
Control class	80.71	9.632	1.577

Further, the independent samples t-test was conducted on the posttest Civics scores of the experimental and control classes, and the test results are shown in Table 7. Combined with the table, it can be seen that the independent samples t-test Sig value of the posttest scores of the students in the two classes is less than 0.05, indicating that the difference between the posttest scores of the students in the two classes is extremely significant statistically.

Table 7: Independent sample T test of post-test scores

-	Levene test of variance equation		T	Df	Sig. (bilateral)	T test of mean equation		95 % confidence interval of difference	
	F	Sig.				Mean difference	Standard error value	Lower limit	Upper limit
Suppose the variance is equal.	12.724	0.001	5.911	71	0.000	10.542	1.771	7	14.112
Suppose the variance is not equal.	-	-	5.952	52.338	0.000	10.542	1.768	7.008	14.085

Overall, this article into the traditional culture of the rule of law Civics virtual reality classroom model applied to the Civics teaching can be very significant to improve student performance, teaching effect is better.

IV. C. Differential Analysis of Rule of Law Perspective Literacy

In order to verify the effectiveness of the Civics virtual reality classroom model proposed in this paper for the integration of traditional rule of law culture in Civics teaching for the integration of traditional rule of law culture and the cultivation of students' concept of the rule of law, a questionnaire survey was conducted on the rule of law conceptual literacy of the students in the experimental class and the control class at the end of the experiment.

The experimental class and the control class of the rule of law concept of literacy questionnaire data are summarized, were calculated to find out each student in the rule of law concept of literacy dimensions of the scale average, the higher the score, the more significant their concept of the rule of law literacy. The rule of law literacy of students in the experimental class and the control class after the experiment is shown in Table 8. As can be seen from the table, the mean values of the overall rule of law literacy of the students in the experimental class and the control class are 4.519 and 3.715 respectively, and the difference between the means is 0.804. Specifically, in the dimensions of the rule of law literacy such as supremacy of law, equality of the law, procedural justice, constraints on power, and safeguarding rights, the mean values of the dimensions of the experimental class are higher than those of the control class, which are higher than those of the control class, respectively, 0.823, 0.916, 0.614, 0.559, 1.119, and 1.11, respectively, 0.559, 1.11.

Table 8: Students ' concept of rule of law literacy

Dimensions	Class	Average value	standard deviation	Standard error of mean
Supremacy of law	Experimental class	4.438	0.391	0.055
	Control class	3.615	0.291	0.056
Legal equality	Experimental class	4.59	0.303	0.055
	Control class	3.674	0.425	0.045
Procedural justice	Experimental class	4.534	0.426	0.079
	Control class	3.92	0.47	0.079
Restriction of power	Experimental class	4.64	0.367	0.063
	Control class	4.081	0.257	0.046
Protecting rights	Experimental class	4.393	0.412	0.071
	Control class	3.283	0.522	0.08
Overall average	Experimental class	4.519	0.292	0.046
	Control class	3.715	0.243	0.033

Table 9: Independent sample T test of each dimension of rule of law literacy

Dimension	-	Levene test of variance equation		T	Df	Sig. (bilateral)	T test of mean equation		95 % confidence interval of difference	
		F	Sig.				Mean difference	Standard error value	Lower limit	Upper limit
supremacy of law	Suppose the variance is equal.	0.484	0.489	10.754	71	0.000	0.783	0.073	0.638	0.928
	Suppose the variance is not equal.	-	-	10.744	70.422	0.000	0.783	0.073	0.638	0.928
Legal equality	Suppose the variance is equal.	0.297	0.587	11.757	71	0.000	0.866	0.074	0.72	1.013
	Suppose the variance is not equal.	-	-	11.778	70.246	0.000	0.866	0.074	0.712	1.013
Procedural justice	Suppose the variance is equal.	1.068	0.305	4.235	71	0.000	0.454	0.107	0.24	0.667
	Suppose the variance is not equal.	-	-	4.233	70.721	0.000	0.454	0.107	0.24	0.667
Restriction of power	Suppose the variance is equal.	5.919	0.017	5.946	71	0.000	0.499	0.084	0.332	0.666
	Suppose the variance is not equal.	-	-	5.928	66.905	0.000	0.499	0.084	0.331	0.667
Protecting rights	Suppose the variance is equal.	2.61	0.111	8.972	71	0.000	0.96	0.107	0.746	1.173
	Suppose the variance is not equal.	-	-	9.005	67.334	0.000	0.96	0.107	0.747	1.172
Overall average	Suppose the variance is equal.	0.089	0.766	14.309	71	0.000	0.712	0.05	0.613	0.812
	Suppose the variance is not equal.	-	-	14.291	69.979	0.000	0.712	0.05	0.613	0.812

Further, the dimensions of the rule of law view literacy of the experimental class and the control class were subjected to an independent samples t-test, and the test results are specifically shown in Table 9. It can be seen that the experimental class and the control class of the overall rule of law literacy mean of independent samples T-test value of 14.309, Sig value of 0.000, less than 0.05. The supremacy of the law, equality of the law, procedural justice, power to constrain, protect the rights of the rule of law concept of literacy dimensions of the Sig value of the same are less than 0.05 difference is more significant. Obviously, the Civics virtual reality classroom model proposed in this paper, which integrates traditional rule of law culture, can effectively promote the integration of traditional rule of law culture, and significantly enhance the students' rule of law literacy in various dimensions.

V. Conclusion

This paper integrates traditional rule of law cultural elements into the virtual reality classroom teaching of Civics in colleges and universities, and designs a virtual reality classroom model of Civics that integrates traditional rule of law culture. The study was implemented in X university in G city, Ningxia Hui Autonomous Region, China, where experimental and control classes were set up, and the data results were analyzed by combining the test method and the independent samples t-test analysis method, and the analysis of the experimental results mainly covered the three aspects of the students' comprehensive competence level, Civic and political achievement, and the view of the rule of law.

The comprehensive ability level of students in the experimental class and the control class is analyzed differently. The mean value of each dimension of the comprehensive ability level of the experimental class is larger than that of the control class, and the P-value of each dimension is less than 0.05. The mean values of the experimental class students in the dimensions of independent learning ability and problem solving ability are higher than those of the pre-experimental test, which are respectively improved by 0.87, 0.82, 1.08, 0.97, and the Sig-value of each dimension is less than 0.05. It can be inferred that this paper incorporates the concept of the rule of law into the experimental class, and the students are more capable than the control class. It can be inferred that the Civics virtual reality classroom model incorporating traditional rule of law culture in this paper has a significant difference in enhancing students' comprehensive ability, and the effect is significantly better than the traditional teaching mode.

In terms of Civics performance, there is no significant difference between the pretest scores of students in the experimental class and the control class (Sig=0.884>0.05). While in the post-test, the Civics scores of the students in the experimental class are higher than those of the control class by 8.87 points, and the independent sample t-test Sig value of the post-test scores of the students in the two classes is less than 0.05, which makes the statistical difference extremely significant. This indicates that the Civics virtual reality classroom model of this paper, which integrates traditional rule of law culture, can effectively improve students' Civics performance.

In terms of students' rule of law conceptual literacy, the mean value of the overall rule of law conceptual literacy of students in the experimental class is higher than that of the control class by 0.804, and the mean values of the rule of law conceptual literacy dimensions such as supremacy of law, equality of law, procedural justice, constraints on power, and protection of rights are higher than that of the experimental class by 0.823, 0.916, 0.614, 0.559, and 1.11 respectively, and all of them have a Sig value of less than 0.05 in the independent samples t-test. This proves that the Civics Virtual Reality Classroom Model of Integrating Traditional Rule of Law Culture proposed in this paper can effectively promote the integration of traditional rule of law culture, better shape students' view of the rule of law, and enhance their rule of law conceptual literacy.

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