

# *Practice of Computer Multimedia Assisted Instruction in the Inheritance of Traditional Sports of Luoba Nationality under the Background of Big Data*

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**Abstract:** Facing the wave of global informationization, countries all over the world attach great importance to the impact of information technology on society and education. They have launched a series of measures in terms of national policy adjustments, the transformation of educational concepts, the reformulation of goals, and the reform of inheritance methods. It is to adapt sports inheritance to the needs of the information society for talent training. The purpose of this article is the practice of computer-assisted multimedia teaching in the inheritance of traditional sports of the Luoba nationality. This article takes the research topic of the inheritance and communication of multimedia in the traditional sports of the Lhoba nationality as a logical starting point, expounds the development process of the traditional media of the Lhoba nationality's traditional sports inheritance and communication from single media to multimedia communication, from the professors and acceptance in society, schools and teaching. From the perspective of the author, it analyzes the reasons why multimedia communication methods lag behind the application of these multimedia communication methods to other subjects in physical education. Through computer-assisted multimedia teaching, the inheritance of the traditional sports of the Lhoba nationality has been optimized by as much as 20%, which greatly helped the inheritance of the traditional sports of the Lhoba nationality.

## 1. Introduction

### 1.1. Background and Significance

Computer-assisted multimedia training, the English name is Computer Assisted Struction

simplified CAI. Since the 1950s, it has been used for overseas education, which refers to the combination of traditional teaching methods with educational design and the latest computer teaching media according to the content and educational goals of the students in the teacher's curriculum, and a reasonable adjustment is made [1-2]. With the joint participation of both computers and teachers, improving the quality of the classroom, cultivating complex and innovative talents, and achieving the effect of reasonable education and optimized education for students are also the requirements of the spirit of the current physical education reform [3]. The application of computer multimedia-assisted teaching in the education process enables students to control the information provided to them as needed, and can freely choose to make their learning more targeted [4]. In this kind of interactive learning of traditional physical education of the Luoba ethnic group, there is also integrated teaching of computer-assisted multimedia teaching.

## 1.2. Related Work

Ming Z believes that the traditional way of teaching physical education is that the teacher first teaches some theoretical knowledge of physical education and the main points of the classroom, and the students learn to listen to the teacher's explanation in the classroom, so the atmosphere is relatively low and the students are easy to get bored. At the same time, the theories written by the teacher are relatively abstract and experienced, and when students understand it, they will find it more difficult to speak and act [5-6]. With the passage of time, they developed a rebellious psychology, leading to low educational effects. Paper F believes that physical education has higher requirements for sports, so teachers may break down and explain their actions. Some actions are completed quickly, and some tasks cannot be completely resolved. This poses a huge challenge to the teacher's interpretation and demonstration process [7- 8]. Moreover, due to various factors, teachers cannot express movements to students in a standard way, and students cannot learn movements accurately [9-10]. These brief introductions show the great importance of computer-assisted teaching in traditional sports in today's society, but at the same time their research is not accurate and comprehensive.

## 1.3. Main Content

The innovation of this article is to describe the value of computer multimedia-assisted teaching applied to traditional sports inheritance. It is explained from the current limitations of computer multimedia-assisted teaching and traditional sports inheritance from various directions. The two can be well combined. It is not able to mature in a short period of time. It expounds the trend of computer-assisted teaching in traditional sports inheritance and development. More perspectives are summarized and judged based on the author's research.

## 2. Inheriting Methods of Computer-Assisted Multimedia Teaching in the Traditional Sports of the Luoba Nationality

### 2.1. Mathematical Statistics

Faced with the continuous development of social economy and the gradual diversification of people's life and entertainment styles, national inheritance has become the main driving force for the inheritance of sports intangible cultural heritage. On the one hand, the national inheritance method is mainly based on cultural departments, schools, cultural stations, sports bureaus, etc.,

through the holding of sports games, lectures, performances, etc., to achieve the purpose of inheriting sports intangible cultural heritage; the formulation of policies and systems related to intangible cultural heritage has played an important role in protecting sports intangible cultural heritage. For Sudoku scores, a comparative analysis of the pre- and post-test scores, including average scores, standard deviations, etc., combined with the questionnaire data and Sudoku scores for analysis and finally reached a conclusion. Reduce the size of the feature map by down-sampling, use a fixed-size area as a window to slide the value on the input feature map, and select the maximum value in the area as the output result, where  $h$  and  $w$  represent the height of the down-sampling area Wide,  $c$  means the  $c$ -th channel.

$$O_{c,m,n} = \max(I_{c,m+1,n+1}) \quad (1)$$

Generally, a nonlinear function is used to perform nonlinear mapping on the input data. The commonly used nonlinear function is shown in the following formula. The formula is as follows.

$$\text{sigmoid}(x) = \max(L \cdot x, 0.0) \quad (2)$$

## 2.2. Questionnaire Survey Method

The questionnaire survey method is a method of information collection that encourages respondents to create detailed surveys. A series of questions or question forms related to the survey objectives created for the survey are called surveys. This is a widely used tool for people who collect information through social research activities. With this tool, researchers can accurately and specifically measure the progress of social activities, apply social statistical techniques to describe and analyze quantities, and provide required survey data. The current situation of the inheritance of traditional sports of the Lhoba nationality is not optimistic about the new themes and new standards for deepening the reform of the inheritance of traditional sports. It is necessary to objectively analyze and adjust the attributions affecting the inheritance of the traditional sports of the Lhoba nationality at the appropriate time. We conducted 300 questionnaire surveys on ethnic education teachers and students of University A, and received 265 valid survey reports. Through statistical data, we analyzed and discussed the practice of computer-assisted teaching in the traditional sports of the Luoba ethnic group in this experiment.

## 3. Practical Experiment of Computer-Assisted Multimedia Teaching in the Inheritance of Traditional Sports of the Luoba Nationality

### 3.1. Connotation Analysis Experiment of the Traditional Sports Culture of the Luoba Nationality

(1) An analysis of the material aspect of the traditional sports culture of the Luoba nationality

An analysis of the material aspects of the traditional sports culture of the Luoba nationality the material aspects of the traditional sports culture of the Luoba nationality mainly include:

The materialized form of the item, such as the objects used in the 33 traditional sports items of the Luoba nationality included in the "Chinese Traditional Sports Journal" published in 1990.

The material conditions needed to carry out traditional sports activities of the Luoba nationality, such as the venue and related material environment.

Participants are an important support for the development of traditional national sports activities, and there is no way to talk about it without the traditional sports culture of the Loba nationality.

Introduce and study the cultural ancient books related to the traditional sports culture of the Luoba nationality, mainly including literature, classics, and inscriptions on tablets.

(2) Analysis of the system level of the traditional sports culture of the Luoba nationality

The traditional sports culture of the Luowa is an important part of the traditional national culture of our country. The unique project characteristics, project rules and festival system all belong to the system category of the traditional sports culture of the Luowa. In the face of the continuous progress and development of society, the traditional sports culture of the Luowa is also affected by many factors. Therefore, the traditional sports system of the Luowa nationality should also include the traditional cultural protection system of the relevant people at the national and local levels. The relevant policy documents issued at the national level are mainly the constitution of the People's Republic of Notice, "The Sports Law of the People's Republic of China." According to the above content, the institutional level of the traditional sports culture of the Luoba nationality has been fully reflected from the national and local levels of the system. At the same time, these systems also have qualitative and quantitative requirements for the development and inheritance of the traditional sports culture of the Luoba nationality.

**3.2. Computer-Assisted Teaching Integration Experiment**

In the process of physical education, computer multimedia is used for supplementary education, which can display educational content to students through audio, text and photos, so as to achieve the learning goals of further attracting students' attention, broadening their horizons and increasing knowledge experience. Multimedia education eliminates the teacher-centered learning environment in traditional education, encouraging students to change from passive to active, and become true learning masters. Using multimedia technology, it brings new experiences to students and further enhances their imagination and creativity. According to the survey, in the selection of teaching methods for traditional physical education instructors, the most commonly used are lectures (accounting for 85%), teaching methods (accounting for 75%), theoretical research methods (accounting for 43.3%), and seminars methods such as lectures, lectures, etc. are not often used, and the proportion is too small. According to a large number of documents, I learned that the Luoba people have gradually lost interest in traditional teaching methods, and have developed a strong interest in seminars and other methods. The survey data is shown in Table 1:

*Table 1. Selection of commonly used teaching methods for college physical education teachers*

	Frequently use		Occasionally use		Uncommonly use	
	N	%	N	%	N	%
Lecture	51	85.00	9	15.00	0	0.00
Taught	45	75.00	10	10.00	5	8.33
Theoretical research	26	43.33	26	46.33	8	13.34
Seminar	2	3.33	9	15.00	49	81.66
Lecture style	3	5.00	12	20.00	45	75.00

The students of the Luoba nationality need updated knowledge. They are not interested in boring theoretical training and are more focused on practical training. Interest is a good teacher for students to learn. Therefore, teachers of college physical education students need to choose network technology reasonably and apply it to the educational combination to transform boring pure theoretical knowledge into vivid teaching methods. Compared with traditional courses, the use of computer multimedia-assisted teaching by the Luoba people is designed by teachers and students through an interactive process, rather than textbooks written by experts or scholars. For this type of

online education, university teachers must act as information consultants, emotional advocates for participant learning, and organizers of course training. The survey data is shown in Figure 1:

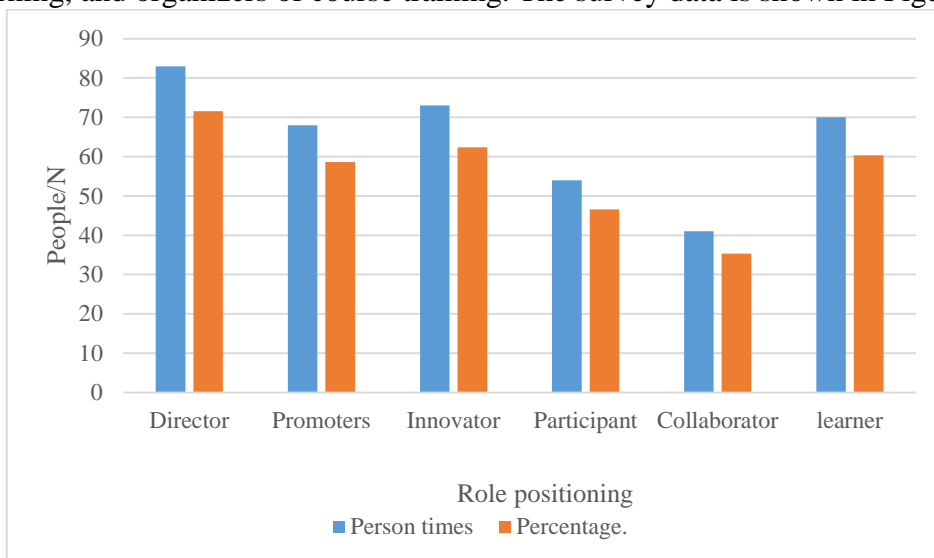


Figure 1. The role of college physical education teachers in teaching

The application of computer-assisted multi-media teaching in the inheritance of traditional sports of the Luoba nationality has strengthened the dissemination of traditional culture. The traditional physical education model has always dominated the leadership or dominant position of teachers. The characteristics of the courses that the Lhoba people learn through the Internet are different from the regular courses. The content is not a textbook edited by experts or scholars, but an interactive process composed of teachers and students using computer multimedia assisted teaching.

#### 4. Survey Data Analysis

The traditional physical education teaching method of the Lhoba nationality is mainly to allow teachers to teach theoretical knowledge and the essence of behavior related to physical education in the classroom. Students who learn to listen to the teacher's explanation in the classroom are easily bored. In addition, the theory taught by the teacher is relatively abstract, and it is difficult for students to understand and impress the behavior. As time goes by, they will develop a rebellious psychology, which will lead to carelessness and insufficient education. Currently, supportive educational computers and multimedia can be used to repeat related theoretical knowledge and actions, making students' emotions more intuitive, but the essence of the actions is reducing the difficulty of understanding. After research and extensive literature review and extensive distribution of conclusions, the application of computer-assisted teaching has had a greater impact on the philosophy, concepts, learning attitudes and learning environment of the university's graduate school of physical education, and it has changed the concept of university physical education teachers. When it comes to the teacher-student relationship, it can have a big impact. In terms of organizing and managing college graduates, computer-assisted multimedia teaching started early and formed a certain model. As shown in table 2.

In the current traditional inheritance, the traditional sports inheritance model of the Loba nationality limits the development of the teacher's subjective initiative, and the training of practical skills is ignored in some learning processes of the Loba nationality. When promoting this model,

the traditional physical education teachers of the Luoba minority underestimated the educational effects of educational institutions. Figure 2 shows the data of the influence of computer-assisted teaching technology on the traditional sports inheritance of the Luoba nationality.

Table 2. The influence of network technology on physical

	Great Influence		Big Influence		Influential	
	N	%	N	%	N	%
Learning Philosophy	37	41.11	28	31.11	18	20.00
Learning Attitude	42	46.67	23	25.60	18	20.00

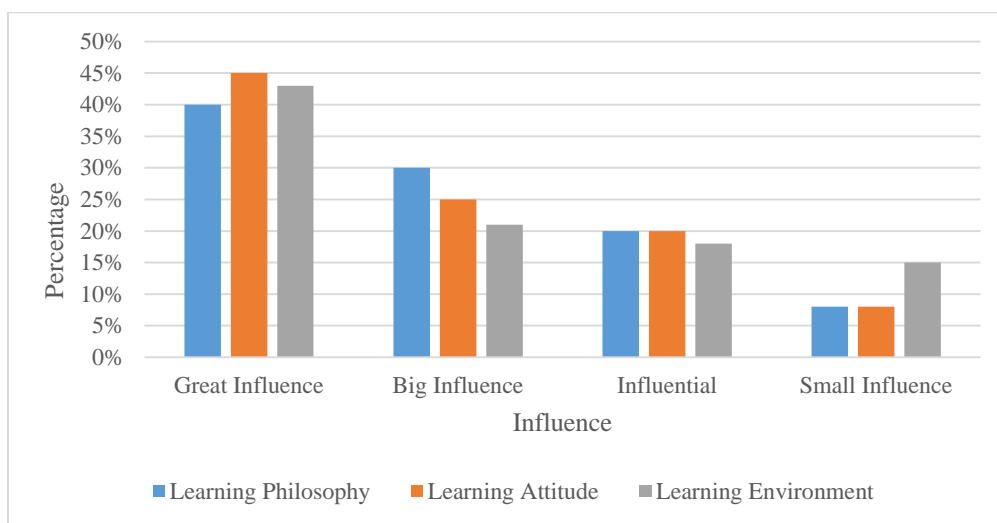


Figure 2. Influence of network technology on sports

At the conceptual level of the traditional sports inheritance culture of the Lhoba ethnic group, it belongs to the core level of the cultural level. This level is composed of various factors cultivated by the Lhoba ethnic group over the years, such as values, ways of thinking and ethnic emotions, which can reflect the donkey tribe’s Social psychological consciousness belongs to the sublimation part of traditional culture. Through computer-assisted multimedia teaching, the inheritance of the traditional sports of the Lhoba nationality has been optimized by as much as 20%, which greatly helped the inheritance of the traditional sports of the Lhoba nationality.

## 5. Conclusion

According to data, the inheritance of traditional minority sports directly affects their inheritance and development. At present, there are three main types of inheritance of traditional sports of the Loba ethnic group, namely school education, private inheritance and government promotion. Folks are the main front for the inheritance and development of traditional national sports. However, due to the acceleration of the urbanization process in my country, migrant workers have become the main force in urban construction. The villages are mostly elderly and children, and they are inherited from family, village and apprentice. In order to protect and inherit the traditional sports culture of ethnic minorities, school education and government promotion have become the main inheritance methods, and computer-assisted multimedia teaching has achieved relatively good results in the inheritance of traditional sports of the Luoba ethnic group.

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## Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

## Conflict of Interest

The author states that this article has no conflict of interest.

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