THE DEVELOPMENT OF SPORTS TRAINING COURSE BASED ON SITUATIONAL TEACHING METHOD TO IMPROVE THE BASIC ATHLETIC SKILLS FOR PRIMARY SCHOOL STUDENTS

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Title	The Development of Sports Training Course Based on Situational Teaching Method to Improve the Basic Athletic Skill for Primary School Students
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ABSTRACT

The objectives of this research were 1) to develop the sports training course based on situational teaching method to improve the basic athletic skills for primary school students and 2) to compare students' basic athletic skills before and after the implementation of sports training course based on the situational teaching method of primary school students. The sample group there were 30 students from the 1 class of the fourth-grade of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023, those who obtained through cluster random sampling. The research instruments involved 1) Activity plan of sport training course based on situational teaching method and 2) Basic athletic skills assessment. The data was statistically analyzed by mean, standard deviation, and t-test for dependent samples.

The results were found that:

1) The development of the sports training course based on situational teaching method to improve basic athletic skills of primary school students, the researcher had studied the documents and research related to the situational teaching method from many researchers and has synthesized into 5 steps (create a situation, enter the situation, strengthen situation, practice repeatedly, guides the end) used to develop activity plan. The results are shown the quality of the activity plan by experts overall has the most suitable.

2) The comparison of students' basic athletic skills between before and after learning by using situational teaching method of primary school students. The results are shown the basic athletic skills of students after learning higher than before learning statistically significant at the level .01.

Acknowledgement

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Introduction

Rationale

In recent years, with the reform of the education system, primary schools in China have gradually attached importance to PE teaching, sports training is very important for primary school students. It is conducive to the physical development of students and healthy physical exercise, can promote the growth and development of students' bones, muscles, heart and other organs, primary school students adhere to good physical education, active physical exercise, can make bone enhancement, promote growth and development, so that children's height rapid rapidly. Physical exercise can also shape the character and moral character of primary school students, cultivate willpower, so that students have an interesting practice, improve their sports ability, cultivate unity, cooperation, competition and other spirit. (Wang Changchun, 2020). The middle and lower grades of primary school are still in the enlightenment stage of physical education, so it is very important to lay a good physical education foundation for students. If the teaching method is improper, it will make them more likely to have negative emotions such as aversion and avoidance to sports, and lower their interest in sports learning, which will also have an impact on their future sports learning (Zhang Xueyong, 2022).

According to the survey, all the indicators of physical fitness of Chinese teenagers and children show a downward trend, distributed at all ages, and the physical fitness of primary school students (i.e., young children aged 6 to 13 years old) is particularly obvious. (Qiu Meilan, 2022). The latest study, published in The Lancet Child & Adolescent Health in the 12th issue of 2019, reviewed data from six national surveys dating back to the 1980s. In comparison, the physical fitness of Chinese children and adolescents dropped by 167 percent from 1995 to 2018, and is still below the level of 1985. Endurance, strength and other qualities are particularly insufficient, and physical diseases such as myopia, obesity, scoliosis become more common in primary school students. Most parents have the idea of "Can't let their children lag

behind the children of other families", for their children to register a variety of interest classes, so as to occupy the children's after-school sports exercise time; The school also pays insufficient attention to physical education, and other subjects occupy the time of physical education frequently. Students devote all their energy to the study of cultural courses in order to be admitted to famous schools. However, once it is time for physical education, they will find various excuses to leave and avoid physical education, and spend more time on the study of examination subjects, thus the physical quality of students gradually declines. Many people ask for leave in PE class, which greatly reduces the teaching efficiency of PE class. (Zheng Hao, 2022).

The effect and quality of physical education course teaching plays a very important role in the physical and mental development of students. The effect is good and the quality is high. Students can not only obtain the correct knowledge and skills, improve their physical quality, but also be happy in the learning of physical education course, and obtain the development of character, will, emotion and other aspects of personality. The effect and quality of PE teaching are influenced by many aspects. According to the theory of teaching written by Li Bingde, seven elements, namely students, teachers, objectives, contents, methods, environment and evaluation, will have a direct impact on the effect and quality of PE teaching. Therefore, it is necessary to set the seven elements of teaching comprehensively on the basis of combining social development and students' physical and mental development, so as to achieve good teaching effect and quality and truly provide good curriculum support for students' physical and mental health development (Chen Ruizi, 2022). Students' learning effect is not only affected by teachers, objectives, contents, methods, environment, evaluation and other external factors, but also affected by the learning subject's own factors, including students' own cognitive factors and non-cognitive factors. Rather than cognitive factors such as motivation, interest, will and emotion, they play an important role in guiding the direction, focusing attention and stimulating vitality in the learning process of students. Therefore, it is necessary to take various measures to improve students' interest in learning, make students feel the pleasure of physical education courses, and actively participate in physical education courses to improve the effect and quality of primary school physical education courses. An

important measure to promote the comprehensive and healthy development of students' body and mind. (Shi Jiating, 2022).

In some primary schools, many PE teachers still maintain the traditional PE teaching concept. Either to avoid safety problems or to innovate teaching methods, they choose simple and repeated exercises to complete the teaching content, which leads to low enthusiasm of students for PE. There is less interaction with teachers and the classroom atmosphere is not active enough. (Wang Qiang, 2022). The situational teaching method is a teaching method to introduces new knowledge to students which makes use of the lively and educational significance of low school students who are keen to imitate, rich imagination and dominant image thinking. This teaching method is mostly to set a "situation" in the teaching process, or even a "situation" runs through the teaching process of the whole unit and course, so that students can learn and practice various movements connected with the plot, in line with the law of children's cognition and emotional change. (Zhou Dengsong, 2012). As wang Kun (2022) studied the implementation effect of the situational teaching method design in the third-grade students of Qingtaishan Primary School affiliated to Sichuan Normal University, and the following conclusions were drawn: The experimental and control groups significantly improved the four football skill levels and football game indicators. In the experimental group, the indexes of the foot and competition were significantly better than those of the control group, and Shi Lihua (2022) adopted the situational teaching method in the primary school basketball teaching. The results show that students' learning attitude, learning interest and initiative have been significantly improved, while traditional teaching methods have also improved these indicators to a certain extent, but to a lesser extent. Situational teaching method also plays a positive role in students' dribbling, passing, shooting and other skills.

Physical activity assessment mostly relied on self-report measures because of cost efficiency and ease of administration (Adamo, Prince, Tricco, Connor-Gorber, & Tremblay, 2009). the activity tools   aim to capture the frequency, intensity, duration, and type of physical activity during a particular period of time. Activity-specific expenditure values (e.g., metabolic equivalents and kilocalories) are then calculated to estimate total energy expenditure from all activities measured (Adamo et al., 2009).

The most common wearable tools for physical activity assessment include pedometers, accelerometers, load transducers, and heart rate monitors. All of these mechanisms have varying degrees of accuracy and measure characteristics such as frequency and duration of physical activity events, intensity levels, stride length, and walking speed (Butte, Ekelund, & Westerterp, 2012). Pedometers are a robust, cost-efficient, and convenient tool to measure physical activity. However, accelerometers are more accurate and more precise at slower speeds and provide more complex variables (such as physiological signals, position orientation, and behavior detection), which can be helpful in differentiating activities such as sitting, standing, sleeping, walking, running, or yoga (Intille, Lester, Sallis, & Duncan, 2012).

The current situation of physical education teaching in primary schools in our country is concerned, although the new curriculum reform has made the teaching brand new, there are still problems such as mismatch between the teaching content and teaching methods, insufficient atmosphere in the classroom, and uncomplicated evaluation and examination system, which restrict the development of students' innovative thinking to some extent. It does not meet the goal of improving students' comprehensive literacy required by the new curriculum reform. (Zhuang Cuihua, 2022). The improvement of students' interest and achievement in PE requires teachers to refine teaching methods and carry out teaching activities in a way that meets students' characteristics and needs. Therefore, to improve the physical education of primary school students, and this study therefore attempts to develop a sports training curriculum based on situational teaching methods to improve the skills of "running, jumping, and throwing" and hope that students will develop the skills, conducive to the physical development of students and healthy physical exercise, can promote the growth be healthy and learning happily.

Objectives

1. To develop sports training course based on situational teaching method to improve the basic athletic skills for primary school students.

2. To compare students' basic athletic skills before and after the implementation of sports training course base on the situational teaching method of primary school students.

Research Hypothesis

After using sports training course based on situational teaching method, the students have improved basic athletic skills obviously.

Scope of the Research

The Population and the Sample Group
The Population

There were 240, 8 classes, fourth grade students of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. (There were student's mixed ability, high level, medium level and low-level abilities.)

The Sample Group

There were 30 students from the 1 class of the fourth grade of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. Through cluster random sampling.

The Variable
Independent Variable

Sport training course based on situational teaching method.

Dependent Variable

The basic athletic skills.

Content (s)

This research was to develop a sports training course based on situational teaching method to improve the basic athletic skills of primary school students. The sports training course consists of 3 learning units as follow: 1) running training course: relay running, endurance running, and fast running 2) jumping training course: single-foot jumping, double-foot jumping, and standing long jumping and 3) throw training course: throw the ball at a fixed point, throw the ball forward, and throw the solid ball.

Time

The study period was from April to November 2023 is divided into the following:
1. Develop proposal research in April 2023.
2. Modified and completed 1) the activity plan of sports training course based on situational teaching method and 2) the basic athletic skills test based on situational

teaching method.

3. Take lesson plans and research instrument to 3 experts to consider consistency, and try out research instrument in June 2023.

4. Experimental studies with sample group in the first semester of the academic year in July 2023 total for 63 hours: Because the students were in primary school, while practicing basic athletic skills the teacher must do carefully for avoid safety problems, they repeated exercises to complete the teaching content, and emphasizes training individual students to be able to truly practice.

Activity plan	Hour	Date
1. Running training course	21 hours	2023.7.8 to 2023.7.10
2. Jumping training course	21 hours	2023.7.12 to 2023.7.14
3. Throw the ball training course	21 hours	2023.7.16 to 2023.7.18

5. Summarize the research and complete the research paper from August to October, which published in November 2023.

Advantages

1. Student level

1.1 The situational teaching method can help students improve their basic athletic skills in a pleasant classroom atmosphere.

1.2 Situational teaching method can stimulate students' interest in sports learning course, gradually form sports participation habits, and lay the foundation for lifelong sports.

2.Teacher level

2.1 Teaching situation method can help teachers to start from the students' learning situation, so that students can find the key of sports skills, so as to shorten the distance between students and knowledge.

2.2 The Situational teaching method can help teachers summarize teaching experience.

Definition of Terms

1. Sport training course based on situational teaching method

1.1 Elements of sports training course

Sports training course is a course with students' physical exercise as the main means, through reasonable physical education and scientific exercise process, to achieve the purpose of strengthening physique and improving health.

1.2 Units of sports training course

The sports training course consists of 3 learning units as follow:

1) Running training course: relay running, endurance running, and fast running.

2) Jumping training course: single-foot jumping, double-foot jumping, and standing long jumping.

3) Throw training course: throw the ball at a fixed point, throw the ball forward, and throw the solid ball.

1.3 Steps of situational teaching method

Situational teaching method is a teaching method that encourages students to actively imitate. Enhance imagination outstanding imaginative thinking by this method of teaching determines the "situation" in the teaching process. So that students can learn and practice various movements. that is connected to the plot in a line with the laws of perception and emotional changes of children. In this research, the situation-based teaching method consists of five teaching Steps:

1) Create a situation is first the guiding language, guiding language is a very important link in situational teaching. When designing guiding language, teachers should combine the content of this lesson and real life, use vivid language or novel teaching props to attract students' attention, so that students are interested in the learning content.

2) Enter the situation is the students entering the teaching situation, it can be divided into two ways: Students enter into the situation by themselves and teacher guidance into the situation. Teacher guidance usually refers to the teacher using vivid and specific language to describe before explaining the action, so as to attract students' attention. Students enter by themselves refers to that after the teacher completes the scene introduction, fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students independently into the situation.

3) Strengthen situation is often composed of teachers using guiding language

reinforcement movements and correcting students' movements. When students conduct collective practice and group practice, the teacher will describe the key points of action in vivid and specific language, and at the same time continuously loudly remind students to correct their movements, and tour inspection to correct the mistakes of individual students.

4) Practice repeatedly is mainly included collective practice and group practice, each of which has its advantages and disadvantages. Teachers should choose the practice method according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the action, and correct the wrong actions of students, and select excellent students to show.

5) Guides the end is some activities at the end of the course. After the training, the students' physical function has changed greatly. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, and make the human body gradually transition from a tense movement state to a relatively quiet state, the teacher needs to lead the students to do some relaxation exercises. In addition, the teacher will summarize the performance of the students in this class, affirm and encourage the students, and finally announce that the students need to prepare for the next class.

2. The basic athletic skill

The basic athletic skill is meaning of track and field are the general term of all-round sports consisting of walking, running, jumping and throwing. And measure performance test at authentic assessment (holistic rubric for 3 scale). In the aimed this research with the fourth-grade students in primary school, the basic athletic skills for 3 skills were running, jumping and throwing:

1) The running skill is the most basic sports quality; especially fast running is one of the key training contents of children's physical quality. Running skill is a combination of the following basic abilities, namely speed skills, anaerobic endurance, aerobic endurance and running efficiency. The study of running skill includes three parts: fast running, endurance running and relay running.

2) The jumping skill is mean a kind of strength quality, which refers to the skills to use the explosive force of the waist and leg muscles to lift the body to a

certain height. The jumping skill mainly includes standing long jump, single-foot jump and double-foot jump.

3) The throwing skill is meaning of the skills of the human body to throw the specified equipment in hand through a certain form of movement, and is mainly measured by distance and precision. The throwing practice I studied is mainly through throw the ball at a fixed point, throw the ball forward and throw the solid ball.

Research Framework

The researcher has studied the documents and research related to situational teaching method from many researchers: Li Jilin (2017), Wang Zhende (2017), Zhang Siming (2018), and Zhao Haiyan (2021). In this research, synthesize into 5 steps used to develop an activity plans of sports training course according to the situational teaching method to improve the basic athletic skills for primary school students and defined as a framework for research concepts as follows:

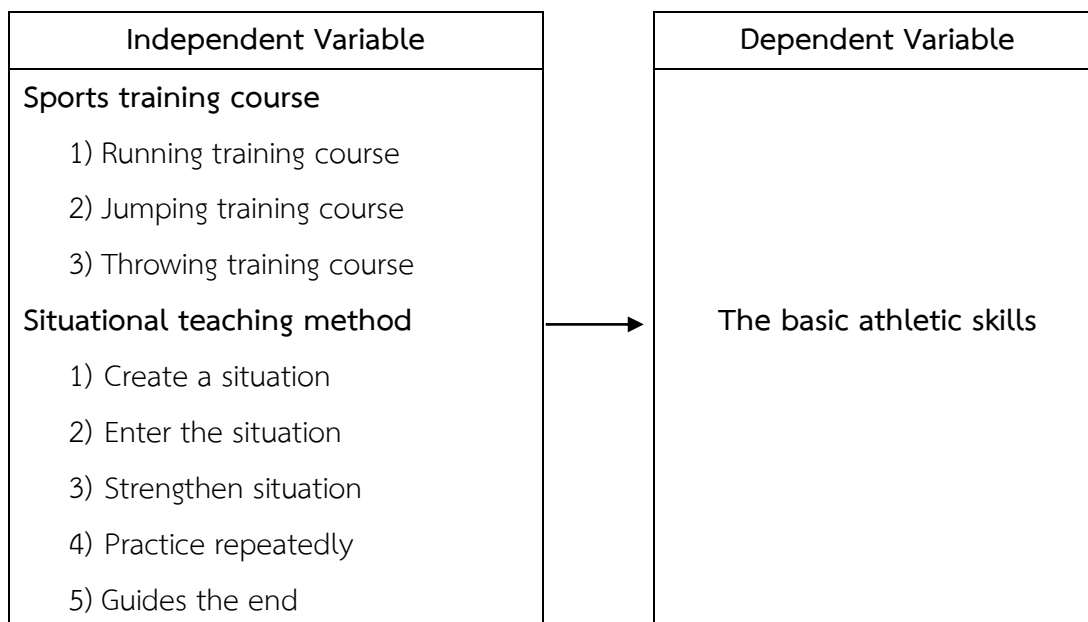| Independent Variable	Dependent Variable
Sports training course 　1) Running training course 　2) Jumping training course 　3) Throwing training course **Situational teaching method** 　1) Create a situation 　2) Enter the situation 　3) Strengthen situation 　4) Practice repeatedly 　5) Guides the end	The basic athletic skills

Figure 1.1 Research Framework

Chapter 2

Literature Review

The development of sports training course based on situational teaching method to improve the basic athletic skills for primary school students.The following literature were studied. This researcher has proposed theories and related research as follows:

1. Situational teaching method
2. Sports training course
3. The basic athletic skills
4. Measurement and evaluation of the basic athletic skills
5. Related research

The details are as follows:

Situational teaching method

In the 1960s, British applied linguists and foreign language teachers Hornby designed and proposed situational methods, when they introduce new knowledge to students, he needs to combine images and interesting scenes with teaching content, so as to help students understand what they have learned. He believes that in order to help students acquire enough knowledge and develop corresponding professional skills, teachers can create some vivid, vivid and specific situations to assist them in classroom teaching, which were later widely used in teaching methods around the globe. On the definition of situational teaching method, different scholars have also expressed different views. Zhou Dengsong (2012) situational teaching method is applicable to low and middle school students. It is a teaching method, which makes use of the lively and educational significance of low school students who are keen to imitate, rich imagination and dominant image thinking. This teaching method is mostly to set a "situation" in the teaching process, or even a "situation" runs through the teaching process of the whole unit and course, so that students can learn and

practice various movements connected with the plot, in line with the law of children's cognition and emotional change.

The meaning of Situational teaching method

In 1989, Blount, Collin, Dagid (2009) and other foreign scholars mentioned in their article "Context Cognition and Learning Culture" that "Knowledge learning brought by leaving the environment is worthless, and only by feedback learning in a specific environment can we get the knowledge closest to the true self". And take the lead to define "situation teaching": " in a specific environment, any learning knowledge will show in different form and is absorbed by our learning use, situation teaching in the teaching process building series in accordance with the teaching atmosphere, students into a specific teaching situation atmosphere, in order to promote students to better learning to master knowledge and skills."

Zhou Dengsong (2012) Situational teaching method is a lively and educational teaching method mainly applicable to junior and middle grade students in primary schools. It takes advantage of the age characteristics of junior students who are keen to imitate, rich in imagination and dominated by image thinking. This kind of teaching method mainly sets a "scene" in the teaching process, or even uses a "scene" to run through the whole teaching process of units and courses, allowing students to learn and practice various movements connected by plots, which conforms to the rules of children's cognition and emotional changes.

Gu Mingyuan (2016) "Dictionary of Education" regards "situational teaching" as a method to induce and stimulate students 'learning desire, participate in, improve students' learning enthusiasm and improve learning effect and quality " by creating a situational atmosphere environment that conforms to the authenticity and the reality of learning content. It reflects the original intention and core value of situational teaching.

Li Jilin (2017) Li Jilin is the most widely known in China, and gives the concept of situational teaching method: situational teaching method is a teaching method that allows students to learn knowledge and train skills in situations by creating effective situations. Children's situational learning establishes the core concept of "combining emotional and cognitive activities", highlighting "emotion". She thinks situation teaching in cognitive feelings and create environment, cognitive feelings and theoretical knowledge,

cognitive emotion and behavior, cognitive emotion and the comprehensive development of constructing real situation, to stimulate students to learn enthusiasm, improve learning enthusiasm, realize the organic combination of emotional cultivation and knowledge skills learning, to form a teaching method"

Wang Shuai & Li Xiaolong (2020) In scene sports teaching, situational teaching using creating teaching problems, game, situational, competition, arouse the enthusiasm of the students, stimulate students' interest, promote students to master the corresponding skills, at the same time through teaching feedback further optimize teaching situation setting, improve the sports classroom efficiency. Therefore, teachers 'use of situational teaching method to teach is of great significance to promote students' physical education knowledge and the formation of skills. His teaching steps are: His teaching steps are: 1) Based on the teaching content, set corresponding scenarios, 2) Set questions, propose and guide students to identify problems, 3) Autonomy and group cooperation Solving problems, and4) Mastering corresponding skills.

In 1983, Dewey, an American educator, also talked about situational teaching. He thought: "If you want students to have an exploratory way of thinking, you need to construct various scenarios to stimulate students' thirst for knowledge." In addition, Dewey believed that teachers should have careful thinking to design various teaching scenarios with different degrees of difficulty.

Grace T. Flores (2021) believes that the situation is that learners provide reference for the new knowledge to be learned by connecting the familiar things and the learned knowledge. With the reference of the previous knowledge, students can quickly understand the new knowledge in the learning process and connect the new knowledge with the previously learned content, thus forming a new knowledge system.

Sun Wenjie (2021) Situational teaching method is a teaching method in which teachers consciously create certain images, vivid and specific scenes according to the teaching purpose in specific teaching, so as to render classroom emotions and arouse students' attitude experience, so as to help students better understand the teaching content and promote the better development of students' sports and mental functions. In daily teaching, situational teaching method is a good teaching

strategy, which can conform to the direction of the reform and development of physical education curriculum in primary schools. Compared with other teaching methods, it pays more attention to students' performance and feelings, and can make students immerse themselves in it and experience the fun. Teaching situation method can help teachers to start from the students' learning situation, so that students can find the key of sports skills, so as to shorten the distance between students and knowledge. Research shows that the teacher through the creation of life teaching situation to teach sports knowledge, can better guide the healthy development of body and mind, in particular, is the primary school physical education teachers combined with the actual situation of students, create vivid, specific teaching situation, make students have strong interest in sports skills, let their learning state in a best learning level.

In summary, many scholars at home and abroad have expressed their views on the concept of situational teaching method. According to the research purpose and content, situational teaching method is defined as follows: Situational teaching method is a teaching method in which teachers consciously create certain images, vivid and specific scenes according to the teaching purpose in specific teaching, so as to render classroom emotions and arouse students' attitude experience, so as to help students better understand the teaching content and promote the better development of students' sports and mental functions.

The importance of situational teaching method

Li Jilin (2016) She put forward the theory of "situational teaching", which advocated the realization of five steps of teaching activities through teacher create a situation, students enter the situation, teachers strengthen situation, students practice repeatedly and teachers guiding the unity of emotion and cognition. 1) Teacher create a situation is first the guiding language and preparation, guiding language is a very important link in situational teaching. When designing guiding language, teachers should combine the content of this lesson and real life, use vivid language or novel teaching props to attract students' attention, so that students are interested in the learning content. 2) Students entering the situation can be divided into two ways: independent introduction and teacher guidance. Teacher guidance usually refers to the teacher using vivid and specific language to describe before explaining the action,

so as to attract students' attention. Students 'independent substitution refers to that after the teacher completes the scene introduction, fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students independently substitute into the situation. 3) teachers strengthen situation is often composed of teachers using guiding language reinforcement movements and correcting students' movements. When students conduct collective practice and group practice, the teacher will describe the key points of action in vivid and specific language, and at the same time continuously loudly remind students to correct their movements, and tour inspection to correct the mistakes of individual students. 4) students practice repeatedly mainly include group practice and group practice, each of which has its advantages and disadvantages. Teachers should choose the practice method according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the action, and correct the wrong actions of students, and select excellent students to show. 5) teachers guiding the unity of emotion and cognition: Li Jilin believes that children's brain preferentially receives emotional signals, and the learning activities accompanied by positive emotions can obtain efficient knowledge. Situational education is to combine children's cognitive activities and emotional activities.

Wang Zhende (2017) He put forward the theory of "situational interaction", which advocates realizing the unification of situation and interaction through the five links of situation creation, role playing, analysis and comment, emotional experience, and summary evaluation. The specific steps to implement this theory: 1) Create a situation: This includes the design of a real or simulated scene, covering a variety of sensory elements, such as vision, hearing, smell, touch, etc., to help students better understand and invest. 2) Role playing: Let the students play different roles in this scene, look at the problems from different perspectives, and enhance their empathy ability and problem-solving ability. 3) Analysis Comment: After role play, students discuss and comment on an in-depth analysis of the roles and scenes they experience to enhance their critical thinking and problem-solving skills.4) Emotional experience: Through the previous steps, students can better understand the scene and the characters, thus producing real or simulated emotional responses. This emotional experience can

enhance students' emotional cognition and emotional processing ability. Through these steps, the unity of situation and interaction can be realized to help students to better understand and deal with various situations. 5) Summary evaluation: At the end of the course, the summary of a class and the analysis and summary of the advantages and disadvantages can help teachers to improve and improve the course.

Zhang Siming (2018) He put forward the theory of "situational experience", which advocated realizing the unification of situation and experience through four stages of situation creation, practical experience, sharing and communication, and emotional sublimation. Specific steps for the implementation of Zhang Siming's "situational experience" theory: 1) Create a situation: through language, music, painting, dance and other ways, create a real or simulated situation, to arouse students' emotional resonance and experience. 2) Practical experience: Students experience in this situation, and enhance the perception and understanding of the situation through feeling and participation. 3) Sharing and communication: After the experience, students will share and communicate to express their feelings and ideas, so as to enhance the interaction and communication between students. 4) Emotional sublimation: Through the previous steps, students have a deeper understanding and feeling of the situation and experience, and they need to sublimate their emotions and transform the experience into positive emotions and values. Through these steps, the unity of situation and experience can be realized, help users better understand and deal with their emotions, and improve their emotional cognition and emotional processing ability.

Fu Yinyin (2019) Mentioned in the article "Experimental research on situational teaching method in the first grade basketball teaching of Beijing Heping Li No.1 primary school" that the emergence of situational teaching method is a supplement to the more traditional teaching methods in the past, and the traditional teaching method emphasizes the mastery of technology and ignores the cultivation of students' desire to explore. The situational teaching method encourages students to discover and perceive knowledge in different situations, stimulate students' desire to explore, give play to their imagination and creativity, and promote the mastery of motor skills.

Wang Chengkai (2019) He pointed out that the physical education teachers set up scenarios according to the actual situation of students and the arrangement of

teaching content to create a pleasant and diverse learning atmosphere for students, and seize the curiosity of students by improving their learning interest, so that students can actively participate, activate their body and mind, master their skills, and improve their physical fitness. In football teaching, using situational teaching method can make PE teaching more knowledgeable, interesting and sustainable.

Zhao Haiyan (2021)　Zhao Haiyan put forward the theory of "situational cognition", which advocates realizing the unification of situation and cognition through five processes: creation a situation , practical exploration, autonomic learning, collaborative learning and reflection and summary. Specific steps for the implementation of Zhao Haiyan's "situational cognition" theory: 1) Create a situation: the teacher creates a real or simulated situation for students to help students better understand and apply knowledge. 2) Practice exploration: students practice and explore in the created situation, and enhance their understanding and master knowledge through personal experience. 3)Autonomic learning: Students make their own decisions, do not accept others' control, do not accept external interference, through independent analysis, exploration, questioning and other methods to achieve learning. 4) Collaborative learning: Students learn and share experiences with others through group cooperation or team learning to enhance their communication and cooperation skills. 5) Reflection and summary: Students should reflect on and summarize in the learning process, thinking about their own performance and knowledge learned in the previous steps, so as to enhance their understanding and memory. Through these steps, the unity of situation and cognition can be realized to help students to better understand and apply knowledge.

Wang Peng & Hua Ming (2021) They pointed out in their research that, among a series of teaching methods, situational teaching method is more vivid and applicable to primary school teaching. It can effectively stimulate the interests of primary school students, fully mobilize their playful and imitative nature, and enhance their enthusiasm for classroom participation. Therefore, when using the situational teaching method, we should consider how to mobilize the emotions, motivations, interests and aspirations of primary school students, which can create a lively classroom atmosphere, fully mobilize the enthusiasm and participation of primary school students, improve the efficiency of classroom teaching, and also help improve the quality of teaching.

Wang Kun (2022) He carried out research and analysis through experimental method and questionnaire survey and mathematical statistics, and reached the following conclusions: 1. Situational teaching method can more effectively design more targeted training programs for different competition situations and teaching contents; 2. According to the statistical analysis of the experimental results, both the situational teaching method and the traditional training method can improve the dribbling skills, but the situational teaching method is more conducive to improving the students' skills to carry the ball around the pole, step on the ball for 30s, touch the ball with both feet for 1 minute and carry the ball in the game; 3. The training results show that the situational teaching method can improve the dribbling skill of primary school students more than the traditional teaching method. Therefore, situational teaching method plays a positive role in primary school students' sports learning.

Table 2.1 Synthesis of the situational teaching method

Author	Li Jilin (2017)	Wang Zhende (2017)	Zhang Siming (2018)	Zhao Haiyan (2021)	My research
Step1	1) Teacher create a situation	1) Create a Context	1) Create a situation	1) Create a situation	1) Create a situation
Step2	2) Student enter the situation	2) Role playing	2) Practical experience	2) Practice exploration	2) Enter the situation
Step3	3) Teacher strengthen situation	3) Analysis comments	3) Sharing and communica-tion	3) Autonomic learning	3) Strengthen situation
Step4	4) Student practice repeatedly	4) Emotional experience	4) Emotional sublimation	4) Cooperative learning	4) Practice repeatedly
Step5	5) Teacher guide the unity of emotion and cognition	5) Summary evaluation		5) Reflection and summary	5) Guides the end

From Table 2.1 In summary, situational teaching method can creates image, vivid and specific scenes, make boring knowledge and mechanized repetitive practice more lively and interesting, stimulate students' emotional resonance, help students to understand the content of learning quickly and deeply, master sports skills, so that students no longer mechanically imitate the teacher's demonstration of action, but through their own thinking and understanding to learn sports knowledge, make students receive better academic performance and training skills in the appropriate situation. From the study of the importance of many researchers, the researcher synthesized steps to be used in this research and used to develop a lesson plan according to situational teaching method approach to further develop students' the basic athletic skills of primary school students consist of five stages: 1) create a situation, 2) Enter the situation, 3) Strengthen situation, 4) Practice repeatedly, and 5) Guides the end.

Sports training course

Sports training course is meaning a course with students' physical exercise as the main means, through reasonable physical education and scientific exercise process, to achieve the purpose of strengthening physique and improving health.

The meaning of sports training course

Ma Ce & Wei Pilai (2015) Sports training course is a compulsory professional basic course for students in sports training . Its teaching purpose is to make students understand the essence and law of sports training practice scientifically, so as to guide students to consciously use the theoretical knowledge of sports training and improve their basic ability to guide the practical activities of sports training. Over the years, in the process of classroom teaching, mainly to the teaching of theoretical knowledge, ignoring the cultivation of students' practical ability. In sports training teaching, therefore, in addition to the traditional interpretation, according to the different teaching objectives to choose different training practice case, and through a variety of case situation let students dressed in a variety of project training to discuss, grasp, learning sports training theory and principle method, to better cultivate students' ability to analyze and solve problems. The teaching method in sports training course is of positive significance to improving students' practical ability and course teaching quality.

Zhu Xingliang (2022) Sports training courses refer to sports activities that take students as the main participants. By cultivating students' sports interests, attitudes, habits, knowledge and skills, students can enhance their physical fitness, cultivate their moral and volition qualities, and promote their physical and mental health.

Li Haiyang (2022) Sports training course is a specialized educational process in which schools use spare time to train students with certain sports talents, cultivate their competitive skills, and enable them to develop and improve their sports skills. It is an important measure to achieve the goals and tasks of school sports. It is also an important intermediate link in popularizing and improving sports.

Tang Yingying & Chen Yun (2022) The physical training course is a special class of courses for physical education teachers and an important part of practical teaching. Normal students first apply their teaching skills to practical teaching by practicing teaching skills such as introduction, teaching, questioning, class closing and blackboard writing. From this point of view, sports training course is a practical and flexible course.

In summary, sports training courses are an integral part of the whole school education, which refers to purposeful, planned and organized educational activities, by cultivating students' sports interests, attitudes, habits, knowledge and skills, students can enhance their physical fitness, cultivate their moral and volition qualities, and promote their physical and mental health. It can cultivate students' competitive skills, and enable them to develop and improve their sports skills.

The importance of sports training course

Shi Tie (2013) Sports training course cannot only comprehensively improve the physical quality of students, but also cultivate their good moral quality, and at the same time, it is beneficial to comprehensively exercise and improve their psychological quality.

Hou Shuhui (2018) Sports training course is an important mission to cultivate students' sound personality and will quality, and also an important mission to cultivate moral integrity. In the sports and health curriculum standard specifically mentioned: " Physical training activities not only contribute to physical health, but also can improve mental health. Often participate in sports training, so that students

have a more profound understanding of the value of rules and rules, and help students to recognize, evaluate and internalize social rules. Sports training class, in order to make the teaching method is flexible, arouse the enthusiasm of students 'initiative, teachers often use group game or game method to achieve some teaching purpose, in the process, students for cooperation, competition, the outcome have a more profound experience and cognition, help the development of students' interpersonal intelligence, make the students can adapt to the society in the future, and in study, life, work with others.

Sun Jing (2018) Physical education training course is one of the basic ways to develop education in an all-round way in China. Physical education in primary and secondary schools plays a unique role in cultivating people who are morally, intellectually, physically, aesthetically and industrially developed and in promoting children's socialization. Physical training courses in primary and secondary schools have good effects on the acquisition of gender roles, improvement of mood, confirmation of self-concept, intellectual development, stress reduction, internalization of social rules, and interpersonal intelligence.

He Zhenyong (2020) Carrying out physical training activities is the main channel of physical education teaching. One, is also the inevitable requirement of modern teaching concept. The teacher should weigh from From the perspective, design more sports content to enhance students' movement perception. The diversification of sports forms is also an important development of extracurricular sports for primary and middle school students direction, in the choice, participation, the enthusiasm of students sports.Physical culture teaching needs to extend the space, let the students exercise in the interesting practice, Improve their athletic ability, develop the habit of unity and cooperation, and promote their health grow up.

In summary, sports training courses can promote the normal development of students 'body, promote the all-round development of sports quality and sports function, effectively regulate the sports teaching process and method, improve the level of students' health effectively to cultivate good moral quality and psychological quality, promote the comprehensive and harmonious development of students, has a great influence on the cultivation of willpower. Sports training allows the students

to have an interesting practice, improve their sports ability, and develop the habit of unity and cooperation.

The basic athletic skills

Motor skill refers to the ability to master and effectively complete specialized movements in human movement.The basic athletic skills of track and field are the general term of all-round sports consisting of walking, running, jumping, throwing and other sports. In my research, the results of "running, jumping and throwing " are mainly used as the evaluation criteria.

Meaning of the basic athletic skills

Li Mei (2020) In primary school physical education course teaching, sports skills, and let the students through repeated training to master the skills is need a process, guide students to master strong interest in sports skills, and actively cooperate with teachers' teaching, make sports skills training students consciously complete task, improve the level of pupils' sports skills, let them from sports skills training, harvest life precious wealth.

Li Yulian & Fan Lixia (2022) Basic athletic skills are the skills formed in children, including walking, running, jumping, throwing and catching. They are the basis for participating in sports activities and mastering specific skills. Basic athletic skills are closely related to people's cognitive development level. As the basis of specific motor skills, basic athletic skills are of important positive significance for physical participation, perceived athletic ability and physical and mental health in childhood and even in adults.

Dong Yingying & Zheng Yunfei (2022) Basic athletic skills are a basic movement pattern that is the foundation for participation in games, sports and other physical activities .Lack of instruction and practice of basic athletic skills in childhood may cause delayed athletic development, with evidence that appropriate practice and instruction are more likely to achieve higher levels of basic athletic skills in children.

Hu Xiaoqing (2022) Basic athletic skill usually refers to common basic movements with specific patterns or basic movements with high proficiency, which generally covers the combination of movements of two or more body parts. It is a

kind of basic motor skill necessary for survival, life, work, study and development of special motor skills formed on the basis of genetic athletic genes, it is an indispensable factor to support teenagers to participate in sports.

In summary, basic athletic skills such as running, jumping, throwing are the prerequisite or cornerstone for a person to participate in all sports or events, and most of the special sports or motor skills are upgrades of basic athletic skills.

The importance of the basic athletic skills

Lu Jindong (2015) In high school physical education, track and field, as a traditional teaching item, has always been valued by teachers and students, because it plays a significant role in cultivating students' basic sports skills.

Chen Jiangdong (2019) Physical education is an important content in the overall environment of quality education, which is related to the healthy development of students' body and mind. In the overall environment of deepening the reform of the education system, physical education has gradually received widespread attention from the whole society. There is a close relationship between basic sports skills and sports display competition. The article analyzes this and puts forward relevant teaching suggestions in order to strengthen students' comprehensive sports skills and promote the improvement of modern sports teaching effect.

Hua Xuejuan (2021) the physical health of students is an important basis for their participation in learning. Therefore, in order to ensure the stability and continuity of learning, let students pay attention to health, improve their physique, and make students stronger, which has prominent practical significance. An analysis of the current education practice of primary school students will find that students have a weak concept of health, coupled with the love of their families, many students do not have healthy living habits, which leads to their poor physical quality, so they cannot effectively cope with challenges in learning and living practice. In order to, change this state, it is of great practical significance to carry out corresponding measures based on the enhancement of sports skills and physical health.

Yuan Xinglin (2021) the primary school is an important period for the development of students' physical quality. The action of throwing the solid ball forward can exercise the students' physical coordination and sensitivity, because

students need to make concerted and rapid efforts when throwing the solid ball.

In summary,it is believed that "running, jumping and throwing" can fully improve the level of human health and physical function, play an important role in the overall improvement of students' physical quality, and also have a certain impact on strengthening students' psychological quality and communication skills.

Measurement and Evaluation of the basic athletic skills

The standardized tests involved in the process of measurement assessment and evaluation enables the students to make better use of the data available in the daily classroom. It offers learners with an understanding of the role of assessment and evaluation in the instructional process. Measurement assessment and evaluation also helps the teachers to determine the learning progress of the students. Without measuring and evaluating their performance, teachers will not be able to determine how much the students have learned. The basic purpose of both measurement assessment and evaluation is to determine the needs of all the learners. Measurement assessment and evaluation also enables educators to measure the skills, knowledge, beliefs, and attitude of the learners. Assessment plays a vital role in evaluating the students' academic as well as interest and motivational values.

1.Types of Assessment and testing

1.1 Authentic assessment

Gulikers et al. (2004) describe the characteristics of authentic assessments and criteria from another perspective. "Use detailed criteria to explain to students what it means to do their work well, and evaluate students' work against those rubrics. "This means that authentic assessment not only requires students to complete real or simulated tasks, but also requires them to demonstrate their mastery of the knowledge and skills they have learned, including the development of a variety of complex abilities such as problem solving, communication and cooperation, and critical thinking. The traditional rubric usually only tells teachers and students what level to achieve, while the authentic assessment not only tells teachers and students what level to achieve, but also tells teachers and students how to achieve this standard. This means that the criteria for authentic assessment is detailed,

explicit, and focused on the mastery of basic knowledge. In general, authentic assessment and rubrics focus on students' actual ability and mastery of knowledge and skills, rather than just a single, traditional way of testing. They emphasize the active participation and cooperation of students, as well as the guidance and design of teachers.

Hattie Rodney & Timperley Lauren (2007) define formative assessment as "the process by which a teacher collects information about student learning multiple times in order to modify and improve instruction over the course of a lesson, unit, course, or long-term learning". They emphasize that formative assessment is designed to help teachers and students identify and solve learning problems to improve learning outcomes. A summative assessment is an assessment at the end of a period of learning (such as a semester or a year) that aims to make a summative judgment on the student's learning outcomes throughout the period.

Marsh (2010) divided curriculum assessment into four categories: diagnostic assessment, formative assessment, summative assessment and comprehensive assessment. Among them, diagnostic assessment aims to identify students' needs and problems, formative assessment is used to feedback and improve students' learning, summative assessment is used to make final judgment on students' learning results, and comprehensive assessment is a combination of the above three categories.

Nkhoma, C., Nkhoma, M., Thomas, S., & Le, N. Q. (2020) The research shows that as the link between learning and teaching, teaching assessment is very important. Authentic assessment can be interpreted in various ways. First, the definition is grade-centered, context-centered, and student-role-centered, ignoring other relevant features of authentic assessment. Second, pure memory is common in other traditional assessments, but it should also be included in the assessment in cases where it is actually necessary to play a memory role. Finally, some people believe that authentic assessment is part of performance evaluation. in addition rubrics play a vital role in education and teaching, it is an important basis to ensure the quality and effect of education and teaching. In the current educational environment, the improvement of students' comprehensive ability is placed in a very important position, and teachers are also thinking about various effective ways, so

the assessment method is constantly improving. This highlights the value of curriculum rubrics, which are of great significance to the standardization of education and teaching, the guidance of teachers' teaching, the improvement of students' learning effect, the promotion of education reform and development, and the promotion of education internationalization.

Assessment and testing are very important in the field of education, they can help teachers, students and related administrators to understand the teaching effectiveness of the curriculum and student learning outcomes. The following are several types of curriculum assessments and tests. In summary, the curriculum evaluation and testing types are diverse, and each evaluation method has its own specific purpose and application scope, which is of great significance for both teachers and students.

1.2 Rubric and authentic assessment

" Rubric" is a regulation of the performance level of an activity, which is a scoring method. As North (2003) states about rating levels, also known as "scoring rubrics", originate from different responses from educators and studied the ideas of academics who have different opinions about the concept of rubrics, as shown in Table 2.2.

Table 2.2 The opinions on the concept of rubric

Scholar	central idea
Heidi Goodrich (1996)	Defines it as a scoring tool that lists the criteria for a work, contains the criteria or expectations required for evaluating the work, and describes in detail the criteria for each grade (superior to poor) quality.
Asmus (1999)	He is believed that the rating scale is a descriptive rating scale developed by teachers or evaluators and aims to analyze student learning outcomes, including learning works and learning processes.
Craig A.Mertler (2001)	The evaluation rules are based on a checklist, formally developing scoring guidelines containing preset performance criteria, and evaluating a high use of student work in performance evaluations

Table 2.2 The opinions on the concept of rubric (Continue)

Scholar	central idea
Judith Arter, Jay Mctighe (2005)	The scoring rubrics is a specific form of a standard: it is a written standard for interpreting and determining all scoring points. The best scoring rubrics can often reflect the substance of classroom assessments endorsed by the faculty member and can provide good advice for components of qualified achievement.
Marcello Knobe (2013)	The evaluation rules are descriptive scoring systems designed and developed by teachers or other assessors in collaboration with students, and are tools to guide the evaluation.
Wu Xuefeng (2018)	Rubric is a authenticity evaluation tool. It is a set of standards for evaluation or grade of students' works, achievements, growth records or performance. It is also an effective teaching tool and an important bridge between teaching and evaluation.
Li gang & Lv Lijie (2018)	Rubric as a structured evaluation tool, describes the specific expectations of students learning performance, it is generally believed that gauge is to students' academic performance, including in the process of learning behavior, cognition, attitude and various learning results (works, oral statements, research report, papers, etc.) to evaluate a set of standards. A relatively complete gauge usually contains five elements, namely, the performance task, performance direction, performance level, performance behavior, and performance record.

1.3 Type of rubrics criteria

Herman et al. (1993) Assessment criteria, assessment scales, definitions of each criterion, should be provided. and a clear description of specific performance levels.

Popham (1997) defined the instructional term " rubric " refers to "an indicator for assessing the quality of a student's response. "The scoring criteria are listed on a rubric, which also depicts all degrees of excellence.

Andrade (2000), Arter & Chappuis (2006). Rubrics are described as

"assessment instruments designed to assist in identifying and evaluating qualitative differences in student performance".

Bargainnier (2003) On the other end of the spectrum, task-specific rubrics have criteria and descriptions that correspond to particular aspects of a performance. As a result, it is only appropriate for a single task, like football dribbling.

According to the evaluation and grading process, the rubrics are divided into two types: "overall" and "analysis". When it is necessary to evaluate the components of a task separately, the rubrics are ideal. Therefore, the scoring criteria, a rating scale, definitions for each criterion, and descriptions for specific performance levels, each entry on the table describes the representation of multiple features. There are many ways to measure exercise performance, as mentioned by Adamo, Prince, Tricco, Connor-Gorber, & Tremblay (2009) most physical activity assessment include; frequency, intensity, duration, and type of physical activity during a particular period of time. Activity-specific expenditure values (e.g., metabolic equivalents and kilocalories) are then calculated to estimate total energy expenditure from all activities measured (Adamo et al., 2009). The most common tools for physical activity assessment include pedometers, accelerometers, load transducers, and heart rate monitors. All of these mechanisms have varying degrees of accuracy and measure characteristics such as frequency and duration of physical activity events, intensity levels, stride length, and walking speed (Butte, Ekelund, & Westerterp, 2012). Pedometers are a robust, cost-efficient, and convenient tool to measure physical activity. However, accelerometers are more accurate and more precise at slower speeds and provide more complex variables (such as physiological signals, position orientation, and behavior detection), which can be helpful in differentiating activities such as sitting, standing, sleeping, walking, running, or yoga. The researcher has developed to measure the rubric to solve the basic athletic skills problems consistent with the objectives and suitability as shown in Table 2.3

Table 2.3 Scoring criteria used to measure of the basic athletic skills

Criteria \ Sport training		Very Good (5) Complete all items	Good (4) slight glitches	Fair (3) Moderately flawed	Poor (2) Mostly flawed	Very Poor (1) not all complete
Relay running	Boy	Less than 1.18 minutes	during 1.18-1.21 minutes	during 1.22-1.29 minutes	during 1.30-1.33 minutes	More than 1.33 minutes
	Girl	Less than 1.22 minutes	during 1.22-1.25 minutes	during 1.26-133 minutes	during 1.34-1.37 minutes	More than 1.37 minutes
Endurance running	Boy	Less than 1.52 minutes	During 1.52-1.63 minutes	During 1.64-2.25 minutes	During 1.64-2.25 minutes	More than 2.29 minutes
	Girl	Less than 1.57 minutes	during 1.57-2.08 minutes	During 2.09-2.30 minutes	During 2.31-2.34 minutes	More than 2.34 minutes
Fast running	Boy	Less than 8.8 seconds	During 8.8-9.1 seconds	During 9.2-9.9 seconds	During 10.0-10.3 seconds	More than 10.3 seconds
	Girl	Less than 9.2 seconds	during 9.2-9.5 seconds	during 9.6-10.3 seconds	during 10.4-10.7 seconds	More than 10.7 seconds
Single-Foot Jumping	Boy	Less than 3.68 seconds	During 3.68-3.71 seconds	During 3.72-3.79 seconds	During 3.80-3.83 seconds	More than 3.83 seconds
	Girl	Less than 4.08 seconds	during 4.08-4.11 seconds	during 4.12-4.19 seconds	during 4.20-4.23 seconds	More than 4.23 seconds

Table 2.3 Scoring criteria used to measure (Continue)

Criteria \ Sport training		Very Good (5) Complete all items	Good (4) slight glitches	Fair (3) Moderately flawed	Poor (2) Mostly flawed	Very Poor (1) not all complete
Double-Foot Jumping	Boy	Less than 4.74 seconds	during 4.74-4.77 seconds	during 4.78-4.85 seconds	during 4.86-4.89 seconds	More than 4.89 seconds
	Girl	Less than 5.14 seconds	during 5.14-5.17 seconds	during 5.18-5.25 seconds	during 5.26-5.29 seconds	More than 5.29 seconds
Standing long jumping	Boy	More than 1.66 meters	between 1.57-1.66 meters	between 1.36-1.56 meters	between 1.29-1.38 meters	Less than 1.29 meters
	Girl	More than 1.56 meters	between 1.48-1.56 meters	between 1.30-1.47 meters	between 1.21-1.29 meters	Less than 1.21 meters
Throw a solid ball into Logo	Boy	into Logo circle 5 balls	into Logo circle 4 balls	into Logo circle 3 balls	into Logo circle 2 balls	into Logo circle 1 ball or not at all
	Girl	into Logo circle 5 balls	into Logo circle 4 balls	into Logo circle 3 balls	into Logo circle 2 balls	into Logo circle 1 ball or not at all
Throw the ball forward	Boy	More than 7.1 meters	between 6.5-7.1 meters	between 5.2-6.4 meters	between 4.2-5.1 meters	Less than 4.2 meters
	Girl	More than 5.2 meters	between 4.4-5.2 meters	between 2.6-4.3 meters	between 2.0-2.5 meters	Less than 2.0 meters

Table 2.3 Scoring criteria used to measure (Continue)

Criteria / Sport training		Very Good (5) Complete all items	Good (4) slight glitches	Fair (3) Moderately flawed	Poor (2) Mostly flawed	Very Poor (1) not all complete
Throw the solid ball	Boy	More than 6.9 meters	between 6.3-6.9 meters	between 5.0-6.2 meters	between 4.0-4.9 meters	Less than 2.0 meters
	Girl	More than 5.1 meters	between 4.3-5.1 meters	between 2.5.-4.2 meters	between 1.9-2.4 meters	Less than 1.9 meters

Source: Make the evaluation according to the requirements of "Physical Education and Health Curriculum Standards". "Physical Education and Health Curriculum Standards" (compulsory education stage, 2011 edition),

From Table 2.3 the quantitative evaluation of students' physical education results, in line with the requirements of the curriculum standards for a comprehensive evaluation of students. The test results of physical education sports skills are combined with a certain weight to determine the results of physical education. This method is born to the importance of the "National Student Physical Health Standard", which is simple and practical, reflecting the performance of students' physical education.

Related research

Sun Wanqing (2021) On the basis of in-depth access to the relevant theory and practical experience of situational teaching, this paper chooses to use the teaching experiment design method to complete the research, and creates a vivid and flexible physical education teaching scene in the teaching. Carry out the teaching concept of "teacher-led, student-oriented", guide students to take the initiative to participate in the classroom, so that students can gradually improve their physical education performance, physical education learning interest and classroom performance in an active and happy atmosphere, so as to improve the teaching quality. Based on the theory of domestic and foreign research, this paper studies the

empirical influence of situational teaching method on third grade primary school students. Through the literature review, experiment, questionnaire survey, observation, mathematical statistics and other research methods, the situational teaching case suitable for the third grade of primary school students is designed to carry out the experimental teaching. In the teaching activities of primary schools, "running, jumping and throwing" are the basic teaching materials that play an important role. Therefore, these three kinds of teaching materials are selected as the experimental teaching design content, and 73 students of Zhuanghe Changsheng Street Central Primary School are taken as the experimental objects. The experimental group uses the situational teaching method to teach, and the control group teaches according to the conventional teaching method, through the experimental teaching method to verify whether the situational teaching method can have a positive impact on the students' physical education learning performance, learning interest and learning performance. The results show that: significant differences between the experimental group before and after the experiment.

Shi Lihua (2022) adopted the situational teaching method in the primary school basketball teaching. During the experiment, 62 boys in grade six of primary school were selected. The results show that students' learning attitude, learning interest and initiative have been significantly improved, while traditional teaching methods have also improved these indicators to a certain extent, but to a lesser extent. Situational teaching method also plays a positive role in students' dribbling, passing, shooting and other skills.

Wang Kun (2022) studied the implementation effect of the situational teaching method design in the third-grade students of Qingtaishan Primary School affiliated to Sichuan Normal University. The selected experimental subjects were the third grade students of our primary school, 30 students in the experimental group and the control group, including an equal number of boys and girls. through Excel and SPSS26.0 version statistical software to provide data support for this study, and the following conclusions were drawn: The experimental and control groups significantly improved the four football skill levels and football game indicators. In the experimental group, the indexes of the foot and competition were significantly

better than those of the control group.

Liu Zhaohui (2022) In the Study, 40 primary school students in the badminton interest class of Dongchang Road Primary School in Liaocheng city were taken as the experimental subjects, and they were randomly divided into the control group and the experimental group with the equal number of people, select three badminton technology test index as a test index of this study. Study results: badminton technique test results: the experimental group and the control group (p <0.01); the test scores between the experimental group increased more than the control group. Conclusion: (1) Both the situational teaching method and the traditional teaching method can improve the badminton skills of the experimental subjects, but the situational teaching method is better than the traditional teaching method. (2) The situational teaching method and the traditional teaching method can improve the physical quality of the experimental subjects, but the situational teaching method is better than the traditional teaching method.

Du Xinwang (2020) This experimental study divided 60 students from the third grade of Shandong Normal University into experimental group and control group. In the teaching process, he took the physical and mental development characteristics of contemporary children as the basis, for the first time to apply the situational teaching method to children's table tennis teaching, give full play to the advantages of the teaching method, so that students' ability to be developed in an all-round way. According to the current research situation at home and abroad, this paper summarizes the application of situational teaching method and table tennis teaching method, which provides theoretical support for the application of situational teaching method in children's table tennis forehand attack teaching. His experimental study adopts the experimental control method. The experimental group is situational teaching method, and the control group is traditional teaching method. The statistical analysis of the experimental results shows that; 1) it is feasible to use the situational teaching method in the teaching of table tennis forehand attack for children aged 8-9 years old. 2) The situational teaching method is applied to children's table tennis teaching, and the teaching effect is better than the traditional teaching, which is embodied in the technical action evaluation of

forehand topspin click and forehand topspin.3) situational teaching method in children's table tennis teaching is better to cultivate students' sense of ball than the traditional teaching method.

Feng Xiaolei (2023) In this study, 100 students from two classes in Guangyuan City, Sichuan Province were divided into experimental classes and control classes, with different teaching methods. The results show that Compared with the traditional teaching methods, students who use the situational teaching method in class have good learning initiative, full learning emotions and strong sense of participation, they can better understand the principle and connotation of the teaching movements, better grasp the rhythm and movement track of the technical movements, and ensure the accuracy of the movements more skillfully.

In summary, situational teaching method can arouse students' positive and healthy emotional experience in the teaching process, and directly improve students' enthusiasm for learning, it can make abstract knowledge concrete and visualized, makes students immerse in the scene. After situational teaching, students 'learning attitude, learning interest and initiative have been significantly improved, which has been improved to a certain extent compared with traditional teaching methods. The situational teaching method has a significant effect on students' performance of various sports skills.

Chapter 3
Research Methodology

The development of sports training course based on situational teaching method to improve the basic athletic skills for primary school students. The methodology of this research was research and development were 1) to develop sports training course based on situational teaching method to improve the basic athletic skills for primary school students and 2) to compare students' basic athletic skills between before and after the implementation of sports training course base on the situational teaching method for primary school students.

The researchers have the following procedures.

1. The population / the sample group

2. Research instruments

3. Data collection

4. Data analysis

The Population and the Sample Group

The Population

There were 240, 8 classes, fourth grade students of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. (There were student's mixed ability, high level, medium level and low-level abilities.)

The Sample Group

There were 30 students from the 1 class of the fourth grade of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. Through cluster random sampling.

Research Instruments

The development of sports training course based on situational teaching method to improve the basic athletic skills for primary school students. The research instruments were as follows:

1. Activity plan of sport training course based on situational teaching method

Procedures for creating the activity plan of sport training, according to the situational teaching method creating activity plans details are as follows.

1.1 Studied the Ministry of Education "Physical Education and Health Curriculum Standards". "Physical Education and Health Curriculum Standards" (compulsory education stage, 2011 edition), Use as a guide for developing a learning program through learning objectives, content, guidelines for organizing measurement and assessment of learning activities, and teacher guidance.

1.2 Index analysis based on the core learning content of the group. To set learning objectives learning content and teaching time.

1.3 Studied of concepts, theories related to the theory from documents, textbooks, and related research to create a learning management plan.

1.4 Create 3 activity plans on the subject about Running, Jumping, and Throwing: 1) running: relay running, endurance running, fast running, 2) jumping: single-foot jumping, double-foot jumping, standing long jumping and 3) throwing: throw the ball at a fixed point, throw the ball forward, throw the solid ball, total 63 Hours. By designing activity plan using the situational teaching method, each activity plan specifies the details of the topics as follows: 1) content, 2) objectives of learning, 3) main point/concept, 4) learning processes according to the situational teaching method, 5) learning activity, 6) measurement and evaluation, and 7) instructional media, in this research, the situation-based teaching method consists of five teaching as follows:

Step1: Create a situation. It is first the guiding language, guiding language is a very important link in situational teaching. When designing guiding language, teachers should combine the content of this lesson and real life, use vivid language or novel teaching props to attract students' attention, so that students are interested in the learning content.

Step2: Enter the situation. There are two ways that students can enter the situation: Students enter into the situation by themselves and teacher guidance into the situation. Teacher guidance usually refers to the teacher using vivid and specific language to describe before explaining the action, so as to attract students' attention. Students

enter by themselves refers to that after the teacher completes the scene introduction, fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students independently into the situation.

Step3: Strengthen situation. It's often composed of teachers using guiding language reinforcement movements and correcting students' movements. When students conduct collective practice and group practice, the teacher will describe the key points of action in vivid and specific language, and at the same time continuously loudly remind students to correct their movements, and tour inspection to correct the mistakes of individual students.

Step4: Practice repeatedly. It is mainly included collective practice and group practice, each of which has its advantages and disadvantages. Teachers should choose the practice method according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the action, and correct the wrong actions of students, and select excellent students to show.

Step5: Guides the end. It's some activities at the end of the course. After the training, the students' physical function has changed greatly. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, and make the human body gradually transition from a tense movement state to a relatively quiet state, the teacher needs to lead the students to do some relaxation exercises. In addition, the teacher will summarize the performance of the students in this class, affirm and encourage the students, and finally announce that the students need to prepare for the next class.

1.5 The completed activity plan is presented to the thesis advisor to verify the suitability and consistency of the content. Alignment of objectives with learning activities and the possibility of activities then improve according to the suggestion.

1.6 Experts verified the validity of checklist concept and development process. Taking the instrument to 3 experts to consider. The test consistency the index of item objective congruency (IOC), the criteria for considering the consistency of the activity plan were as follows.:

Rating is +1. There is an opinion that "consistent to relevant."

Rating is 0. There is an opinion that "Not sure it consistent to relevant."

Rating is -1. There is an opinion that "Inconsistent with relevant."

Each activity plan had an IOC consistency index greater than or equal to 0.50, so it was considered suitable for use in research. The result of the Index of Item Objective Congruence (IOC) analysis of this activity plan has an IOC = 1.00 for all questions.

1.7 Take the activity plan received from the review. Let's improve according to the suggestions of experts to achieve more accuracy, before actually applying it to the sample group.

2. Basic athletic skills assessment

Procedures for creating the performance test, which is a practical test, 3 contents, 9 items, with steps to create and find quality as follows:

2.1 Content Analysis, competence and learning objectives consistent with the activity plan on 1) running: relay running, endurance running, fast running, 2) jumping: single-foot jumping, double-foot jumping, standing long jumping and 3) throwing: throw the ball at a fixed point, throw the ball forward, throw the solid ball.

2.2 Studied the theory, principles and methods of performance test from documents, textbooks and related researches.

2.3 Determine scoring criteria for practice tests by authentic assessments (holistic rubric) rating on 5 scales, as follow in Table 3.1

Table 3.1 Development of scoring criteria used to measure the basic athletic skills

Kind of running		Very Good (5)	Good (4)	Fair (3)	Poor (2)	Very Poor (1)
Relay running	Boy	Less than 1.18 minutes	during 1.18-1.21 minutes	During 1.22-1.29 minutes	during 1.30-1.33 minutes	More than 1.33 minutes
	Girl	Less than 1.22 minutes	during 1.22-1.25 minutes	During 1.26-133 minutes	during 1.34-1.37 minutes	More than 1.37 minutes
Endurance running	Boy	Less than 1.52 minutes	During 1.52-1.63 minutes	During 1.64-2.25 minutes	During 1.64-2.25 minutes	More than 2.29 minutes

Table 3.1 Development of scoring criteria used to measure the basic athletic skills (continue)

Kind of running		Very Good (5)	Good (4)	Fair (3)	Poor (2)	Very Poor (1)
Endurance running	Girl	Less than 1.57 minutes	during 1.57-2.08 minutes	During 2.09-2.30 minutes	During 2.31-2.34 minutes	More than 2.34 minutes
Fast running	Boy	Less than 8.80 seconds	During 8.80-9.10 seconds	During 9.20-9.90 seconds	During 10.00-10.30 seconds	More than 10.30 seconds
	Girl	Less than 9.20 seconds	during 9.20-9.50 seconds	during 9.60-10.30 seconds	During 10.40-10.70 seconds	More than 10.70 seconds

Table 3.1 Development of scoring criteria used to measure the basic athletic skills (continue)

Kind of jumping		Very Good (5)	Good (4)	Fair (3)	Poor (2)	Very Poor (1)
Single-foot jump	Boy	Less than 3.68 seconds	During 3.68-3.71 seconds	During 3.72-3.79 seconds	During 3.80-3.83 seconds	More than 3.83 seconds
	Girl	Less than 4.08 seconds	during 4.08-4.11 seconds	during 4.12-4.19 seconds	during 4.20-4.23 seconds	More than 4.23 seconds
Double-foot jump	Boy	Less than 4.74 seconds	during 4.74-4.77 seconds	during 4.78-4.85 seconds	during 4.86-4.89 seconds	More than 4.89 seconds
	Girl	Less than 5.14 seconds	during 5.14-5.17 seconds	during 5.18-5.25 seconds	during 5.26-5.29 seconds	More than 5.29 seconds
Standing long jumping	Boy	More than 1.66 meters	between 1.57-1.66 meters	between 1.36-1.56 meters	between 1.29-1.38 meters	Less than 1.29 meters
	Girl	More than 1.56 meters	between 1.48-1.56 meters	between 1.30-1.47 meters	between 1.21-1.29 meters	Less than 1.21 meters

Table 3.1 Development of scoring criteria used to measure the basic athletic skills
(continue)

Kind of Throwing		Very Good (5)	Good (4)	Fair (3)	Poor (2)	Very Poor (1)
Throw a solid ball into logo	Boy (Distance 5 meters)	into Logo circle 5 balls	into Logo circle 4 balls	into Logo circle 3 balls	into Logo circle 2 balls	into Logo circle 1 ball or not at all
	Girl (Distance 2.50 meters)	into Logo circle 5 balls	into Logo circle 4 balls	into Logo circle 3 balls	into Logo circle 2 balls	into Logo circle 1 ball or not at all
Throw the ball forward	Boy	More than 7.10 meters	between 6.50-7.10 meters	between 5.20-6.40 meters	between 4.20-5.10 meters	Less than 4.20 meters
	Girl	More than 5.20 meters	between 4.40-5.20 meters	between 2.60-4.30 meters	between 2.00-2.50 meters	Less than 2.00 meters
Throw the solid ball	Boy	More than 6.90 meters	between 6.30-6.90 meters	between 5.00-6.20 meters	between 4.00-4.90 meters	Less than 2.00 meters
	Girl	More than 5.10 meters	between 4.30-5.10 meters	between 2.50-4.20 meters	between 1.90-2.40 meters	Less than 1.90 meters

2.4 Suggest the proficiency test to the thesis supervisor. Check for accuracy and make improvements as suggested.

2.5 The performance test is handed over to 3 experts for measurement and evaluation. Check the content validity, find out the Index of Item Objective Congruence (IOC). The criteria for judging the consistency of the test are as follows:

Rating is +1. There is an opinion that "consistent to objective of leaning."

Rating is 0. There is an opinion that "Not sure it consistent to objective of leaning"

Rating is -1. There is an opinion that "Inconsistent with objective of leaning.

Each item test had an IOC consistency index greater than or equal to 0.50, so it was considered suitable for use in research. The result of the Index of Item Objective Congruence (IOC) analysis of this activity plan has an IOC = 1.00 for all questions.

2.6 Improve and revise the performance test that have been verified by experts. Then take it to try out with students who were non-sample for 30 students to analyze the quality test and checking the quality of confidence values in performance tests by test-retest, which is a test for the coefficient of stability. The students perform the testing 2 times at different intervals and then use the obtained values to find by Pearson's correlation coefficient = 0.81

Data Collection

The data were collection analyzed as follows.

Experimental pattern

1. Coordinate with 3 professional scholars experts dispense official document from bansomdejchaopraya university professional scholars experts and gave information about data collection process and research instruments: instructional model and checklist form about quality of instructional model for consideration (Index of Item Objective Congruence: IOC).

2. Collect data from 3 professional scholars experts and analysis data for consideration (Index of Item Objective Congruence: IOC)

3. This research was experimental research One Group Pretest-Posttest Design was used with the following experimental design:

Table 3.2 Experimental design

Group	Pretest	Experimental	Posttest
R	O_1	X	O_2

The meaning of the symbols used in the experimental design.

R   means   Random Sampling

X   means   experimental

O_1 means   Pretest

O_2 means   Posttest

This research the data collection was as follows.

1. Contact with the Graduate School Bansomdejchaopraya Rajabhat University to request an official letter for an expert to inspect research equipment.

2. Organize a test before starting the experiment to understand students how to study student role learning objectives evaluation method and the benefits that will be gained from taking the ability test and learning activities during the experiment.

3. Test before teaching (Pre-test) with 30 students in fourth grade students of Weifang Wenhua Primary School, which was a sample group, and checked the score record in order to analyze the data.

4. The experimental with the sample group to use the activity plan of sports training course based on the situational teaching method. The teaching time in 8th July - 18th July 2023, total of 63 hours, not counting the days of pre-test and post-test, as follow in Table 3.3

Table 3.3 Activity Schedule for sports training course based on the situational teaching method

Activity plan	Contents	Time	date
Running training	Relay running	7 hours	8th July
	Endurance running	7 hours	9th July
	Fast running	7 hours	10th July
Jumping training	Single-foot jumping	7 hours	12th July
	Double-foot jumping	7 hours	13th July
	Standing long jumping	7 hours	14th July
Throwing training	Throw the ball at a fixed point.	7 hours	16th July
	Throw the ball forward	7 hours	17th July
	Throw the solid ball	7 hours	18th July

5. Testing again after teaching (Post-test) with 30 students in fourth grade students of Weifang Wenhua Primary School, which was a sample group, and checked the score record in order to analyze the data.

Data Analysis

The researchers analyzed the data by program computer, the order in which the data were analyzed was as follows:

1) Quantitative data were analyzed through descriptive statistics; means, and standard deviation.

2) Quantitative data were analyzed through inferential statistics; then calculate the different score of learning ability before and after using instructional model were analyzed through t - test for dependent samples.

Chapter 4
Results of Analysis

The objective of research was 1) to develop sports training course based on situational teaching method to improve the basic athletic skills for primary school students and 2) to compare students' basic athletic skills of sports training course between before and after the implementation base on the situational teaching method of primary school students. The data analysis result can be presented as follows:

1. Symbol and Abbreviations

2. Results of Data analysis

The details are as follows.

Symbol and Abbreviations

n	means	the number of students
$\bar{X}$	means	the average
SD.	means	the standard deviation
D	means	the difference in scores between pre and post learning
df	means	degree of freedom
t	means	the statistical value to be used in the t-test
**	means	statistical significance at level .01

Results of Data Analysis

The development the sports training course based on situational teaching method to improve basic athletic skills of primary school students, the researchers proceeded in the following order.

1. The result of development the sports training course based on situational teaching method to improve basic athletic skills of primary school students, The researcher has studied the documents and research related to situational teaching method from many researchers: Wang Chengkai (2019), Zhang Siming (2018), Zhao Haiyan (2021), Wang Peng & Hua Ming (2021), Li Jilin (2017) was used to develop the basic athletic skills and

has synthesized into 5 steps used to develop activity plan. The results of the data analysis were quality assessment of the activity plan according to the situational teaching method by 3 experts, shown in Table 4.1

Table 4.1 The quality assessment of the running training course activity plan

Assessment Item	$\bar{X}$	SD.	Interpretation
Activity plan I: Running training course			
1. Learning objectives sort the contents from easy to difficult.	5.00	0.00	Most suitable
2.The Situational Teaching Method is suitable for encouraging students to learn independently	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5.00	0.00	Most suitable
5. Learning activities can actually improve students' the Basic Athletic Skills	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5.00	0.00	Most suitable
Total	**5.00**	**0.00**	**Most suitable**

From Table 4.1 the quality assessment of the activity plan by experts overall, the suitability of the research objectives has the most suitable ($\bar{X}$=5.00, SD.=0.00). When considering the assessment item, it was found that it is the most suitable ($\bar{X}$=5.00, SD.=0.00) for every assessment item and can be used in teaching and it can be used for teaching.

Table 4.2 The quality assessment of the jumping training course activity plan

Assessment Item	$\bar{X}$	SD.	Interpretation
Activity plan II: Jumping training course			
1. Learning objectives sort the contents from easy to difficult.	5.00	0.00	Most suitable
2.The Situational Teaching Method is suitable for encouraging students to learn independently	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5.00	0.00	Most suitable
5. Learning activities can actually improve students' the Basic Athletic Skills	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5.00	0.00	Most suitable
Total	**5.00**	**0.00**	**Most**

From Table 4.2 the quality assessment of the activity plan by experts overall, the suitability of the research objectives has the most suitable ($\bar{X}$=5.00, SD.=0.00). When considering the assessment item, it was found that it is the most suitable ($\bar{X}$=5.00, SD.=0.00) for every assessment item and can be used in teaching and it can be used for teaching.

Table 4.3 The quality assessment of the throwing training course activity plan

Assessment Item	$\bar{X}$	SD.	Interpretation
Activity plan III: Throwing training course			
1. Learning objectives sort the contents from easy to difficult.	5.00	0.00	Most suitable
2.The Situational Teaching Method is suitable for encouraging students to learn independently	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5.00	0.00	Most suitable
5. Learning activities can actually improve students' the Basic Athletic Skills	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5.00	0.00	Most suitable
Total	**5.00**	**0.00**	**Most suitable**

From Table 4.3 the quality assessment of the activity plan by experts overall, the suitability of the research objectives has the most suitable ($\bar{X}$=5.00, SD.=0.00). When considering the assessment item, it was found that it is the most suitable ($\bar{X}$=5.00, SD.=0.00) for every assessment item and can be used in teaching and it can be used for teaching.

2. The results of the comparison students' basic athletic skills of the sports

training course between before and after the implementation base on the situational teaching method of primary school students.

      2.1 This research is carried out to development the sports training course based on of the situational teaching method to improve the basic athletic skills of primary school students. The detail results of the basic athletic skills score between before and after learning, shown in Table 4.2

Table 4.4 The basic athletic skills score between before and after learning

Student	Pretest (45)	Posttest (45)	Difference scores (D)	Student	Pretest (45)	Posttest (45)	Difference scores (D)
1	29	34	5	16	28	37	9
2	28	37	9	17	25	34	9
3	27	34	7	18	23	34	11
4	28	37	9	19	26	37	11
5	25	36	11	20	22	31	9
6	32	39	7	21	24	34	10
7	26	34	8	22	24	31	7
8	27	37	10	23	32	39	7
9	24	30	6	24	29	38	9
10	24	33	9	25	29	36	7
11	29	38	9	26	32	40	8
12	25	36	11	27	23	32	9
13	25	34	9	28	23	34	11
14	28	36	8	29	19	28	9
15	25	36	11	30	21	30	9
				$(\bar{X})$	26.07	34.87	
				SD.	3.22	2.94	

From Table 4.4, scores for the basic athletic skills using the situational teaching method of the students, the average score before learning was 26.07, the

average score after learning was 34.87. The result average score was found that the after learning score was higher than before learning score.

      2.2 The comparison of students' basic athletic skills between before and after learning base on the situational teaching method of primary school students. The researcher used the research results to analyze the basic athletic skills before and after learning of students who have been taught by using Situational Teaching Method. Analyze the data using average statistics. standard deviation and t-test which the data analysis results. The results are shown in Table 4.5.

Table 4.5 The comparison of the basic athletic skills scores between before and after learning.

Basic athletic skills	testing	n	Score total	$\overline{X}$	SD.	df	t	p
Running	Pre-test	30	15	8.83	2.05	29	21.24**	.00
	Post-test	30	15	11.80	1.69			
Jumping	Pre-test	30	15	8.70	1.88	29	18.11**	.00
	Post-test	30	15	11.50	1.61			
Throwing	Pre-test	30	15	8.53	1.74	29	19.54**	.00
	Post-test	30	15	11.57	1.65			
Total	pre-test	30	45	26.07	3.22	29	34.01**	.00
	post-test	30	45	34.87	2.94			

**Statistically significant at the level.01 (p<.01)

      From Table 4.5, The comparison of students' basic athletic skills between before and after learning base on the situational teaching method of primary school students. The average total score before was 26.07, the average total score after was 34.87. The results were found that the basic athletic skills of students after learning higher than before learning statistically significant at the level .01. When considering the results of data analysis classified by content: Running, Jumping, and Throwing were found that the basic athletic skills of students after learning higher than before learning statistically significant at the level .01 for all contents.

Chapter 5

Conclusion Discussion and Recommendations

The purpose of this research was 1) to develop the sports training course based on situational teaching method to improve the basic athletic skills for primary school students and 2) to compare students' basic athletic skills of sports training course before and after the implementation base on the situational teaching method of primary school students. The sample group there were 30 students from the 1 class of the fourth grade of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. Through cluster random sampling. The research instruments used in this study were as follows:

1. To develop the situational teaching method to design activity plans and conduct training to improve the basic athletic skills of students.

2. To create the basic athletic skills test, which performance test, totally 9 items to improve the basic athletic skills of the students.

Conclusion

1. The development of the sports training course based on situational teaching method to improve basic athletic skills of primary school students, the researcher had studied the documents and research related to the situational teaching method from many researchers and has synthesized into 5 steps used to develop activity plan and testing standard according to the situational teaching method of primary school students. The data analysis was the assessment of the quality of the activity plan according to situational teaching method by 3 experts, and the results are shown the quality of the activity plan by experts overall, the suitability of the research objective has the most suitable.

2. The comparison of students' basic athletic skills between before and after learning by using situational teaching method of primary school students. The average total score before was 26.07, the average total score after was 34.87. The results were found that the basic athletic skills of students after learning higher than before learning

statistically significant at the level .01. When considering the results of data analysis classified by content: Running, Jumping, and Throwing were found that the basic athletic skills of students after learning higher than before learning statistically significant at the level .01 for all contents.

Discussion

Research results on the development of the basic athletic skill 30 fourth-year primary school students in the Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023 by using the situational teaching method can be discussed as follows.

1. The development of the sports training course based on situational teaching method to improve the basic athletic skills for primary school students. Researcher had studied the documents and research related to the situational teaching method from many researchers and has synthesized: into 5 steps used to develop activity plan and testing standard according to the situational teaching method of primary school students. The data analysis was the assessment of the quality of the activity plan according to the situational teaching method by 3 experts, and the results are shown the quality of the activity plan by experts; overall, the suitability of the research objectives has the most suitable. This is because the developed learning plan is consistent with the concept of the situational teaching method, and the developed activity plan contains critical elements of the activity plan, learn completely related the content is clear and the goal is specific. The activities that are established emphasize that learners can actually learn and Practice of specific skills. In terms of measurement and assessment, the assessment is determined to be based on actual situations and measured according to the learning objective, which is consistent with the research Sun Wanqing (2021), Liu Zhaohui (2022). through the development of actual activity plan cases based on the situational teaching method, to fully verify the teaching effect and student learning effect of the situational teaching method applied to actual teaching, it is consistent with the research Liu Wei (2015) mentioned in his article that as one of many teaching methods, the situational teaching method can undoubtedly bring greater results in primary school physical education teaching, which

can not only improve students' enthusiasm for physical education and learning effect, but also promote the improvement of teaching effect.

2. The comparison students' basic athletic skills of sports training course between before and after the implementation base on the situational teaching method of primary school students. The average total score before was 26.07, the average total score after was 34.87. The results were found that the basic athletic skills of students after learning higher than before learning statistically significant at the level .01, which was in accordance with the hypothesis. Situational teaching method is that teachers purposefully introduce or create vivid and specific scenes to arouse students' attitude and experience, so as to help students understand action skills. This is the same as Du Xinwang (2020). In the teaching process, based on the physical and mental development characteristics of contemporary children, he applied the situational teaching method to Elementary school student's teaching, giving full play to the advantages of teaching methods, so that students have the skills of all-round development. And through situational teaching method, student's academic performance and skills have been significantly improved, this is consistent with Wang Kun (2022), Feng Xiaolei (2023). Compared with the traditional teaching method, students' performance has been greatly improved. The results show that the teaching of situational teaching method has a positive impact on students, and consistent with the research Feng Xiaolei (2023).Feng Xiaolei (2023Application situation teaching methods in high school martial arts teaching way of tai chi influence to students' martial arts skills, said: the traditional teaching methods and situation teaching way compared, students under the situation teaching way, can better understand the principle and connotation of teaching action, can better grasp the rate of technical action rhythm, movement trajectory, can more skilled to ensure the accuracy of action, it is beneficial to improve the quality and efficiency of the teaching and learning the whole process, it follows that situation teaching method has a positive impact on students.

In conclusion, the situational teaching method can improve the students' learning interest, and consolidation of athletic skills in the sports trainning course of primary school students. Situation teaching method is through the setting of "situation", make the teaching content in the situation of the story, it conforms tusness level

development is not enough mature junior students' physiological characteristics, the setting is to make the skills of a teaching carrier, which conforms to the guiding ideology of "health first", conform to the basic concept of the new curriculum standard. The country should cultivate the overall quality of the students, not only let the students master the book knowledge, more importantly, let the students have a healthy body.

Recommendations

General recommendation

1. Through the experimental test, the situational teaching method can indeed improve the ability of the fourth-grade students to run, jump and throw, but the students in different situations should be reasonably guided.

2. In the use of situational teaching methods for teaching, first of all, to ensure the safety of all aspects of teaching, and then the teaching situation setting should always focus on the elements of the "primary school student physical education and health curriculum standards", according to the actual teaching needs, to create a teaching situation conducive to the physical and mental development of students. In teaching practice, we should pay close attention to the situation of some students to make appropriate differential adjustments and teach flexibly.

3. The students in this study belong to the intermediate stage of primary school, and have undergone preliminary practice before the experiment. Therefore, different training methods and difficulties according to different levels, and the training load in line with the same level.

4. Choosing teaching situation should apply different situations according to students 'learning stages, and teachers should grasp students' interests and hobbies according to students' ages. The choice of a teaching situation, what kind of teaching effect depends on the interests of students.

Suggestions for future researches

1. Due to the relatively small sample size involved in this study, the sample of students sampled is not representative of the parent being studied, therefore, larger samples are recommended.

2. In China, the situational teaching method is still in the trial operation stage,

especially in physical education, so when conducting research, there is not enough literature related to the research topic. it still needs to be adjusted and improved to promote the implementation of situational teaching method in sports training teaching.

3. The situational teaching method has been very perfect and mature in foreign training, but it has not been much recognized in China, so more promotion and development are needed to make Chinese teenagers use the most appropriate training method.

4. In the process of using the situational teaching method, teachers and students are equal, democratic and cooperative new teacher-student relationship. Teachers cannot control, manipulate the students, more cannot impose their own will on the students. Teachers and students should establish an equal, free and cooperative relationship, only in this way can students take the initiative and boldly express their opinions.

References

Blount, Collin, Dagid. (2009). Contextual cognition and learning culture. *Educational Research*. 1,32-34.

Brian C. Wesolowski. (2012). Understanding and Developing Rubrics for Music Performance Assessment. Music Educators Journal,98,3.

Craig A. Mertler. (2001). Designing Scoring Rubrics for Your Classroom. Practical Assessment, Research & Evaluation,7,25.

Chen Jiangdong. (2019). Relationship between sports skills and sports display competition and its teaching suggestions. *Middle School Teaching Reference Book*. 24, 19-20.

Chen Ruizi. (2022). How to improve students' interest in learning in physical education classroom. *The World of Tutoring*. 16, 55-56.

Du Xinwang. (2020). Experimental research on the teaching of situational teaching method in children's table tennis forehand ball. Master of Physical education teaching. Shandong Normal University.

Dong Yingying & Zheng Yunfei. (2022, 8). Differences in basic motor skills development between boys and girls: A Systematic Review and Meta-analysis. The 7th Guangzhou International Symposium on Sports and Health, August 20, 2022-August 21, 2022, Guangzhou Institute of Physical Education.

Feng Xiaolei. (2023). Research on the practice of context teaching in 24 style Taijiquan teaching in high school physical education. Master of Physical Education Teaching, Yili Normal University.

Fu Yinyin. (2019). Experimental research on situational teaching method in first-grade basketball teaching in Beijing Heingli No.1 Primary School. Master of Physical Education, Capital Institute of Physical Education.

Grace T. Flores. (2021). Application of situational teaching materials in research teaching in primary school. *Journal of Educational Research and Policies*. 10,7-9.

Gu Mingyuan. (2016). Dictionary of Education. Shanghai: Shanghai Education Press.

Hattie Rodney & Timperley Lauren. (2007). An investigation of a multiple-measures teaching evaluation system and its relationship with students' college-going outcomes. *Educational Policy*. 1, 9-11

He Zhenyong. (2020). Under the new curriculum standard, primary and middle school students after school physical training exploration. subject discussion. 2,52-53.

Hou Shuhui. (2018). The role of sports training courses in primary and secondary schools in children's socialization Contemporary Tourism. *Golf Travel.* 12, 226.

Hua Xuejuan. (2021). Research on the construction of the evaluation index system of junior high school students' sports skills in Anhui province. Master's thesis in physical training, Huaibei Normal University.

Huang Jianqiang & Zhang Yanfeng. (2017). Thinking on the evaluation of primary and middle school students. *Campus Football*. 7,15-16.

Hu Xiaoqing. (2022). Study on the influence and intervention of demand-supported teaching on primary school students' basic motor skills from the perspective of self-determination theory. Ph.D. Dissertation. Physical education and training science, Shanghai Institute of Sports Education.

Judith Arter,Jay MeTighe.(2005). *Classroom teaching scoring rules*: use performance evaluation criteria to improve students' performance. Beijing: China Light Industry Press.

Jia Junping, He Xiaoqun & Jin Yongjin. (2019). Statistics. The fifth edition. Beijing: Higher Education Press.

Larry BeardJoesph Akpan,Charles E. Notar (Emeritus),Larry Beard.(2019). Rubrics 101:What, When and How. American Journal of Educational Research andReviews,4,44.

Li Gang & Lu Lijie. (2018). Visible evaluation: compilation of core literacy evaluation sheet based on gauge and applied education theory and practice. 38,12-15

Li Haiyang. (2022). Research on Improving the quality of primary school sports training under the concept of happy sports. *Chinese Journal of Multimedia and Network Teaching*. next issue 11, 77-80.

Li Hongye. (2022). Research and construction of evaluation system in Wucheng District of Jinhua city. Master's thesis. Zhejiang Normal University.

Li Jilin. (2017). Construction of Chinese children's situational learning paradigm. *Educational Research.* 03,91-102.

Li Jilin. (2016). Nature of situational education. The first printing. Beijing: Education and Science Press Co, Ltd.

Li Yulian & Fan Lixia. (2022). The relationship between basic motor skills and cognition of Chinese children from the perspective of embodied cognition. S*ports Science and Technology Literature Bulletin*. 7, 116-118.

Liu Zhaohui. (2022). Studies the application of situational teaching method in primary school badminton teaching. Master of Physical Education Teaching, Physical Education College of Liaocheng University.

Lu Jindong. (2015). Discussion on the cultivation of students' sports skills in high school. *Track and Field Teaching*. 9, 18-19.

Ma Ce & Wei Pilai. (2015). Application cases in sports training course teaching in physical education institutions. *School Physical Education*. 2, 97-98.

Marsh. (2010). Tool used to assess the quality of peer review reports: a methodological systematic review. *BMC Medical Research Methodology.* 1,11-12.

North. (2003). Scales for rating language performance: Descriptive models,formulation styles, and presentation formats. TOEFL Monograph, 24.

Popham, W. J. (1997). What's Wrong and What's Right with Rubrics. Educational Leadership,55(2),72-75.

Qiu Meilan. (2022). On the effective application of situational teaching method in primary school physical education. *Questions and Research.* 22, 188-190.

Renato H. L. Pedrosa,Eliana Amaral,Marcello Knobel.(2013). Assessing higher educationlearning outcomes in Brazil. Higher Education Management andPolicy,24,2.

Rovinelli, R. J., & Hambleton, R. K. (1976). On the use of content specialists in the assessment of criterion-referenced test item validity.

Scriven Eric J, Carraccio Carol, Kelleher Matthew, Kinnear Benjamin, Schumacher Daniel J & Santen Sally. (1967). The education passport: connecting programmatic assessment across learning and practice. *Canadian Medical Education Journal*. 4,57-59.

Shi JiaTing, (2022). Experimental research on situational teaching method in high school volleyball teaching. Ph.D. Dissertation in pedagogy Hebei Normal University.

Shi Lihua, (2022). The application of game scene teaching method in primary school basketball training. *New Sports*. 14, 64-66.

Shi Tie, (2013). The important role of college physical training courses Journal of Changchun University of technology. *Social Science Edition*. 9, 204-205.

Sun Jing, (2018). Use training methods skillfully to improve the effect of physical training for primary school students. Teaching Communication. 26, 216.

Sun Wanqing. (2021). Empirical study on the influence of situational teaching method on physical learning of third grade students. Master of PE, Liaoning Normal University.

Sun Wenjie. (2021). Application analysis of situational teaching method in primary school physical education. *Tianjin Education*. 6,12-13.

Tang Yingying & Chen Yun. (2022). Exploring the mixed teaching mode of the teaching skill training course for normal majors. *Science and Technology Literature*. 23, 92-95.

Wang Chengkai. (2019). Experimental study on football situational teaching method on the skills of 10-11 years-old children to control the ball. Master of Physical Education, Beijing Sport University.

Wang Kun. (2022,8). Research on the education system of college football special course teaching from the perspective of "curriculum ideology and politics". The 6th China Football Culture and Campus Football Development Conference in 2022. On August 24,2022, Huaibei Normal University.

Wang Peng & Hua Ming. (2021). Create diverse situations and optimize physical education teaching. P*rimary School Teaching Research.* 26, 40-41.

Wang Qiang. (2022). Application of situational teaching method in primary school physical education. *Youth Sports*. 6, 102-103.

Wang shuai & Li xiaolong. (2020). Tries to infiltrate the core literacy of physical education from the perspective of students -Taking the practical application of physical education scene teaching in the lower grades of primary school as an example. *Sports Frontier*. 12,13-14.

Wang Zhende. (2017). Research on the cultivation of the core literacy of primary school Chinese. *Education*. 43, 13.

Yuan Xinglin. (2021). Instruct students to throw solid ball forward to improve their sports skills. *Sports Vision*. 17, 95-96.

Zhang Xi. (2020). Explore the strategy of primary school PE performance grade evaluation mode. *Scientific consulting (Science and technology management)*. 2,189.

Zhao Haiyan. (2021). Situational teaching infuses "vitality and vitality" into the history classroom. *Middle school history teaching Reference*. 14, 22-23.

Zhang Siming. (2018). Math fun, play good math - pursuit will think, will use, will learn the teaching. *Primary school teaching*. 7,11-12.

Zheng Hao. (2022). Application of situational teaching method in basketball teaching in middle school. *Neijiang Technology*. 7, 25+28.

Zhang Xueyong. (2022). Application of situational teaching method in junior high school physical education. *Research on Ice and Snow Sports Innovation*. 11, 88-90.

Zhou Dengsong. (2012). Grasp the key points and strategies of current physical education research in schools. *Chinese School Physical Education*. 10,2-3.

Zhuang Cuihua. (2022). Application of Situational teaching method in junior middle school Physical education. *Arts and Science Navigation*. 1, 88-90.

Zhu Xingliang. (2022). Research on primary school physical education under the background of core literacy. *Ningxia Education*. 4,65-66.

Appendixes

Appendix A

Expert name

Expert name to validate a research instrument

1. Assistant Professor Dr. Wasan Dueanchaeng

   Ph.D.Program in Research and Statistics in Cognitive Science

2. Assistant Professor Kannika Bhiromrat

   Ph.D.Program in Technical Pedagogic Research and Development

3. Professor Dr.Wang Zengbin

   Master of Education, major in physical education training, doctoral candidate.

Appendix B

Official Letter

Ref.No. MHESI 0643.14/268
Bansomdejchaopraya
Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

23 May 2023

RE: Invitation to validate research instrument

Dear   Assistant Professor Dr.Wasan Dueanchaeng

        Miss Xue Mei is a graduate student in Master of Education Program in Curriculum and Instruction of Bansomdejchaopraya Rajabhat University. She is undertaking research entitled "The Development of Sports Training Course Based on Situational Teaching Method to Improve the Basic Athletic Skills for Primary School Students"

        The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

        We respectfully request your assistance in validating a research instrument that is attached to this message. We would be grateful for any help you can provide in this matter. We would like to express our sincere appreciation for your time and expertise. If you have any questions or concerns, please do not hesitate to contact Miss Xue Mei at 184890324@qq.com

        Thank you for considering our request.

                        Sincerely,

                        (Dr.Nainapas Injoungjirakit)
                   Vice Dean, For Dean of the Graduate School

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000 ext. 1814
www.bsru.ac.th

Ref.No. MHESI 0643.14/269

Bansomdejchaopraya
Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

23 May 2023

RE: Invitation to validate research instrument

Dear   Assistant Professor Dr.Kannika Bhiromrat

      Miss Xue Mei is a graduate student in Master of Education Program in Curriculum and Instruction of Bansomdejchaopraya Rajabhat University. She is undertaking research entitled "The Development of Sports Training Course Based on Situational Teaching Method to Improve the Basic Athletic Skills for Primary School Students"

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Vice Dean, For Dean of the Graduate School

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000 ext. 1814
www.bsru.ac.th

Ref.No. MHESI 0643.14/270

Bansomdejchaopraya
Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

23 May 2023

RE: Invitation to validate research instrument

Dear   Associate Professor Dr.Wang Zengbin

Miss Xue Mei is a graduate student in Master of Education Program in Curriculum and Instruction of Bansomdejchaopraya Rajabhat University. She is undertaking research entitled "The Development of Sports Training Course Based on Situational Teaching Method to Improve the Basic Athletic Skills for Primary School Students"

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Thank you for considering our request.

Sincerely,

Nainapas I.

(Dr.Nainapas Injoungjirakit)
Vice Dean, For Dean of the Graduate School

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000 ext. 1814
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Appendix C

The Content of Sports Training Course

Information Sheet of Running Training Course

1. Relay running

Introduction

Classroom routine

1. Teachers count the number of students and ask them about their health condition.

2. Announce the class requirements: listen carefully, look carefully, and do it patiently.

3) Emphasize the safety precautions in this lesson.

Prepare for the event

1. Warm-up game: divide the students into three groups, each group with 10 people. According to the round formation, listen to the teacher's command of forward running, reverse running and standing.
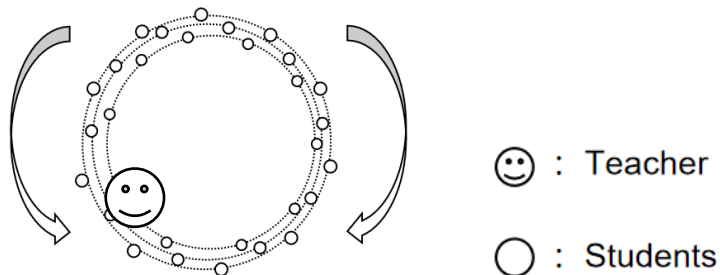
2. Warm-up exercise: the teacher leads the students to conduct the warm-up exercise of wrist, ankle, knee joint, neck movement, chest expansion movement, body rotation movement and lunge and leg pressing according to the original formation.
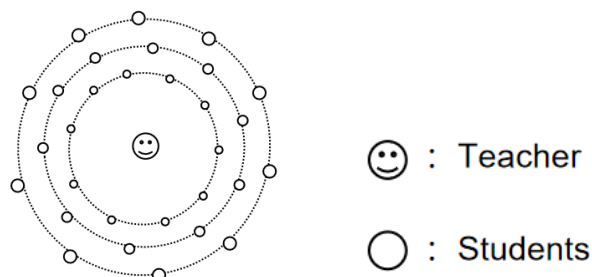
1. Create a situation

1) The teacher asks: Who is going faster, car or train? What are the types of trains in China?
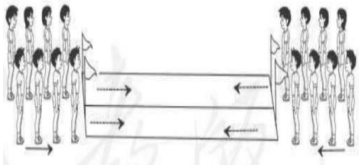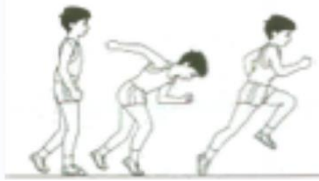
2) The teacher announces the correct answers and praised the students (200 km per hour in 2007 to 400 km per hour now)

3) Teachers teach the development speed of Chinese trains, the speed of trains and the stories of train relay transport passengers all over the country, which arouse students' interest in relay transport. Students know that the meaning of the word "relay" is meant by several people (things) who work together to complete a certain thing.
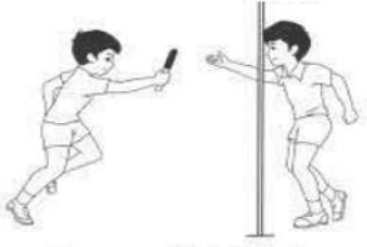
4) Teachers shall announce the teaching content, teaching objectives and key action skills

5) The teacher will show the whole process of the relay running to the students, so that the students can understand the various movement skills of the relay running, which can form a certain image in their mind.

Relay running teaching demonstration diagram

Action pictures	Action resolution
	The two ends of the field are 50 meters apart, and six students are in a team, and the same team of students stand separately outside the two ends of a track. Starting from the students on one side, the top students hold the end of the stick on their right hand and adopt the method of standing start and standing stick passing rod. After the teacher sends the order, run forward, pass the stick to the opposite partner, and stand to the end of the opposite team. In turn, the team that runs first is the winning team.
	Starting action: "each in place", students stand in the back of the starting line, two feet in front and back, a strong foot near the starting line; "ready", two legs slightly bent, the front foot of the arm bent in front of the body, the upper body slightly forward; hear "run" or signal, both feet push on the ground, quickly run forward.
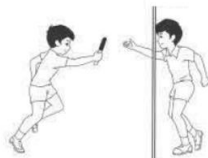
Relay running teaching demonstration diagram(continue)
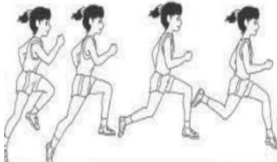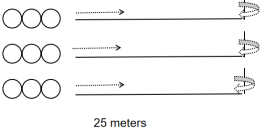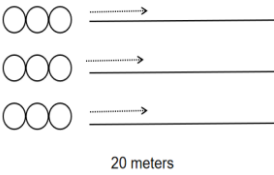
Action pictures	Action resolution
	Run on the way: the back kick is strong, the thigh is positive, on the front foot, the front, the upper body remains upright, the arms swing back and forth, and forward at the fastest speed.
	Primary school students baton handover generally adopts the standing stick type baton method, the right hand four fingers together, thumb open, tiger mouth forward, arm forward to prepare to meet the baton from the companion, after the baton ran out from the left side of the flag. The runner holds one end of the stick, and the stick carries the other end to the dominant hand of the receiver
	Sprint run: the relay race is completed by the last student. Compared with the running run, the sprint run needs to strengthen the push force and accelerate the speed of leg swing and arm swing. At about 1 meter before the finish line, the upper body leans forward and crosses the finish line.

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Teacher instruction usually means that the teacher uses vivid and specific language to describe before explaining the action to attract the attention of the students. Students 'independent entry means that teachers can fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students enter the situation independently.

This lesson is by the teacher to guide students into the teaching situation, by the teacher teaching students starting movement skills, rod movement skills and run on the way and the sprint movement skills, students will practice each action one by one after group training, in the process of the teacher should pay attention to each student action, as far as possible in the students training early mistakes to avoid repeated practice action curing. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

Action name	Skill action	Training formation	Correct the key points and difficult actions
Start action skills			① Ask the student to put the other side of the arm in front ② Let the students experience the feeling of the same side and different arms in front of the start, and guide the students to summarize the requirements of the opposite arm in front of the start
Hand bar movement skills			The timing and cooperation of the baton: left hand left hand, right hand right hand.

Running movement skills on the way			Running on the way should be in a straight line, and the radius should be small
Sprint and running movement skills			Sprint run should also be straight line, and at the fastest speed

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes. During the training, teachers irregularly find out excellent students to show them to learn.

In the above movement skills, the baton handover requires students to strengthen the practice, which is the key and difficult skills of relay running.

Start skills:

① Move your arms in place for 1 minute * 5 times

② Follow the teacher high-and arm practice for 30 seconds * 5 times

③ After starting, continue to run 10-15 meters to practice * 5 groups Pick up the stick skills practice

④ No stick or wrong shoulder exercises: 10 times

⑤ Exercise without rod: 10 times

⑥ Stick holding short distance (5 m) stick handover exercise: 10 times

⑦ Medium distance (20 m) Exercise: 5 times

⑧ Stick running and handover practice: 5 times

> **Note:** When passing the baton, shout out the word "give" loudly to remind the baton receiver.

Sprint running skills:

After the uniform run, the sprint, the sprint is the speed to enter the full, approaching the end of the shoulder to push forward, the skill practice 10 times.
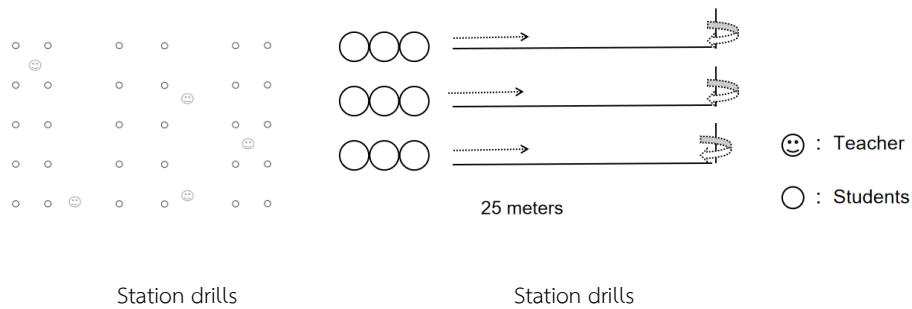
Station drills   Station drills

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. Teachers should choose the practice method according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the behavior, correct the students' wrong behavior, and choose the excellent students to show it. In this class, we use the method of group practice in class and solo practice after class. Repeat the movements of the previous link until the movements are stable and solidified.
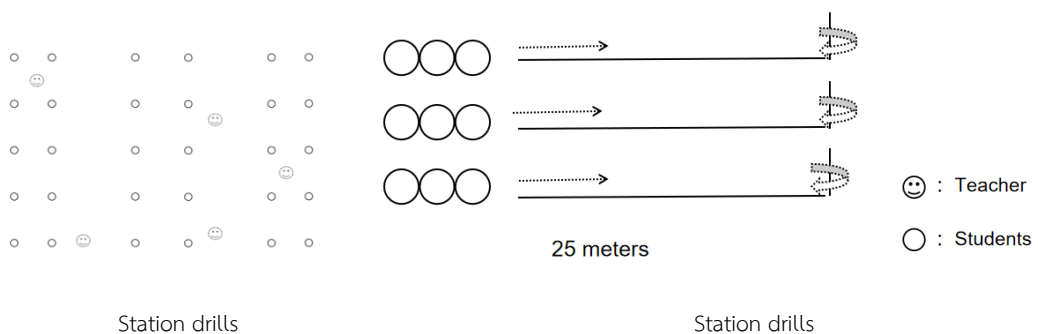
Station drills   Station drills

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles.

①Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body

③ Throw your arm and beat your shoulder
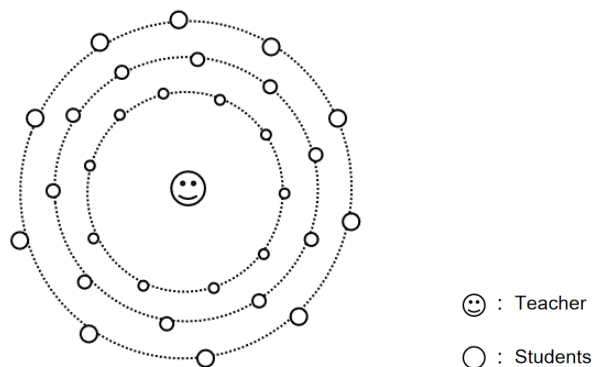
☺ : Teacher

◯ : Students

Information Sheet of Running Training Course

2. Endurance running

Introduction

Classroom routine

1. Teachers count the number of students and ask them about their health conditions

2. Announce the class requirements: listen carefully, look carefully and do patiently

3. Emphasize the safety precautions in this lesson

Prepare for the event

1. Warm-up jogging game: let the students stand in 3 columns, 10 people in each column, the first column runs first, the second row, the third row and the second row, according to the 8-shaped queue, students run in the air to warm up.
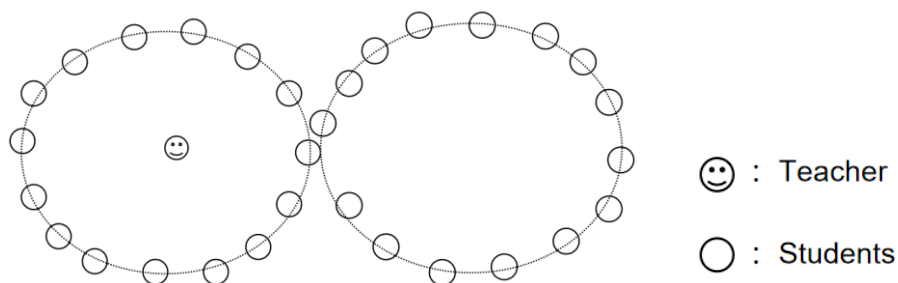
☺ : Teacher

◯ : Students

2. Warm-up exercises: chest expansion exercise, body side exercise, front and back and side leg pressure, knee joint movement, wrist and ankle movement. The teacher leads the students to stretch the ankle, lower limbs, upper limbs, waist, neck and other body muscles according to the formation.
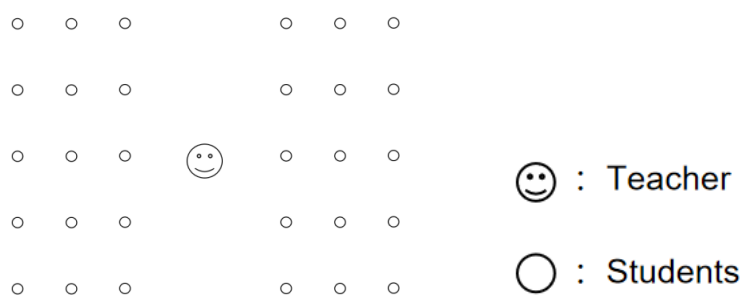
☺ : Teacher

◯ : Students

1. Create a situation
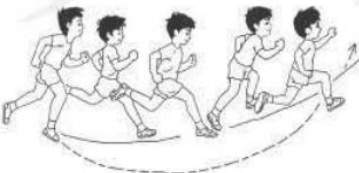
1) Teacher's question: Do you know anything about aerobic exercise? What are aerobic exercise?

2) Students answer: running (durable running), marathon running, swimming, cycling, etc.

3) Teacher: Endurance running belongs to aerobic endurance exercise, which is a kind of aerobic exercise that consumes a lot of energy, which can relieve people's fatigue and mental pressure, improve children's memory and increase concentration. Today, we learn sports skills related to durable running.

4) Teachers shall announce the teaching content, teaching objectives and key action skills
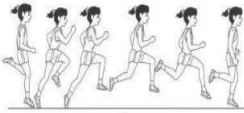
5) The teacher will show the whole process of durable running to the students, so that the students can understand the various movement skills of the relay running, which can form a certain image in their mind.

Action pictures	Action resolution
	Take turns to take the lead: the last student of the team accelerates to the first student as the leader, then the penultimate student takes the leader as the first student, and then once and so on.
	① Ask the student to put the other side of the arm in front ② Let the students experience the feeling of the same side and different arms in front of the start, and guide the students to summarize the requirements of the opposite arm in front of the start After running 20-30 meters at a fast speed, enter the way at a uniform speed
	Along the way: the back kick is fully powerful, the front of the thigh, hit the ground with the ball of the front foot, and keep upright. It is required to have light, coordinated movements, uniform stride length, rhythmic breathing, reasonably control the running speed and distribute physical strength. At the finish line, try to cross the finish line at a fast speed and complete the whole journey.

2. Enter the situation

There are two ways for students to enter into the following situations: independent entry and teacher guidance entry. Teacher guidance usually refers to the description of the teacher in vivid and concrete language before explaining actions to attract the attention of students. Durable running is done in the way of teaching. Teachers guide students into the teaching situation, then the teacher to review running starting movement skills, running on the way, students will practice each action one by one and then group training, in the process of the teacher should pay attention to each student, as far as possible when students just mistakes give correct to avoid repeated practice action curing. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

Action name	Skill action	Training formation	the key points and difficult actions
Start action skills			① Ask the student to put the other side of the arm in front ② Let the students experience the feeling of the same side and different arms in front of the start, and guide the students to summarize the requirements of the opposite arm in front of the start

Running movement skills on the way		 50-80米	Running on the way is the key and difficult skill of durable running, and exhaling and inhaling during the way is another difficulty. Breathing method: two steps one breath, two steps one breath or three steps one breath, three steps one breath, pupils use two steps one breath, two steps one breath. The mouth and nose breathe at the same time, the nose inhale, the mouth exhale, increase the ventilation of the lungs

3. Strengthen situation

The cardiopulmonary function of fourth grade students is relatively weak, and their willpower needs to be improved. In terms of teaching content and teaching methods, they should step by step and gradually increase the distance and speed. The link of strengthen situation is usually composed of teachers using guiding language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

Exhale, inhalation practice: two steps one exhale, two steps one inhalation, natural action, mouth and nose breathing at the same time, practice to step by step

① Walk in place: practice 1 minute * 5 times

② Jogging: 2 minutes * 5 times

③ Fast run: 3 minutes * 5 times

④ Serpentine run: 3 minutes * 5 times

Run on the way: Practice gradually

① Constant speed running: 50 meters, 100 meters, 150 meters, 200 meters, 400 meters, 2 times each

② Return run: 30 meters, 50 meters, 100 meters, 2 times each

Matters need attention:

① Running on the way: light, coordinated, uniform stride, breathing rhythm

② The breathing rhythm of the run works with the running rhythm.
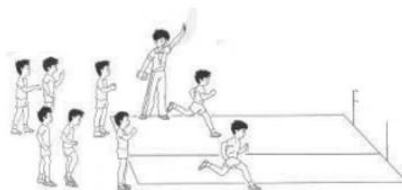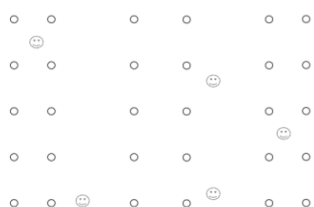
☺ : Teacher

◯ : Students

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. Teachers should choose the practical methods according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of behavior, correct the wrong behavior of students, and choose excellent students to show it. Durable running using the group practice method, 100 meters, 200 meters and 400 meters rotating lead to practice, each exercise for 2 times.

200 meter starting point

400 meter starting point

100 meter starting point　　endpoint

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music. ① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles ② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body ③ Throw your arm and beat your shoulder.

☺ : Teacher

◯ : Students

Information Sheet of Running Training Course

3. Fast running

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health conditions

2) Announce the class requirements: listen carefully, look carefully and do patiently

3) Emphasize the safety precautions in this lesson

Prepare for the event

warm-up game: let the students line up, according to the circular formation counterclockwise jogging, jogging in the process of the teacher password play the game, each unity after the formation, do a set of warm-up exercise, until the wrist ankle, neck, chest expansion, body movement, lunge leg activity knee warm-up exercise.
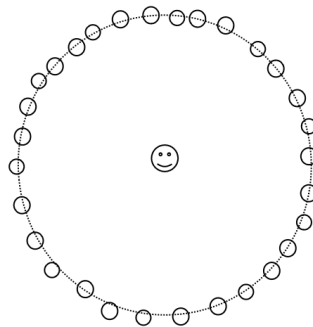
☺ : Teacher

◯ : Students

1. Create a situation

1) Teacher: Let the students observe the wind today, and ask questions from where can we see if there is any wind today?

2) Students answer: leaves are shaking, red flags are flying, clothes are shaking

3) The teacher tips: if our face just feels the wind, how can today's wind speed make us feel bigger wind?
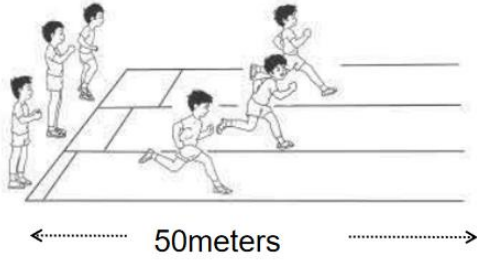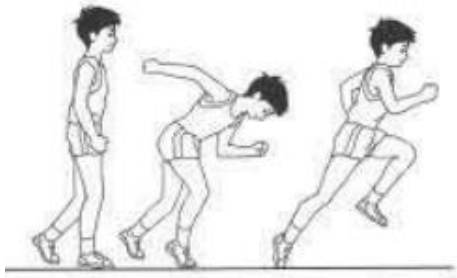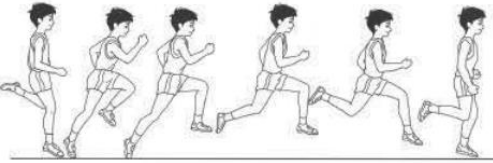
4) Students answer: in the car, ride the bike

5) Teacher: Are these our fast speed? So how can we increase our speed without using our tools?

6) Student: When you run, the faster you speed, the more you can feel the wind

7) The teacher praises the students correctly, and announces the teaching content, teaching objectives and key action skills of this class
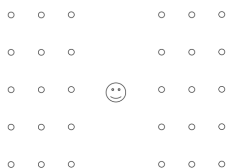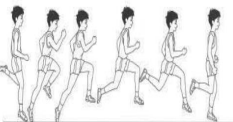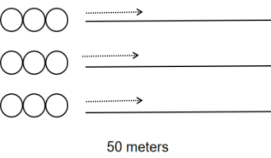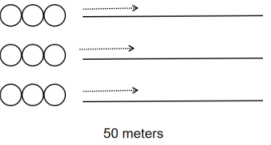
8) The teacher will show the whole process of fast running to the students, so that the students can understand the various movement skills of fast running, which can form a certain representation in their mind.

Action pictures	Action resolution
50meters	The track is 50 meters long. Six students are in one group, divided into five groups. The students of the same team stand outside the same track. After listening to the teacher, he ran straight out of the front, on the way to sprint over the finish line.
	Start: when the teacher "each in place", the students stand behind the starting line, two feet in front and back, a strong foot near the starting line; "ready", the legs slightly bent, the front side of the arm bent in front of the body, the upper body slightly forward; hear "run" or signal, both feet push on the ground, quickly run forward.
	Run on the way: the back kick is strong, the thigh is positive, on the front foot, the front, the upper body remains upright, the arms swing back and forth, and forward at the fastest speed.
	Sprint speed to full, approaching the end of the upper body forward, one shoulder to push forward.

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Our students are fourth grade students in primary school, and it is difficult to enter independently. We adopt the method of teacher guidance to enter. Teacher instruction usually means that the teacher uses vivid and specific language to describe before explaining the action to attract the attention of the students. Fast running teaching by the teacher to guide the students into the teaching situation, then taught

by the teacher students start movement skills, on the way running and sprint movement skills, students will practice each action one by one after group training, in the process teachers should focus on each student, as far as possible when students just appear error give correct to avoid repeated practice action curing. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

Action name	Skill action	Training formation	The key points and difficult actions
Start action skills			① Ask the student to put the other side of the arm in front ② Let the students experience the feeling of the same side and different arms in front of the start, and guide the students to summarize the requirements of the opposite arm in front of the start
Running movement skills on the way		50 meters	Run in a straight line on the way, and return to a small radius
Sprint and running movement skills		50 meters	Sprint to run, also need to run in a straight line, and at the fastest speed

Starting is the difficult point of running fast, which tests the students' reaction ability.

Reaction ability exercises:

Game 1: High-five (5 minutes):

① When the teacher raises his hands, all the student high-five, the teacher does not put down his hands, the students high-five, stop when put down

② The teacher raised the left hand when the boy, the girl when the right hand Note: The teacher raises his hand slowly until the student can do it perfectly.

Game 2: Radish squat (5 minutes):

① The teacher numbered the students as number 1-6 according to the queue.

② The teacher shouted out: the teacher squatting, the teacher squatting, the teacher squatting 3 squatting (girls squatting, boys squatting, etc.).

③ The teacher invites outstanding students to show, and give praise Note: to listen to the teacher's password, the students cannot be too early, also can not react too slowly.
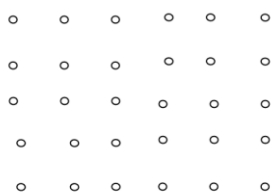
☺ : Teacher

◯ : Students

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes. In the above movement skills,

the starting skills need students to strengthen the practice, which is the key and difficult skills of relay running.

Start skills:

① Move your arms in place for 1 minute * 5 times.

② Continue to run 10 meters after starting to practice * 5 groups.

Running skills on the way:

① Jogging in situ practice, arms and back step to smooth * 5 times.

② 20 meters, 30 meters on the way to run practice, practice to the back pedal strong, thigh positive forward, with the front foot of the ground, see the front, and the upper body integrity, each practice 3 times.

Sprint running skills:

After the way is the sprint, sprint speed to enter the full, near the end of the shoulder to push forward, practice sprint run can be combined with the way to run, this skill practice 10 times.
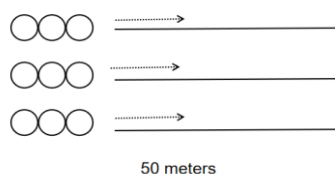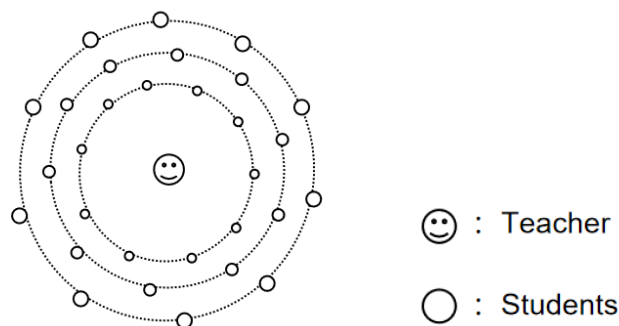
50 meters

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. Teachers should choose the practical methods according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the behavior, correct the wrong behavior of students, and choose excellent students to show it. Our exercises are done in small groups, which can be done alone after the students' class. During repeated practice, the whole process of fast running can be practiced together, which can be repeated for many times until students can successfully complete all the skills of fast running according to the requirements.

50 meters

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body

③ Throw your arm and beat your shoulder

☺ : Teacher

◯ : Students

Information Sheet of Jumping Training Course

## 1. single-foot jumping

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health conditions

2) Announce the class requirements: listen carefully, look carefully and do patiently

3) Emphasize the safety precautions in this lesson

Warm-up hula hoop exercise:

Divide the students into 3 groups, each group of 10 people, according to the circular formation, stand in the air, listen to the teacher's password to do hula hoop warm-up exercises: holding hula hoop in situ, one word step exercise, jump exercise, shake hula hoop, open and close jump exercise.

☺ : Teacher
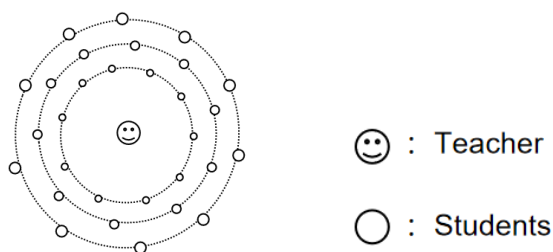
◯ : Students

Warm-up game (train): divide the students into 6 groups, each group of 5 people, the back students will hand on the shoulder of the front students, lift the other leg, and by the front students hold the trouser leg, 5 people jump at the same time, in order to match the rhythm, by the first student shout 1-2; 1-2 slogan, until the fifth student skip the finish line.

5 meters
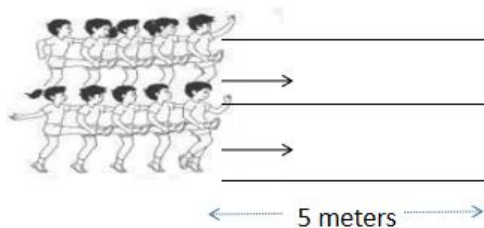
1. Create a situation

1) Teacher: Take out the pictures of rooster, flamingo and red-crowned cranes and let the students observe their characteristics

2) Student: All are birds, all can fly, all have feathers

3) Teacher: What are their legs like?

4) Student: Stand on one leg

5) The teacher announces the correct answer and praises the students. Ask the students if they can stand on one leg for a long time?

6) Student: Can

7) Teachers: Publish the teaching content, teaching objectives and key action skills

8) The teacher will show the whole process of one-foot jumping to the students, so that the students can understand the various movement skills of one-foot jumping, which can form a certain representation in their mind.

Action pictures	Action resolution
	The track is 5 meters long, and the students are divided into 5 groups, and each group has 6 students. Students in the same team stand outside the same track. After listening to the teacher jump to the front straight line until the end.

2. Enter the situation

1) There are two ways for students to enter into the following situations: independent entry and teacher guidance entry. Our students are the fourth grade of primary school students independent learning is difficult, so we choose teachers to guide to enter. Teacher guidance usually refers to the description of the teacher in vivid and concrete language before explaining the action to attract the attention of the students. The teacher will teach each skill action to the students one by one, and then train in groups. In this process, the teacher should pay attention to each student's action, and give corrections as far as possible when the students just make mistakes to avoid repeated exercises. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

2) Standing on one foot practice: Golden rooster independent gam

Students jog counterclockwise according to the circular formation. When the teacher shouted "golden rooster is independent", students stop to run and stand on one foot, the standing time is 5-10 seconds, and the time is accurate according to the teacher countdown number (such as: 5,4,3,2,1).

3) One-foot jumping exercise:

The teacher asked the students to practice one foot hop according to their own habits, the teacher asked the students what kinds of one foot hop?
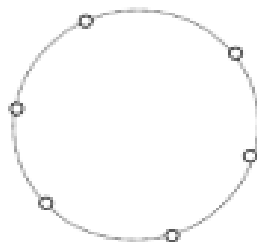
4) Student: bend leg one foot jump, hook foot one foot jump, back bend leg one foot jump, etc.

The teacher teaches the students to jump with one foot after the practice, and practice the coordination of arm swing and jump movements. The group practice and group practice time are 20 minutes.

> **Note**: Jump on one foot, the knee joint should bend the buffer to avoid knee injury
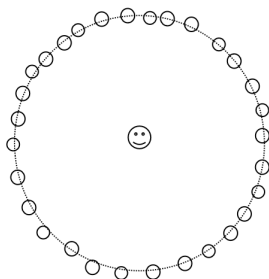
☺ : Teacher

○ : Students

Group exercises   Station drills

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

The coordination of arm swing and leg jumping in the movement skill of one-foot jump requires students to strengthen the practice, which is the key and difficult skill of one-foot jump.

The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training.

One-foot jumping and foot landing exercises and one-foot landing exercises: 20 exercises each Pay attention to the landing buffer and land with the palm of the front foot.
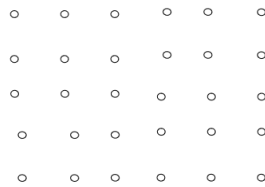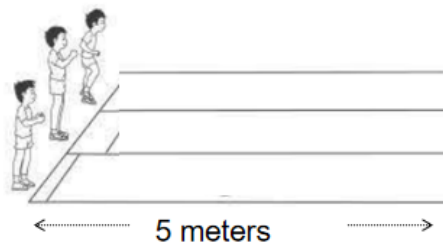

☺ : Teacher

◯ : Students

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. Teachers should choose the practice method according to the content of the textbook and the specific situation setting, use vivid language to tell the key points of the behavior, correct the students' wrong behavior, and choose the excellent students to show it. One-foot jumping is repeated in group exercises.

One-foot jumping and two-foot landing practice, one-foot landing practice, one-foot continuous jumping practice, the jump length is 5 meters distance, each jumping exercise left and right feet to do 10 times.

Note: When jumping and landing, the knee joint should be bent to avoid knee injury, and the sole of the foot
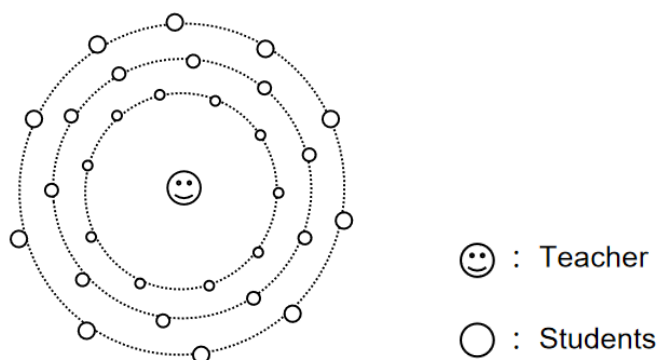

5 meters

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the

content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles.

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body.

③ Throw your arm and beat your shoulder.

☺ : Teacher

◯ : Students

Information Sheet of Jumping Training Course

2. Double-foot jumping

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health conditions

2) Announce the class requirements: listen carefully, look carefully and do patiently

3) Emphasize the safety precautions in this lesson

Prepare for the event

Warm-up little game: the students into three groups, each group of 10 people, around the markers according to the circular formation, listen to the teacher random

say dwarf (students do squat touch), superman (students do jump) words, students make squat or jump, time for 5 minutes, with students' body slightly hot.

○ : Students

△ : marker
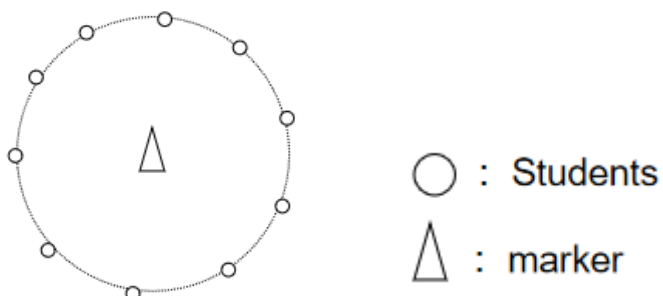
1. Create a situation

Teacher: What animals in the world walk by jumping?

Student: rabbit, kangaroo, sparrow, frog

Teacher: Which animal jumps the furthest?

Student: Kangaroo.

Teacher: Do you want to jump as far away as a kangaroo?

Student: Think.

Teacher: Publish the teaching content, teaching objectives and key action skills

The teacher will show the whole process of jumping with feet to students, so that students can understand the various movement skills of jumping with feet, which can form a certain representation in their mind.

Action pictures	Action resolution
	The feet open naturally, bend the knees to squat, the arms behind the swing, the sole of the front foot fast force, calf fast pedal, when the knees buffer

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Teacher instruction usually means that the teacher uses vivid and specific language to describe

before explaining the action to attract the attention of the students. Students 'independent entry means that teachers can fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students enter the situation independently.

The teaching of the situation, foot jump and one foot jump, all need the front of the foot fast force, calf fast push, when the ground knee buffer, two feet jump is different is the arm after the swing. Students practice each action one by one and then train in groups. In this process, teachers should pay attention to each student's action, and correct it as much as possible when students just make mistakes to avoid repeated exercises. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

Skill name	Action modeling	Study formation	Action correction
Hold hands skills			① You need to inhale when swinging your hand up ② The front foot on the ground
Squat skills			① Exhale while waving your hand back ② The front foot on the ground still
Jumping skills			① Push your feet forward ② Swing your arm forward and drive the body

Landing skills			① Ground to be light, the knee has a buffer ② Landing immediately followed by the second jump action

1) Swing: two feet naturally open, the upper body forward, arms raised over the head, take a deep breath, lift the center of gravity, the sole of the foot, the ground.

Group practice for 1 minute, group practice for 3 minutes.

2) Squat: quickly squat into half squat, the body center of gravity reduced at the same time the arms to the buttocks.

Hand swing practice and squat movement combined, squat movement also collective practice for 1 minute, group practice for 3 minutes.

3) Jump: when taking off, two feet vigorously push forward the ground, at the same time two hips slightly bent upward swing the whole person forward and above the air.

Combined with hand waving and squatting, the take-up action first jumps up to practice, group practice for 1 minute, group practice for 3 minutes, then forward and upper jump practice, group practice for 1 minute, group practice for 3 minutes.
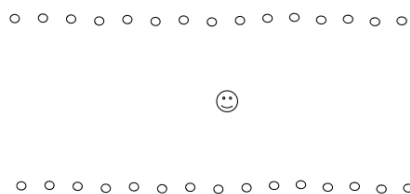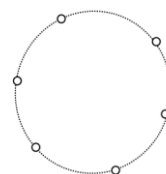
Group exercises   Station drills

☺ : Teacher

◯ : Students

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. Students learning action skills early can't stability and curing, there will be wrong action, first

group practice, mutual supervision between students, the teacher patrol inspection, constantly loudly remind students to correct action, help individual students to correct mistakes, collective practice, students learn the advantages of outstanding students, correct their shortcomings.

The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training.
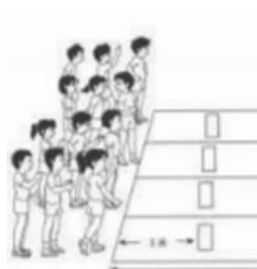
Station drills   One versus one game

☺ : Teacher

○ : Students

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. In class, primary school students generally use group practice, teachers should be based on the content of the textbook and the specific situation, with vivid language to repeat the key points of action, to correct the students' wrong behavior.

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the

content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body

③ Throw your arm and beat your shoulder

☺ : Teacher

◯ : Students

Information Sheet of Jumping Training Course

3. Standing long jumping

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health conditions.

2) Announce the class requirements: listen carefully, look carefully and do patiently.

3) Emphasize the safety precautions in this lesson.

Prepare for the event

1) Warm-up game: Divide the students into three groups, each group of 10 people, according to the round formation, listen to the teacher's command to run forward, run back, stop and other actions.
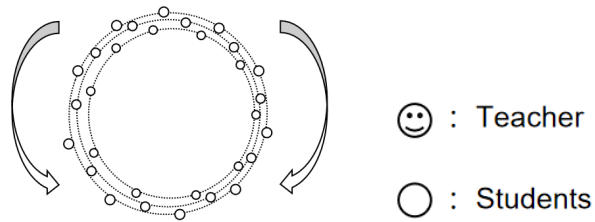
○ : Teacher

○ : Students

2) Muscle stretching exercise: The teacher leads the students to stretch the ankle, lower limbs, upper limbs, waist and neck according to the original formation.
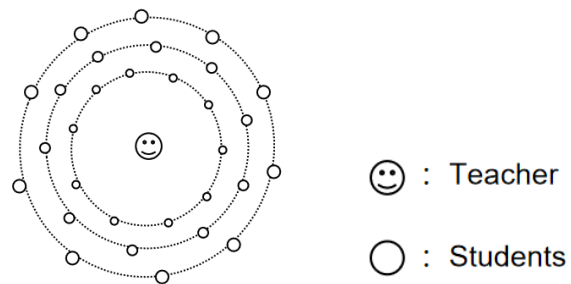
☺ : Teacher

○ : Students

1. Create a situation

Teacher: Last class learned feet jump, we jump and kangaroo as far, the students want to see the little frog have what ability?
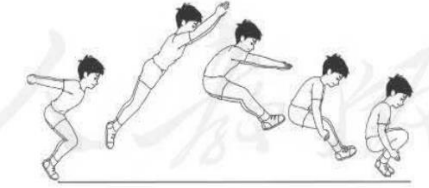
Student: To.

Teacher: Farmers uncle vegetable has a lot of pests in the field of vegetables, today we are a small frog, to catch for the farmer uncle pests clean, we have confidence.

Student: Have.

Teacher: Publish the teaching content, teaching objectives and key action skills.

The teacher will show the whole process of standing long jump to the students, so that the students can understand the various movement skills of standing long jump, which can form a certain representation in their mind.

Action pictures	Action resolution
	Two feet naturally open with the shoulder width, the upper body slightly forward, two legs bent knees, two arms raised; two arms naturally back and forth, while the legs from the forward above strong swing, feet quickly push off the ground, knee joint forward jump, after the chest, stretch the body as far as possible; before landing abdomen, knees, legs as far as possible: landing immediately knee buffer, maintain body balance.

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Teacher instruction usually means that the teacher uses vivid and specific language to describe before explaining the action to attract the attention of the students. Students 'independent entry means that teachers can fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students enter the situation independently.

Standing long jump is by the teacher to guide students into the teaching situation, then by the teacher teach students pedal skills, upper and lower limb movements movement coordination skills, students will practice each action one by one after the group training, in the process teachers should focus on each student, as far as possible when students just appear mistakes give correct to avoid repeated practice action curing. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

1) Double foot pedal ground skills:

① Hold in place: 5 * 5 groups per group

②Jump up and down the high steps continuously (steps high 30CM): divided into 6 groups, each group of 5 people, take turns to practice, practice for 2 minutes each time, do 5 times.

2) Foot and movement skills:

Frog jump lotus leaf game: students play the small frog, to 5 meters away in the field to catch pests, ◯ The hula hoop means the lotus leaf, every jump to have the cooperation, every time to jump on the lotus leaf, otherwise it will fall into the water. Then the students are divided into six groups, with five people in each group. Each person must help his uncle to catch the pests for five times to catch all the pests.
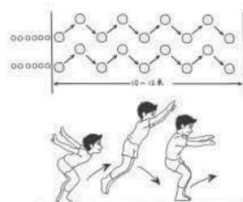
◯ : lotus leaf

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

In the above movement skills, the pedal pendulum with movement skills needs students to strengthen the practice, which is the key and difficult skills of standing long jump.

Strengthen the pedal pendulum with movement skills: continuous feet jump over obstacles.

The height of the obstacle is 20cm and the length is 5 meters. Students will jump 4 times continuously. After reaching the finish line, the next student will continue to practice 15 times each.
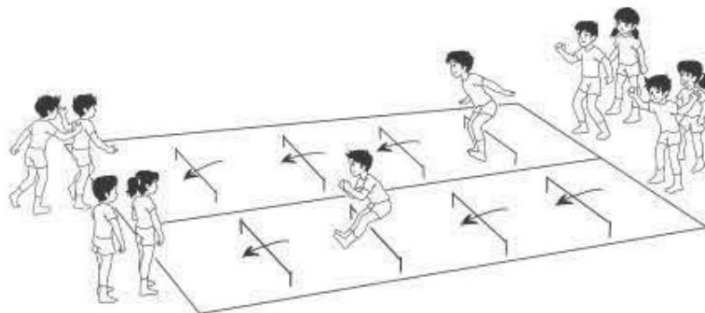
4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. Teachers should use vivid language to tell the key points of the behavior according to the content and specific situation of the textbook, correct the students' wrong behavior, and choose excellent students to show it.

The repeated practice of the standing long jump skills can be divided into groups or practiced alone, and all the skills can be skillfully used in the standing long jump. Repeat the wrong action many times until it is stable and fixed.

5.Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles.

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body.

③ Throw your arm and beat your shoulder.

☺ : Teacher

◯ : Students

Information Sheet of Throwing Training Course
1. Throw the ball at a fixed point

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health condition.

2) Announce the class requirements: listen carefully, look carefully, and do it patiently.

3) Emphasize the safety precautions in this class: the throwing practice is dangerous, let the students pay attention to safety, the ball cannot pick up the ball, the teacher's whistle cannot pick up the ball without blowing.

Prepare for the event

1) Warm-up small game: Buy fruit

The teacher plays the fruit vendor, each boy represents one yuan, the girl represents 0.5 yuan, when the teacher shows the fruit picture, the student asks: how much fruit? Then according to the price reported by the teacher free combination in a circle, see which students respond the fastest?

Divide the students into two groups, each with 15 students in the group, according to the circular formation, the outer circle students run clockwise, the students run counterclockwise to start the game. The teacher showed pineapple 1.5 yuan per catty, watermelon 3 yuan per catty, apple 3.5 yuan per catty, the game time

is about 6 minutes, then the student's body is slightly hot. The teacher said that the fruit was sold out, and we began our class.

2) Muscle stretching exercise: The teacher leads the students to stretch the ankle, lower limbs, upper limbs, waist and neck according to the original formation.

1. Create a situation

1) Teacher: Have you ever played the game of whack-a-mole?

2) Student: Played it once.

3) Teacher: How do you play? Who can talk about the gameplay?

4) The students raised their hands, the teacher called the name of a classmate, by the classmate answered: the ground mouse will hide in the hole, from time to time, we hold a small hammer in our hands, the local rat came out when I hit the hammer with his head.

5) Teacher: Yes, but we play the whack-a-mole game today, we are not a hammer, is a solid ball, gopers do not have to start, we can directly hit their hole.

6) Teachers shall announce the teaching content, teaching objectives and key action skills.

The teacher will show the whole process of the activity to the students, so that the students can understand each movement skills, and can form a certain representation in the mind.

Action pictures	Action resolution
	Training formation: the students are divided into groups of six people, to throw a solid ball into the rat hole in the center of the circle, The goal scorer is the best scorer.
	The grip of the solid ball: hold the solid ball with the thumb, index finger, middle finger and ring finger, bend the little finger to the top under the sandbag or softball, without the palm of the ball.
	On the body side, with the dominant foot straight, the other leg bent back, (with the right foot on the right foot) extend the right hand to the right side and the back of the right arm on the right leg; then push the right leg, turn the hip, chest out, turn left, the center of gravity forward, the right arm over the shoulder, swing the equipment forward and above.

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Teacher instruction usually means that the teacher uses vivid and specific language to describe before explaining the action to attract the attention of the students. Students 'independent entry means that teachers can fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students enter the situation independently.

Teaching situation, by the teacher to teach the students holding the ball, pedal, hip, chest out, body left and a series of movement skills, students will practice each action one by one after group training, in the process teachers should pay attention to each student, as far as possible when students just give correction to avoid repeated practice action curing. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

Ball-holding skills exercises:

Teachers study collectively for 10 minutes, and students practice in groups for 15 minutes.

2) Push the ground, hip, chest out and ball throwing:

① Students do not hold the ball practice: kicking the ground, turning hips, chest out, throwing the ball practice, collective learning, because this is a set of coherent skills, learning time needs the teacher according to the on-site students learning, this is the difficulty and key points of learning, generally take 20-30 minutes.

② Students holding the ball practice: kick the ground, hip, chest out, throwing the ball practice, collective learning, on the basis of no ball holding practice, students' movement skills of holding the ball will not change, but the weight of the hand changes, students can learn a little adjustment. But this is a difficult move, and the practice time is usually 20 minutes.

Note: Because kicking the ground, turning the hip, holding the chest, and throwing the ball is the close coordination and connection of a series of movements, the mastery of the previous skill will affect the learning of the next skill, so each skill must be learned to complete the whole ball throwing skill.
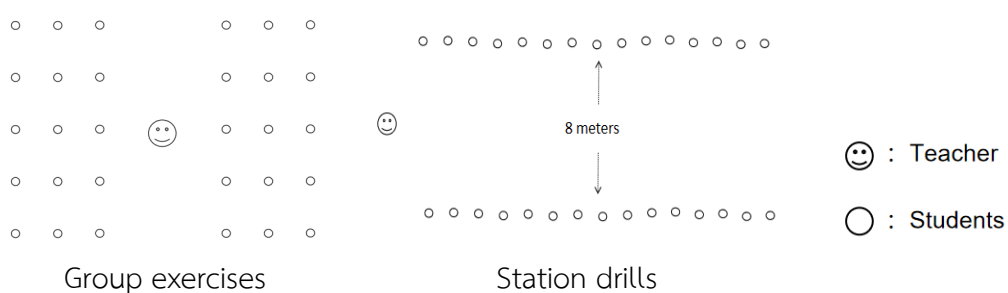
Group exercises   Station drills

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training.

Push the ground, turn the hips, chest out and ball throwing exercises:

① Students do not hold the ball practice: practice kicking the ground, turning the hips, chest out, throwing the ball. Group practice first: 6 people in each group, one person to practice, 5 people to observe, correct and urge each other. Collective practice: Group practice is to find students' problems in group practice, and the teacher will summarize the problems and focus on correcting the wrong actions.

② Students holding the ball: practice kicking the ground, turning hips, chest out and throwing the ball. On the basis of not holding the ball, students' movement skills of holding the ball will not change, but the weight in the hands will change. But this is a difficult move, and the practice time is usually 20 minutes.
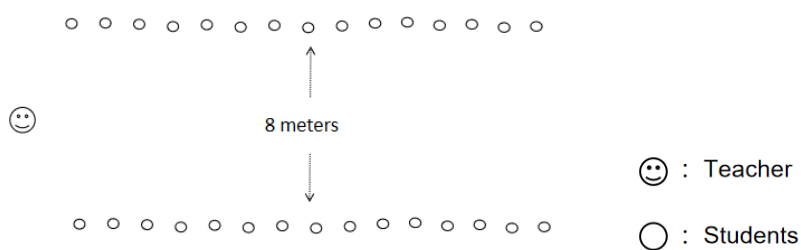
8 meters

☺ : Teacher

◯ : Students

4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. This class adopts the method of group practice. Teachers should tell the key points of the behavior in vivid language, correct the students' wrong behavior, and select excellent students to show it.

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles.

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body.

③ Throw your arm and beat your shoulder

Information Sheet of Throwing Training Course

2. Throw the ball forward

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health condition.

2) Announce the class requirements: listen carefully, look carefully, and do it patiently.

3) Emphasize the safety precautions in this class: the throwing practice is dangerous, let the student pay attention to safety, the ball can not pick up the ball, the teacher's whistle can not pick up the ball without blowing.

Prepare for the event

1) Warm-up small game: peach blossom blossoming

Students 15 people a column, stand into two columns, each column of team stand into a circle, the outer circle of the students running clockwise, the circle of the students running counterclockwise, in the process of running the teacher shouted: peach blossom blossoming, the students shout: open a few? If the teacher randomly says a number (for example, 4), four students will be together. The game time is 5 minutes, and the students' body is slightly hot.
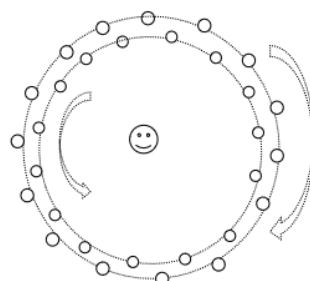
☺ ： Teacher

◯ ： Students

2) Warm-up exercises: the teacher led the students to do wrist, ankle, neck, shoulder joint, body rotation, side, lunpress according to the original formation, and the muscle stretching exercise of 5 people in groups.

○　○　○　○　○　○
○　○　○　○　○　○
○　○　○　○　○　○
○　○　○　○　○　○
○　○　○　○　○　○

☺ ： Teacher

○ ： Students

☺

1. Create a situation

    1) Teacher: Have you ever played the game of whack-a-mole?

    2) Student: Played it once

    3) Teacher: How do you play? Who can talk about the gameplay?

    4) The students raised their hands, the teacher called the name of a classmate, by the classmate answered: the ground mouse will hide in the hole, from time to time, we hold a small hammer in our hands, the local rat came out when I hit the hammer with his head

    5) Teacher: Yes, but we play the whack-a-mole game today, we are not a hammer, is a solid ball, gopers do not have to start, we can directly hit their hole.

    6) Teachers shall announce the teaching content, teaching objectives and key action skills

    The teacher will show the whole process of the activity to the students, so that the students can understand each movement skills, and can form a certain representation in the mind.

Action pictures	Action resolution
	Facing the direction of throwing, the feet front and back, the arms bend the elbow, two hands holding the ball behind the head, the upper body later, the center of gravity falls on the hind legs, and then the legs to push off the ground, the stomach, swing arms, throw the ball from the head forward and above with full body strength

2. Enter the situation

There are two ways for students to enter into the following situations: independent entry and teacher guidance entry. Teacher guidance usually refers to the description of the teacher in vivid and concrete language before explaining actions to attract the attention of students. This lesson is guided by the teacher to guide students into the teaching situation.

1) The teacher teaches students a series of movement skills such as holding the ball, kicking the ground, turning hip, chest out and body turn left. Students practice each movement one by one. In this process, the teacher should pay attention to each student's movements, and correct them as much as possible when students just make mistakes to avoid repeated solidification of exercises. At this time, the teacher will also find that many excellent students can invite excellent students to show their action skills and drive the enthusiasm of students.

2) Use the group practice method for cooperative learning. Divide the students in two groups (standing in two horizontal teams) to do a forward throw, 8 meters from each other.
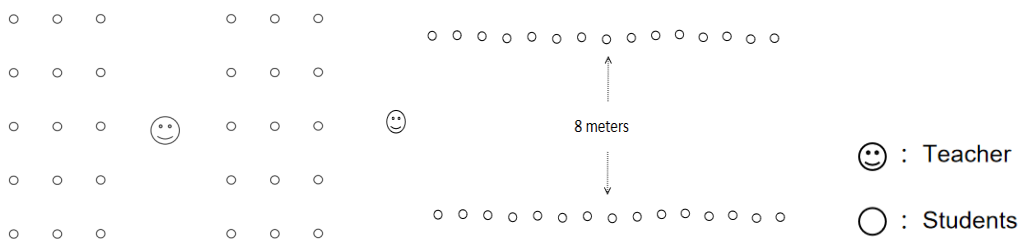
Group exercises   Group exercises
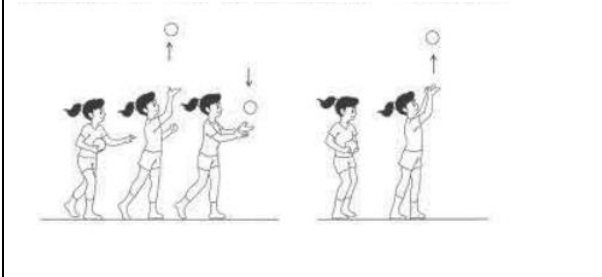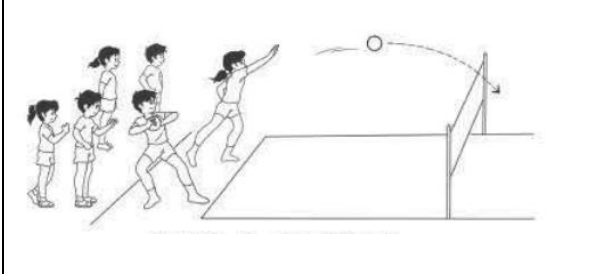
3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

Push the ground, turn the hips, chest out and ball throwing exercises:

1) Students do not hold the ball practice: practice kicking the ground, turning the hips, chest out and throwing the ball. First group practice: 6 people in each group, one person to practice, 5 people to observe, correct and urge each other. Collective practice: Group practice is to find students' problems in group practice, and the teacher will summarize the problems and focus on correcting the wrong actions.

2) Set practice conditions to help students understand the Angle and strength of the ball.

Demo figure	instruction
	Throw the ball with both hands and practice the strength of the ball for 10 minutes
	Throw the solid ball over the rope, practice the Angle of the ball shot for 10 minutes

3) Students 'ball holding practice: practice kicking the ground, turning hips, chest out and throwing the ball. On the basis of not holding the ball practice, students' movement skills of holding the ball will not change, but the weight in the hand will change. But this is a difficult move, and the practice time is usually 20 minutes.
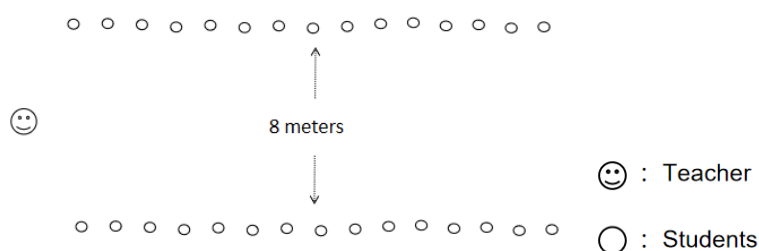
4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. This class adopts the method of group practice. Teachers should tell the key points of the behavior in vivid language, correct the students' wrong behavior, and select excellent students to show it. The fourth grade students have the experience of two-handed throwing movements. Teachers should appropriately improve the requirements of movement quality and practice density according to the characteristics of the continuous improvement of students' movement skills. Special emphasis should be placed on the coordination of ground, stomach and arm swing, and strengthen technical specifications.

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body

③ Throw your arm and beat your shoulder

☺ ： Teacher

◯ ： Students

Information Sheet of Throwing Training Course

3. Throw the solid ball

Introduction

Classroom routine

1) Teachers count the number of students and ask them about their health conditions

2) Announce the class requirements: listen carefully, look carefully, and do it patiently

3) Emphasize the safety precautions in this lesson: throwing practice is dangerous, let students pay attention to safety, stop and pick up the ball.

warming-up

1) Warm up jogging: pick up the ball Students hand in hand siege round, 1,2,3,4,5, so the students are divided into 1,2,3,4,5, students began to jog around the round, in the process of running, the teacher called to 3, for 3 students bend over to pick up the ball, and so on, until the ground all 30 ball were picked up by the students, jogging time for 5 minutes
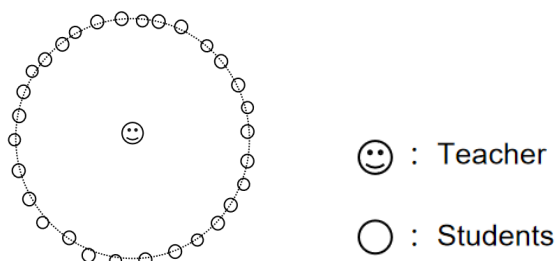
☺ ： Teacher

◯ ： Students

2) Ball exercises: after running, each student has a solid ball in his hands. The teacher leads the students to do ball exercises according to the original formation: one word step left and right swing movement, neck movement, body rotation movement, body side movement, lunge leg press movement, jumping muscle stretching movement.
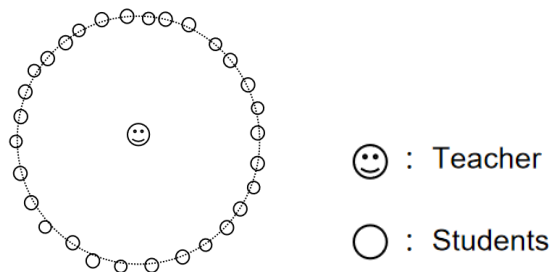
☺ : Teacher

◯ : Students

1. Create a situation

Teacher: Have you ever played the game of plants vs. zombies?

Student: played.

Teacher: How does the pea pitcher throw the peas in the game?

The teacher called a classmate to raise his hand, and the student answered: the pea pitcher's hand stretched back, the body is like a bow, the string can cast the pea.
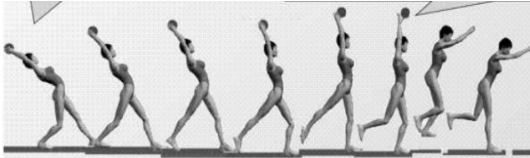
Teacher: praise this classmate, ask if there is no classmate supplement? Then he called him to another classmate.

Student: The waist is bent back, and the legs are also bent.

Teacher: Praise the second student and sum up the views of the above two students.

Teachers shall announce the teaching content, teaching objectives and key action skills.

The teacher will show the whole process of the activity to the students, so that the students can understand each movement skills, and can form a certain representation in the mind.

Action pictures	Action resolution
	tables which should be committed to memory for ready use: Hold the solid ball with both hands, two feet separate before and after, Bend the knee back over the head, Push the ground to pull up.

2. Enter the situation

There are two ways: independent entry and teacher guidance entry. Students 'independent entry means that teachers can fully develop democracy, listen to students' ideas and suggestions carefully, cultivate students' autonomy, and let students enter the situation independently. Our students have the experience of throwing with both hands. In this class, students can observe the action pictures, explore together in groups, and try to experience independent learning.

1) Students will observe the teacher's action decomposition pictures in groups and read the formula for 5 times.

2) The teacher divides the students into two horizontal teams, stand 8 meters apart, select two students for independent study display, and let the whole class give evaluation.

3) Teacher summary: praise the advantages and correct the mistakes

4) The teacher demonstrates the correct action

5) Select 4 students to show the action, and the students will evaluate it again

6) The teacher gives the evaluation again, praises the advantages, corrects the mistakes, and does the correct action demonstration again.
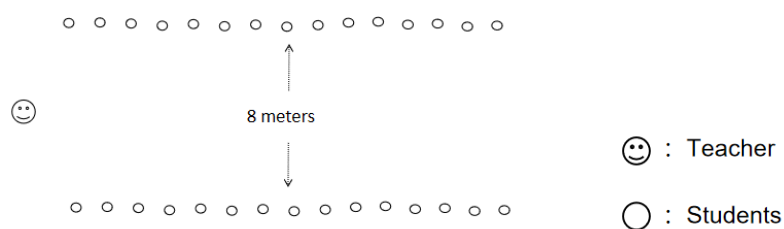
Group exercises

3. Strengthen situation

The link of strengthen situation is usually composed of teachers using guided language to strengthen movements and correct students' movements. When students practice alone and to practice together, teachers will use vivid and specific language to describe the key points of action, and constantly loudly remind students to correct their actions, and inspect to correct students' personal mistakes.

Throwing solid ball practice:

1) Turn the ball over the head: key points: hold the ball with both hands on the top of the head, the body back, hind legs bend the knees, front legs straight, the center of the body falls on the hind legs, the body tightened. Each person practiced for 10 times.

2) Students do not throw the ball practice: the teacher and students shout out the formula, while doing the action, each person 10 times

3) Students throw the ball practice: the teacher let the students hold the ball practice, and the students together loudly shouted out the formula, while doing the action, each person 10 times

4) Students practice in groups: requirements: the students must shout "prepare" and "throw" in turn before throwing the ball. After the ball stops moving, then shout out "pick up" and then pick up the ball.

5) The practice time is 20 minutes.
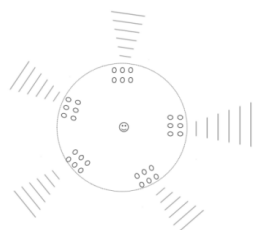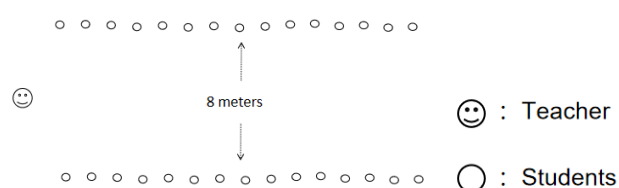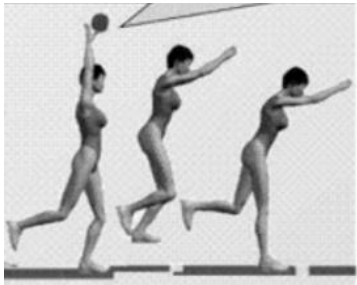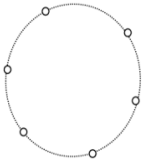
Station drills   Group exercises
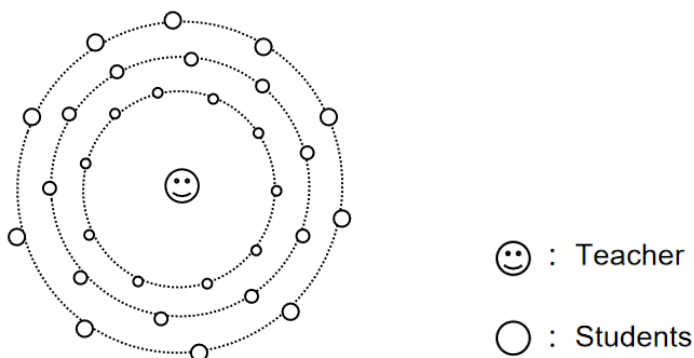
4. Practice repeatedly

Students' practice repeatedly include solo practice and group practice, each with its own advantages and disadvantages. This class adopts the method of group practice. Teachers should tell the key points of the behavior in vivid language, correct the students' wrong behavior, and select excellent students to show it.

Ball out for foot change movement exercise:

Action decomposition diagram	Practice the formation	Error prone point
		Throw the foot: in order to prevent the body to lean forward, to change the foot in time, then the body center of gravity should fall on the supporting foot, stop the force in time, control the body.

5. Guides the end

The end part is the end of a class, and its importance cannot be ignored. To guide students to relax, summarize this lesson, and infiltrate the important link of the content of the next class, to improve the quality of teaching. The formation of physical skills requires teachers and students to work more together and constantly strengthen them to form stable skills and use them skillfully in the later training. The teaching of this part is mainly about the relaxation and stretching of the body muscles, and the teacher plays soothing music.

① Sit to shake thighs, relax leg muscles, body forward flexion stretch muscles

② Adjacent students shake their arms, back-to-back to stretch the front muscles of the body

③ Throw your arm and beat your shoulder

☺ : Teacher

◯ : Students

Appendix D

Research Instrument Analysis Results

Index of Item Objective Congruence (IOC) Analysis of sports training course based on a situational teaching method for improve the basic athletic skills for primary school students.

Assessment Item	Expert Person			Total	IOC	Interpretation
	1	2	3			
Activity plan I: running training course						
1. The content is related to the learning objectives.	+1	+1	+1	3	1.00	suitable can be used
2. The learning objectives are consistent with the subject matter.	+1	+1	+1	3	1.00	suitable can be used
3. The learning Processes are related to teaching.	+1	+1	+1	3	1.00	suitable can be used
4. The learning activities are related to situational teaching Method.	+1	+1	+1	3	1.00	suitable can be used
5. The assignment of work related to the subject of learning.	+1	+1	+1	3	1.00	suitable can be used
6. There are various assessments related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used
7. The measurement and evaluation related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used

Assessment Item	Expert Person			Total	IOC	Interpretation
	1	2	3			
Activity plan II: Jumping training course						
1. The content is related to the learning objectives.	+1	+1	+1	3	1.00	suitable can be used
2. The learning objectives are consistent with the subject matter.	+1	+1	+1	3	1.00	suitable can be used
3. The learning Processes are related to teaching.	+1	+1	+1	3	1.00	suitable can be used
4. The learning activities are related to situational teaching Method.	+1	+1	+1	3	1.00	suitable can be used
5. The assignment of work related to the subject of learning.	+1	+1	+1	3	1.00	suitable can be used
6. There are various assessments related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used
7. The measurement and evaluation related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used

Assessment Item	Expert Person			Total	IOC	Interpretation
	1	2	3			
Activity plan III: Throwing training course						
1. The content is related to the learning objectives.	+1	+1	+1	3	1.00	suitable can be used
2. The learning objectives are consistent with the subject matter.	+1	+1	+1	3	1.00	suitable can be used
3. The learning Processes are related to teaching.	+1	+1	+1	3	1.00	suitable can be used
4. The learning activities are related to situational teaching Method.	+1	+1	+1	3	1.00	suitable can be used
5. The assignment of work related to the subject of learning.	+1	+1	+1	3	1.00	suitable can be used
6. There are various assessments related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used
7. The measurement and evaluation related with learning objectives.	+1	+1	+1	3	1.00	suitable can be used

Index of Suitable Analysis of the sports training course based on a situational teaching method for improve the basic athletic skills for primary school students

Assessment Item	Expert Person			$\bar{X}$	SD.	Interpretation
	1	2	3			
Activity plan I: Running training course						
1. Learning objectives sort the contents from easy to difficult.	5	5	5	5.00	0.00	Most suitable
2. The situational teaching method is suitable for encouraging students to learn independently.	5	5	5	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5	5	5	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5	5	5	5.00	0.00	Most suitable
5. Learning activities can actually improve students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5	5	5	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5	5	5	5.00	0.00	Most suitable
Assessment Item	Expert Person			$\bar{X}$	SD.	

Assessment Item	Expert Person			$\bar{X}$	SD.	Interpretati-on
	1	2	3			
Activity plan II: Jumping training course						
1. Learning objectives sort the contents from easy to difficult.	5	5	5	5.00	0.00	Most suitable
2. The situational teaching method is suitable for encouraging students to learn independently.	5	5	5	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5	5	5	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5	5	5	5.00	0.00	Most suitable
5. Learning activities can actually improve students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5	5	5	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5	5	5	5.00	0.00	Most suitable

Assessment Item	Expert Person			$\bar{x}$	SD.	Interpretation
	1	2	3			
Activity plan III: Throwing training course						
1. Learning objectives sort the contents from easy to difficult.	5	5	5	5.00	0.00	Most suitable
2. The situational teaching method is suitable for encouraging students to learn independently.	5	5	5	5.00	0.00	Most suitable
3. Determining content suitable for the age of students.	5	5	5	5.00	0.00	Most suitable
4. Organizing activities suitable for learning objectives.	5	5	5	5.00	0.00	Most suitable
5. Learning activities can actually improve students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
6. A variety of learning activities are suitable for the development of basic sports skills of students	5	5	5	5.00	0.00	Most suitable
7. The using teaching media are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
8. The duration of the activities is suitable for the development of students' basic sports skills.	5	5	5	5.00	0.00	Most suitable
9. Measurement and evaluation are suitable for learning activities.	5	5	5	5.00	0.00	Most suitable
10. Appropriate assessment criteria for the student's level	5	5	5	5.00	0.00	Most suitable

Index of Item Objective Congruence (IOC) analysis of the performance test
to Improve the basic athletic skills for primary school students

Basic Athletic Skills	Expert Person			Total	IOC	Interpretation
	1	2	3			
Running training course						
- Relay running	+1	+1	+1	3	1.00	can be used
- Endurance running	+1	+1	+1	3	1.00	can be used
- Fast running	+1	+1	+1	3	1.00	can be used
Jumping training course						
- Single-foot jumping	+1	+1	+1	3	1.00	can be used
- Double-foot jumping	+1	+1	+1	3	1.00	can be used
- Standing long jumping	+1	+1	+1	3	1.00	can be used
Throwing training course						
- Throw the ball at a fixed point	+1	+1	+1	3	1.00	can be used
- Throw the ball forward	+1	+1	+1	3	1.00	can be used
- Throw the solid ball	+1	+1	+1	3	1.00	can be used

Analysis Result of Reliability

by Pearson's correlation coefficient method

Student No.	First times	Second times	Student No.	First times	Second times
1	28	31	16	29	31
2	26	32	17	27	30
3	28	32	18	25	28
4	25	28	19	31	32
5	24	28	20	23	25
6	28	33	21	32	33
7	24	29	22	28	28
8	26	30	23	26	28
9	26	29	24	26	30
10	23	27	25	26	27
11	28	29	26	23	25
12	31	31	27	23	26
13	21	26	28	24	28
14	25	27	29	25	28
15	25	28	30	25	26

The basic athletic skills score using the situational teaching method of students before and after learning.

Student number	pre-test				post-test				Difference score
	Running (15)	Jumping (15)	throwing (15)	Total (45)	Running (15)	Jumping (15)	throwing (15)	Total (45)	
1	7	12	10	29	9	13	12	34	5
2	9	8	11	28	12	11	14	37	9
3	12	6	9	27	14	10	10	34	7
4	9	8	11	28	12	11	14	37	9
5	4	10	11	25	10	13	13	36	11
6	12	11	9	32	15	12	12	39	7
7	8	10	8	26	11	12	11	34	8
8	9	9	9	27	12	12	13	37	10
9	8	7	9	24	10	9	11	30	6
10	8	6	10	24	11	10	12	33	9
11	10	10	9	29	13	12	13	38	9
12	10	7	8	25	13	11	12	36	11
13	8	7	10	25	11	10	13	34	9
14	9	9	10	28	12	12	12	36	8
15	7	8	10	25	11	12	13	36	11
16	11	9	8	28	14	12	11	37	9
17	8	11	6	25	11	14	9	34	9
18	9	9	5	23	12	13	9	34	11
19	5	11	10	26	9	14	14	37	11
20	9	8	5	22	12	11	8	31	9
21	10	9	5	24	13	12	9	34	10
22	9	7	8	24	12	9	10	31	7
23	12	10	10	32	14	12	13	39	7
24	11	11	7	29	13	14	11	38	9
25	11	10	8	29	14	12	10	36	7
26	11	12	9	32	13	14	13	40	8
27	7	8	8	23	10	11	11	32	9
28	10	6	7	23	13	10	11	34	11
29	6	6	7	19	9	9	10	28	9
30	6	6	9	21	9	8	13	30	9
$\overline{X}$				26.07				34.87	
SD.				3.22				2.94	

Appendix E

Research Instrument

Activity Plan I

Content

Running training course

Objective of Learning

1. Students can run the relay running to the criteria of fair level and above. (P)

2. Students can run the endurance running to the criteria of fair level and above. (P)

3. Students can run the fast running to the criteria of fair level and above. (P)

Main point/concept

Running is a sporting activity that uses basic human motor skills to enhance physical performance and helps to strengthen the muscles Improved breathing system better nervous system. This is one activity that is useful for children. This is in line with the nature of a child who does not like to be still. Running skill is a combination of the following four basic abilities, namely speed skills, anaerobic endurance, aerobic endurance and running efficiency. The study of running skill includes three parts: 1) relay running, 2) endurance running, and 3) fast running

Learning processes

Introduction

1) Introduce the learning objectives of running training.

The teacher first introduces this lesson's teaching content and learning objectives to the students, and explains the content and importance of the teaching objectives in detail. Students can clearly understand the teaching objectives to achieve the expected teaching effect is very important.

2) Introduce safety matters before, during and after running training.

Learning Activity

The situational teaching method includes five teaching: 1) create a situation, 2) enter the situation, 3) strengthen situation, 4) practice repeatedly, and 5) guides the end.

Step 1 Create a situation

Create a situation: the teacher explains the construction of teaching scenes in the following order:

1) The teaching scene of relay running teaching is "China speed--Harmony EMU". The teacher use language to describes driving speed of Chinese bullet trains, which set off the learning atmosphere.

2) The endurance running, the teacher started teaching with "Take turns to lead the run" scenario, the teacher tell the contents and rules of the training.

3）"Let the wind kiss my face" is the teaching scene of fast running, let the students feel the breeze in the hot summer.

1.1 Teachers introduce the teaching content and arrange the teaching scenarios.

1.2 Teachers explain how to use the tools to complete the teaching and training tasks.

1.3 The teacher asks questions and guides the students to think about problems and complete tasks.

Step 2 Enter the situation

After the teacher create a situation, the students enter the situation. In order to make the students pay more attention, the teacher try to use exaggerated movements, in each training content (relay running, endurance running, and fast running) respectively, especially the key content and details of the demonstration of repeated actions.

1) Warm-up exercise: Let the students do rhythmic exercises follow the teacher's slogan, move each the joints of the body, to prevent physical injury during exercise.

2) The teacher takes the students to the training ground and teach the operations together.

3) The students practice in groups and select the team leader. Students remind each other and help each other when they practice.

4) Teachers observe the movements of students, pay attention to the wrong movements of students in the training process, and help the students to correct their movements.

Step 3 Strengthen situation

The teacher observes the movement of the student's pay attention to the incorrect running of the students in the process of training. In this part teaching, the teacher strengthens their key running training and correction of the wrong running.

1) The teacher observes the students, find problems, corrects them collectively and invites the outstanding students to demonstrate the correct movements.

2) The teacher helps students overcome difficulties by setting questions, and organize students to strengthen exercises.

3) Students cooperative training, collaborate with each other and encourage each other.

Step 4 Practice repeatedly

After intensive training, the teacher found that there were still students mistake movements. At this time, the teacher take care of the collective and can't fall poor students, in the collective to the key and difficult movements repeat training at the same time to individual students to correct guidance. Let teammates take care of and enhance training. The goal of repetitive training is to make the student move more stable and repeatedly practicing until students can meet the fair to very good criteria as follows:

1）Relay running: Students can relay run for 6 peoples*50 meters. (Criteria for boys during 1.14-1.43 minutes, criteria for girls during 1.18-1.47 minutes).

2）Endurance running: Students can endurance run in a distance of 400 meters. (Criteria for boys during 1.42-2.39 minutes, criteria for girls during 1.47-2.44 minutes).

3）Fast running: Students can fast run in a distance of 50 meters. (Criteria for boys during 8.4-11.3 seconds, criteria for girls during 8.8-11.7 seconds).

Step 5 Guides the end

After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises:

1) The teacher plays soothing music and guides the students to relax the body muscles.

2) The teacher summarizes the students' performance in class and announces the completion of the task.

3) Announce the next class and ask students to prepare for the next class.

Measurement and Evaluation

      1) Running observation form

      2) Performance running test

Instructional Media

      runway, sign pole, meter ruler, stopwatch

Activity Schedule for running training course

Date/time	Teaching Process	Remark
Day1 Relay running		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of relay running training. 2) Introduce safety matters	30 minutes

8:30-11:30	**Learning Activity: relay running**
	   The situational teaching method includes five teaching:
	Step 1 Create a situation:
	  The teacher explains the construction of teaching scenes.
	Step 2 Enter the situation
	   The students enter the running teaching situation.
	   The teacher teaches the relay running.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13:30-16:30	**Step 3 Strengthen situation**
	   The teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process.
	Step 4 Practice repeatedly
	   The objective of repetitive training is to make the students move more stable and repeatedly practicing until students can meet the fair to very good criteria.
	Step 5 Guides the end
	   After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.
		3 hours

16:30-17:00	Summarize and prepare for the following Endurance running training	30 minutes

Date/time	Teaching Process	Remark
Day2 Endurance running		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of endurance running training. 2) Introduce safety matters	30 minutes

8:30-11:30	**Learning Activity: endurance running**
	    The situational teaching method includes five teaching:
	Step 1 Create a situation:
	    The teacher explains the construction of teaching scenes.
	Step 2 Enter the situation
	    The students enter the running teaching situation.
	    The teacher teaches the endurance running.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13:30-16:30	**Step 3 Strengthen situation**
	    In teaching this part, the teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process.
	Step 4 Practice repeatedly
	    The objective of repetitive training is to make the students move more stable and repeatedly practicing until students can meet the fair to very good criteria.
	Step 5 Guides the end
	    After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.
		3 hours

16:30-17:00	Summarize and prepare for the following fast running training	30 minutes

Date/time	Teaching Process	Remark
Day3 Fast running		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of fast running training. 2) Introduce safety matters	30 minutes
8:30-11:30	**Learning Activity: Fast running** The situational teaching method includes five teaching: **Step 1 Create a situation:** The teacher explains the construction of teaching scenes. **Step 2 Enter the situation** The students enter the running teaching situation. The teacher teaches the fast running.	3 hours
11:30-13:30	Break and lunch time	2 hours
13.30-16:30	**Step 3 Strengthen situation** The teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process. **Step 4 Practice repeatedly** The objective of repetitive training is to make the students move more stable and repeatedly practicing until students can meet the fair to very good criteria. **Step 5 Guides the end** After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.	3 hours
16:30-17:00	Summary	30 minutes

Activity Plan II

Content

　Jumping training course

Objective of Learning

　1. Students can jump the single-foot jumping to the criteria of fair level and above. (P)

　2. Students can jump the double-foot jumping to the criteria of fair level and above. (P)

　3. Students can jump the Standing long jumping to the criteria of fair level and above. (P)

Main point/concept

　Jumping is a physical activity that uses the basic motor skills of the human body to improve the physical performance, it is a kind of strength quality, which helps to enhance the body coordination and improve the muscle strength. This is one activity that is useful for children. The study of jumping skills includes three parts: 1) single-foot jumping, 2) double-foot jumping, and 3) standing long jumping.

Learning processes

　Introduction

　1) Introduce the learning objectives of jumping training.

　The teacher first introduces this lesson's teaching content and learning objectives to the students, and explains the content and importance of the teaching objectives in detail. Students can clearly understand the teaching objectives to achieve the expected teaching effect is very important.

　2) Introduce safety matters before, during and after jumping training.

Learning Activity

　The situational teaching method includes five teaching: 1) create a situation, 2) enter the situation, 3) strengthen situation, 4) practice repeatedly, and 5) guides the end.

　Step 1 Create a situation

　The teacher creates teaching situation in the following order:

　1) Single-foot jumping is through the game "drive the train" teaching, the students are divided into six groups, in the way of group competition to learn.

　2) Double-foot jumping teaching is combined with the content of this lesson and the actual situation of the lesson, the use of novel teaching props to attract

students' attention, so that students are interested in the learning content, the study of this class to "small animal show" as the scene teaching.

3) Standing long jumping is based on the "little frog big ability" for the scene teaching, in order to make students interested in the learning content, the students played the little frog jumping to catch pests.

Step 2 Enter the situation

After the teacher create a situation, the students enter the situation. In order to, let the students enter the teaching situation as soon as possible and put into learning, the teacher lead the students play their imagination and try to practice in each training content (single-foot jump, double-foot jump and standing long jump). After the students practice, the teacher summarizes the students' excellent movements, especially the key content and details of the demonstration movements.

1) Warm-up exercise: Let the students do rhythmic exercises with the teacher command, Fully move the body joints to prevent the body from being hurt during exercise.

2) After the teacher introduces the teaching scene, take the students to the training ground, listen to their ideas carefully, and let the students practice in their own methods.

3) The teacher observes the students 'movements, finds out the excellent students' examples and summarizes the excellent students' movements, and takes the opportunity to teach the students about the correct movements.

4) The teacher observes the students' movements, finds the students with wrong movements in the training process and corrects them in time.

Step 3 Strengthen situation

The teacher observes the movement of the student's pay attention to the incorrect jumping of the students in the process of training. In this part teaching, the teacher strengthens their key jumping training and correction of the wrong jumping.

1) The teacher observes the students, find problems, corrects them collectively and invites the outstanding students to demonstrate the correct movements.

2) The teacher helps students overcome difficulties by setting questions, and organize students to strengthen exercises.

3) Students cooperative training, collaborate with each other and encourage

each other.

Step 4 Practice repeatedly

After intensive training, the teacher found that there were still students mistake movements. At this time, the teacher takes care of student's level poor and difficult movements to take them repeat jumping training at the same time to individual students to correct guidance. Let teammates take care of and enhance training. The goal of repetitive training is to make the student move more stable and repeatedly practicing until students can meet the fair to very good criteria as follows:

1) Single-foot jumping: Students can single-foot jump in distance of 5 meters. (Criteria for boys during 3.64-3.84 seconds, criteria for girls during 4.07-4.24 seconds).

2) Double-foot jumping: Students can double-foot jump in a distance of 5 meters. (Criteria for boys during 4.73-4.90 seconds, criteria for girls during 5.13-5.30 seconds).

3) Standing long jumping: Students can jump the standing long jump at a distance in meters. (Criteria for boys between 1.28-1.67 meters, criteria for girls between 1.20-1.57 meters).

Step 5 Guides the end

After training, the students have drastic changes after training. In order to relieve fatigue as soon as possible and make the human body gradually transition from a violent exercise state to a relatively quiet state, they need to do some relaxation exercises:

1) Play soothing music, and the teacher guides the students to stretch their movements;

2) The teacher summarizes the learning and key points of this course in vivid language, and evaluates the students' performance;

3) The teacher tells the main content of the next class, let the students actively prepare for the next class of learning.

Measurement and Evaluation

Jumping observation form

Performance jumping test

Instructional Media

Tape, stopwatch, bunker, straight runway

Activity Schedule for jumping training course

Date/time	Teaching Process	Remark
Day1 Single-foot jumping		
8:00-8:30	**Teacher Introduction** 1) Introduce the learning objectives of single-foot jumping training. 2) Introduce safety matters	30 minutes
8:30-11:30	**Learning Activity: single-foot jumping training.** 　The situational teaching method includes five teaching: **Step 1 Create a situation:** 　The teacher explains the construction of teaching scenes. **Step 2 Enter the situation** 　The students enter the jumping teaching situation. 　The teacher teaches the single-foot jumping training.	3 hours
11:30-13:30	Break and lunch time	2 hours
13.30 – 16.30	**Step 3 Strengthen situation** 　In teaching this part, the teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process. **Step 4 Practice repeatedly** 　After intensive training, the teacher found that there were still students mistake movements. At this time, the teacher takes care of student's level poor and difficult movements to take them repeat single-foot jumping training until students can meet the fair to very good criteria. **Step 5 Guides the end** 　After training, the students have drastic changes after training. In order to relieve fatigue as soon as possible and make the human body gradually transition from a violent exercise state to a relatively quiet state, they need to do some relaxation exercises.	3 hours
16:30-17:00	Summarize and prepare for the following double-foot jumping training.	30 minutes

Date/time	Teaching Process	Remark
Day2 Double-foot jumping training.		
8:00-8:30	**Teacher Introduction** 1) Introduce the learning objectives of double-foot jumping training. 2) Introduce safety matters	30 minutes

8:30-11:30	**Learning Activity: double-foot jumping training.**
	    The situational teaching method includes five teaching:
	Step 1 Create a situation:
	    The teacher explains the construction of teaching scenes.
	Step 2 Enter the situation
	    The students enter the jumping teaching situation.
	    The teacher teaches the double-foot jumping training.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13.30 – 16.30	**Step 3 Strengthen situation**
	    In teaching this part, the teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process.
	Step 4 Practice repeatedly
	    After intensive training, the teacher found that there were still students mistake movements. At this time, the teacher takes care of student's level poor and difficult movements to take them repeat double-foot jumping training until students can meet the fair to very good criteria.
	Step 5 Guides the end
	    After training, the students have drastic changes after training. In order to relieve fatigue as soon as possible and make the human body gradually transition from a violent exercise state to a relatively quiet state, they need to do some relaxation exercises.
		3 hours

16:30-17:00	Summarize and prepare for the following standing long jumping training.	30 minutes

Date/time	Teaching Process	Remark
Day3 Standing long jumping training.		
8:00-8:30	**Teacher Introduction** 1) Introduce the learning objectives of standing long jumping training. 2) Introduce safety matters.	30 minutes

8:30-11:30	**Learning Activity: standing long jumping training.**
	  The situational teaching method includes five teaching:
	Step 1 Create a situation:
	  The teacher explains the construction of teaching scenes.
	Step 2 Enter the situation
	  The students enter the jumping teaching situation.
	  The teacher teaches the standing long jumping training.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13.30-16:30	**Step 3 Strengthen situation**
	  In teaching this part, the teacher will strengthen the practice of key movements. The teacher observes the movements of the students, paying attention to the incorrect movements of the students in the training process.
	Step 4 Practice repeatedly
	  After intensive training, the teacher found that there were still students mistake movements. At this time, the teacher takes care of student's level poor and difficult movements to take them repeat standing long jumping training until students can meet the fair to very good criteria.
	Step 5 Guides the end
	  After training, the students have drastic changes after training. In order to relieve fatigue as soon as possible and make the human body gradually transition from a violent exercise state to a relatively quiet state, they need to do some relaxation exercises.
		3 hours

16:30-17:00	Summary	30 minutes

Activity Plan III

Content

    Throwing training course

Objective of Learning

    1. Students can throw the ball at a fixed point to the criteria of fair level and above. (P)

    2. Students can throw the ball forward to the criteria of fair level and above. (P)

    3. Students can throw the solid ball to the criteria of fair level and above. (p)

Main point/concept

    Throwing is a certain way of movement, coordinating the use of the whole-body strength, through the hand out of the device throwing exercise, it is to exercise primary school students upper limb strength and shoulder belt flexibility is a good form of exercise, which is a very meaningful activity for primary school students. The throwing movement is mainly measured by distance and precision. The study of throwing skills includes three parts: 1) throw the ball at a fixed point, 2) throw the ball forward and 3) Throw the solid ball.

Learning Processes

    1. Classroom safety education

        1) Emphasize the safety before, during and after exercise.

        2) Introduce the safety of equipment and training site during throwing training.

    2. Introduction

        1) The teacher introduced the teaching content and learning objectives of this lesson to the students

        2) It is very important that students can clearly understand the learning objectives to achieve the desired teaching results.

Learning Activity

    The situational teaching method includes five teaching: 1) create a situation, 2) enter the situation, 3) strengthen situation, 4) practice repeatedly, and 5) guides the end.

    Step 1 Create a situation

1) The first part of the throwing teaching is based on the game of "whack-a-mole". The teacher needs to explain the rules of the game and the potential dangers in the training process.

2) "Throw the ball forward" is the second part of the teaching situation. The teacher divides the students into five groups, explains the rules of the practice and the requirements of throwing and picking up the ball, and guides the students into the next part of learning.

3) The scene where the teacher designed to throw the solid ball is "blasting the bunker". The teacher will use action decomposition diagram to let them understand the students of the whole process of throwing, so that the students can understand more intuitively.

In the throwing teaching, teachers should introduce the teaching content and learning objectives, as well as the potential dangers and risk avoidance methods in the training process. Students should prepare in advance according to the teacher's requirements before the training.

Step 2 Enter the situation

After the teacher create a situation, the students enter the teaching situation. In order to make students more focused, teachers try to use exaggerated movements in each training content, especially the key content and details.

1) Preparation activities: jogging warm up, joint stretching, fully in the movement of the body's joints, to prevent the body from being injured during exercise.

2) The teacher takes the students to the training ground and teach the operations together.

3) The students practice in groups and select the team leader. Students remind each other and help each other when they practice.

4) Teachers observe the movements of students, pay attention to the wrong movements of students in the training process, and help the students to correct their movements.

Step 3 Strengthen situation

The teacher lets the students practice in groups, focusing on strengthening the training of key contents to solidify the movements.

1) Students practice in groups and help each other.

2) The teacher repeated the description of the key points of the action in language, and observed the students, and correct collectively, and remind and correct one by one.

3) Select the excellent students for the presentation.

Step 4 Practice repeatedly

The purpose of repeated training is to make the students' movements more stable and practice repeatedly until the students fairly meet the very good standards as follows:

1) Throw the ball at a fixed point: Students can throw a solid ball into Logo circle for 5 times. (Criteria for boys in a distance 5 meters, criteria for girls in a distance 2.5 meters from the starting point, and record the number of goals score).

2) Throw the ball forward: Students can throw the ball forward in a criteria distance. (Criteria for boys between 4.2-7.1 meters, criteria for girls between 2.0-5.2 meters). Throw the solid ball: students can throw the solid ball by their both hands in a criteria distance. (Criteria for boys between 4.0-6.9 meters, criteria for girls between 1.9-5.1 meters).

3) Step 5 Guides the end

After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.

1) The teacher plays soothing music and guides the students to relax the body muscles.

2) The teacher summarizes the students' performance in class and announces the completion of the task.

3) Announce the next class and ask students to prepare for the next class.

Measurement and Evaluation

1) Throwing observation form

2) Performance throwing test

Instructional Media

solid ball, Logo circle, the action decomposition diagram

Activity Schedule for throwing training course

Date/time	Teaching Process	Remark
Day 1 Throw the ball at a fixed point		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of throw the ball at a fixed point training. 2) Introduce safety education	30 minutes

8:30-11:30	**Learning Activity: Throw the ball at a fixed point**.
	  The situational teaching method includes five teaching:
	Step 1 Create a situation :
	  The teacher explains the construction of teaching scene.
	Step 2 Enter the situation
	  The students enter the throwing teaching situation.
	  The teacher teaches the throw the ball at a fixed point.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13:30-16:30	**Step 3 Strengthen situation**
	  The teacher observes the students, collective correction, remind and correct one by one.
	Step 4 Practice repeatedly
	  The objective of repetitive training is to make the student move more stable and repeatedly practicing until students can meet the fair to very good criteria.
	Step 5 Guides the end
	  After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.
		3 hours

16:30-17:00	Summarize and prepare for the following throw the ball forward training	30 minutes

Date/time	Teaching Process	Remark
Day 2 Throw the ball forward		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of throw the ball forward training. 2) Introduce safety education.	30 minutes

8:30-11:30	**Learning Activity: Throw the ball forward**
	
	  The situational teaching method includes five teaching:
	
	Step 1 Create a situation :
	
	  The teacher explains the construction of teaching scene.
	
	Step 2 Enter the situation
	
	  The students enter the throw teaching situation.
	
	  The teacher teaches the throw the ball forward.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13.30-16:30	**Step 3 Strengthen situation**
	
	  The teacher Observe the students, collective correction, remind and correct one by one.
	
	Step 4 Practice repeatedly
	
	  The objective of repetitive training is to make the student move more stable and repeatedly practicing until students can meet the fair to very good criteria.
	
	Step 5 Guides the end
	
	  After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.
		3 hours

16:30-17:00	Summarize and prepare for the following Throw the solid ball training	30 minutes

Date/time	Teaching Process	Remark
Day 3 Throw the solid ball		
8:00-8:30	Teacher Introduction 1) Introduce the learning objectives of throw the solid ball training. 2) Introduce safety matters	30 minutes

8:30-11:30	**Learning Activity: throw the solid ball**
	  The situational teaching method includes five teaching:
	Step 1. Create a situation :
	  The teacher explains the construction of teaching scene.
	Step2. Enter the situation
	  The students enter the throwing teaching situation.
	  The teacher teaches the throw the solid ball.
		3 hours

11:30-13:30	Break and lunch time	2 hours

13.30-16:30	**Step 3 Strengthen situation**
	  The teacher Observe the students, collective correction, remind and correct one by one.
	Step 4 Practice repeatedly
	  The objective of repetitive training is to make the student move more stable and repeatedly practicing until students can meet the fair to very good criteria.
	Step 5 Guides the end
	  After training, students' somatic function has drastic changes. In order to relieve fatigue as soon as possible, reduce the excitability of the cerebral cortex, so that the human body gradually transition from an intense exercise state to a relatively quiet state, the students need to do some relaxation exercises.
		3 hours

16:30-17:00	Summary	30 minutes

Appendix F

Certificate of English

BS RU BANSOMDEJCHAOPRAYA RAJABHAT UNIVERSITY

This is to certify that

Miss Xue Mei

Achieved BSRU English Proficiency Test (BSRU-TEP) level

B2

Given on 9th August 2022

(Assistant Professor Dr Kulsirin Aphiratvoradej)

Director

Appendix G

Research Article Response Form

ICLIST2024 submission 32

Dear authors,

Thank you for submitting your abstract , I have the following result about your submission
to ICLIST2024
The Development of Sports Training Course Based on Situational Teaching Method to improve the Basic Athletic Skills for Primary School Students.

With heartiest congratulations, your abstract has been accepted. Acceptance of the abstract does not automatically imply acceptance of the paper.

The score from 3 reviewers is 76% based on Quality of Content ,Significance,Originality, Thematic Relevance, and Presentation.

Please up load the full paper through easy chair system,
Your contribution to the ICLIST 2024 is greatly appreciated

Best regards,
Wisitsree Wiyaratn.
ICLIST 2024 secretariat

The Development of Sports Training Course Based on the Situational Teaching Method to improve the Basic Athletic Skills for Primary School Students

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Abstract

The purposes of this research were 1) to develop the sports training course based on the situational teaching method to improve the basic athletic skills of primary school students and 2) to compare students' basic athletic skills of the sports training course before and after the implementation base on the situational teaching method of primary school students. The sample group there were 30 students from the 1 class of the fourth grade of Weifang Wenhua primary school, Weifang, who obtained through cluster random sampling. The research instruments involved 1) an Activity plan according to the situational teaching method and 2) a basic athletic skills test (performance test). The Quality of confidence values in performance tests by test-retest with 30 non-sample students, by Pearson's correlation coefficient = 0.81. Data were statistically analyzed by mean, standard deviation, and t-test for dependent samples.

The results were found that:

1) The development of the sports training course based on the situational teaching method, the researcher had studied the documents and research related to the situational teaching method from many researchers and has synthesized into 5 steps used to develop an activity plan. The results show the quality of the activity plan by experts overall is the most suitable.

2) The comparison of students' basic athletic skills before and after learning by using the situational teaching method of primary school students. The results show the basic athletic skills of students after learning higher than before learning statistically significant at the level .01.

Keywords: Basic athletic skills, Situational teaching method, Sports training course

1. Introduction

Sports training is very important for primary school students. It is conducive to the physical development of primary school students and healthy physical exercise, and can promote the growth and development of primary school students' bones, muscles, heart, and other organs, primary school students adhere to good physical education, active physical exercise, can make a bone enhancement, promote growth and development, so that children's height rapid rapidly, improve their sports ability, cultivate unity, cooperation, competition and other spirit. (Wang Changchun, 2020, p.2).

According to the survey, all the indicators of physical fitness of Chinese teenagers and children show a downward trend, distributed at all ages, and the physical fitness of primary school students (i.e., young children aged 6 to 13 years old) is particularly obvious. (Qiu Meilan, 2022, pp.188-190.). In comparison, the physical fitness of Chinese children and adolescents dropped by 167 percent from 1995 to 2018 and is still below the level of 1985.

In recent years, with the reform of the education system, primary schools in China have gradually attached importance to PE teaching. However, in some primary schools, many PE teachers still maintain the traditional PE teaching concept, which leads to low enthusiasm of students for PE. There is less interaction with teachers and the classroom atmosphere is not active enough. (Wang Qiang, 2022, pp.102-103). Therefore, it is necessary to take various

measures to improve students' interest in learning, make students feel the pleasure of physical education courses, and actively participate in physical education courses to improve the effect and quality of primary school physical education courses. An important measure to promote the comprehensive and healthy development of students' body and mind. (Shi Jiating, 2022).

The improvement of students' interest and achievement in PE requires teachers to refine teaching methods and carry out teaching activities in a way that meets students' characteristics and needs. Therefore, in order to improve the fun and physical education of primary school students, this study tries to develop a sports training course based on the situational teaching method to improve the "running, jumping, and throwing" skills for Primary school students. And then examine the influence of situational teaching methods.

2. Research Objective

(1) To develop sports training course based on the situational teaching method to improve the basic athletic skills for primary school students.

(2) To compare students' basic athletic skills of sports training course before and after the implementation base on the situational teaching method of primary school students.

3. Literature Review

3.1 sports training course

Sports training course is a course with students' physical exercise as the main means, through reasonable physical education and scientific exercise process, to achieve the purpose of strengthening physique and improving health. Ma Ce & Wei Pilai (2015) Sports training course is a compulsory professional basic course for students in sports training. Its teaching purpose is to make students understand the essence and law of sports training practice scientifically, so as to guide students to consciously use the theoretical knowledge of sports training and improve their basic ability to guide the practical activities of sports training. Shi Tie (2013) Sports training courses can not only comprehensively improve the physical quality of students, but also cultivate their good moral quality, and at the same time, it is beneficial to comprehensively exercise and improve their psychological quality.

Situational Teaching Method

In the 1960s, British applied linguists and foreign language teachers Hornby designed and proposed situational methods, He believes that in order to help students acquire enough knowledge and develop corresponding professional skills, teachers can create some vivid and specific situations to assist them in classroom teaching. Li Jilin (2017) the most widely known in China, and gives the concept of situational teaching method: situational teaching method is a teaching method that allows students to learn knowledge and train skills in situations by creating effective situations. Fu Yinyin (2019) Mentioned in the article "Experimental research on the situational teaching method in the first grade basketball teaching of Beijing Heping Li No.1 Primary School" that the emergence of situational teaching method is a supplement to the more traditional teaching methods in the past, and the traditional teaching method emphasizes the mastery of technology and ignores the cultivation of students' desire to explore. The situational teaching method encourages students to discover and perceive knowledge in different situations, stimulates students' desire to explore, gives play to their imagination and creativity, and promotes the mastery of motor skills.

The Basic Athletic Skills

Motor skill refers to the ability to master and effectively complete specialized movements in human movement. In primary school physical education courses teaching, sports skills, and the students through repeated training to master the skills is need a process, guide students to master a strong interest in sports skills, and actively cooperate with teachers' teaching, make sports skills training students consciously complete task, improve the level of pupils′ sports skills, let them from sports skills training, harvest life precious wealth. Li Yulian & Fan Lixia (2022) Basic athletic skills are the skills formed in children, including walking, running, jumping, throwing, and catching. They are the basis for participating in sports activities and mastering specific skills. Basic athletic skills are closely related to people's cognitive development level. As the basis of specific motor skills, basic athletic skills are of important positive significance for physical participation, perceived athletic ability and physical and mental health in childhood and even in adults.
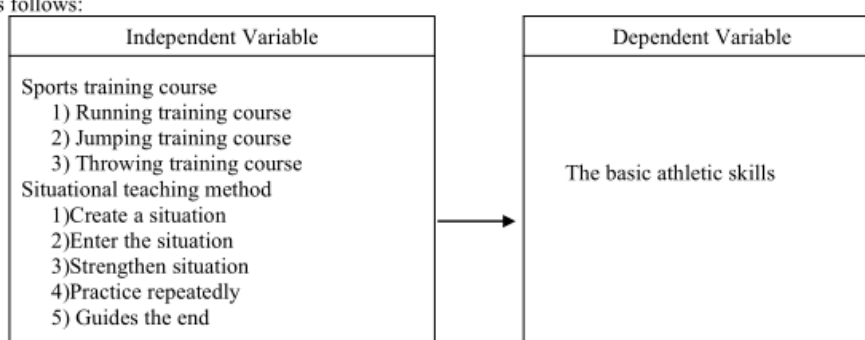
Measurement and Evaluation

The standardized tests involved in the process of measurement assessment and evaluation enable the students to make better use of the data available in the daily classroom. Measurement assessment and evaluation also help the teachers to determine the learning progress of the students. The basic purpose of both measurement assessment and evaluation is to determine the needs of all the learners. Measurement assessment and evaluation also enables educators to measure the skills, knowledge, beliefs, and attitude of the learners. Curriculum assessment and testing are very important in the field of education, they can help teachers, students, and related administrators to understand the teaching effectiveness of the curriculum and student learning outcomes. Marsh (2010) divided curriculum assessment into four categories: diagnostic assessment, formative assessment, summative assessment, and comprehensive assessment. While the performance

activity uses authentic assessment Gulikers et al. (2004) describe the characteristics of authentic assessments and criteria from another perspective. "Use detailed criteria to explain to students what it means to do their work well, and evaluate students' work against those rubrics. "This means that authentic assessment not only requires students to complete real or simulated tasks, but also requires them to demonstrate their mastery of the knowledge and skills they have learned, including the development of a variety of complex abilities such as problem solving, communication, and cooperation, and critical thinking. The traditional rubric usually only tells teachers and students what level to achieve, while the authentic assessment not only tells teachers and students what level to achieve but also tells teachers and students how to achieve this standard. This means that the criteria for authentic assessment is detailed, explicit, and focused on the mastery of basic knowledge. In general, authentic assessment and rubrics focus on students' actual ability and mastery of knowledge and skills, rather than just a single, traditional way of testing. They emphasize the active participation and cooperation of students, as well as the guidance and design of teachers.

3.2 Research Framework

The researcher has studied the documents and research related to situational teaching methods from many researchers: Li Jilin (2017); Zhang Siming (2018); Wang Chengkai (2019); Zhao Haiyan (2021); Wang Peng & Hua Ming (2021). This research, synthesizes 5 steps used to develop an activity plan for sports training course according to the situational teaching method to improve the basic athletic skills for primary school students and defined as a framework for research concepts as follows:

Independent Variable	Dependent Variable

Sports training course
    1) Running training course
    2) Jumping training course
    3) Throwing training course
Situational teaching method
    1)Create a situation
    2)Enter the situation
    3)Strengthen situation
    4)Practice repeatedly
    5) Guides the end
	The basic athletic skills

3.3 Research Hypotheses

After using sports training courses based on the situational teaching method, the students have improved basic athletic skills obviously. As wang Kun (2022) studied the implementation effect of the situational teaching method design in the third-grade students of Qingtaishan Primary School affiliated with Sichuan Normal University, and the following conclusions were drawn: The experimental and control groups significantly improved the four football skill levels and football game indicators. In the experimental group, the indexes of the foot and competition were significantly better than those of the control group. Shi Lihua (2022) adopted the situational teaching method in primary school basketball teaching. The results show that students' learning attitudes, learning interest, and initiative have been significantly improved, while traditional teaching methods have also improved these indicators to a certain extent, but to a lesser extent. Situational teaching method also plays a positive role in students' dribbling, passing, shooting and other skills.

4. Research Methodology

4.1 Research Design

This research is experimental research One Group Pretest-Posttest Design was used with the following in Table 1.

Table 1 Experimental design

Group	Pretest	Experimental	Posttest
R	O_1	X	O_2

The meaning of the symbols used in the experimental design.

R   means Random Sampling

X   means experimental

O_1 means Pretest

O_2 means Posttest

4.2 Population and Sample

The Population:There were 240, 8 classes, fourth grade students of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023. (There were student's mixed ability, high level, medium level and low-level abilities.)

The Sample Group:There were 30 students from the 1 class of the fourth grade of Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023.Through cluster random sampling.

4.3 Research Instrument

The development of sports training course based on the situational teaching method to improve the basic athletic skills for primary school students. The research instruments were as follows:

1. Activity plan of sport training course.

Procedures for creating the activity plan of sport training, according to the situational teaching method creating activity plans details are as follows.

1.1 Studied the Ministry of Education "Physical Education and Health Curriculum Standards". "Physical Education and Health Curriculum Standards" (compulsory education stage, 2011 edition), Used as a guide for developing a learning program through learning objectives, content, guidelines for organizing measurement and assessment of learning activities, and teacher guidance.

1.2 Studied concepts, and theories related to the theory from documents, textbooks, and related research to create a learning management plan.

1.3 Create 3 activity plans on the subject of Running, Jumping, and Throwing total of 63 Hours. By designing an activity plan using the situational teaching method, each activity plan specifies the details of the topics as follows: 1) content, 2) objectives of learning, 3) main point/concept, 4) learning processes according to the situational teaching method, 5) learning activity, 6) measurement and evaluation, and 7) instructional media, in this research. The situation-based teaching method consists of five teaching as follows: Step1: Create a situation, Step2: Enter the situation, Step3: Strengthen the situation, Step4: Practice repeatedly, and Step5: Guide the end.

1.4 The completed activity plan is presented to the thesis advisor to verify the suitability and consistency of the content. Alignment of objectives with learning activities and the possibility of activities then improve according to the suggestion.

1.5 Experts verified the validity of the checklist concept and development process. Taking the instrument to 3 experts to consider. The test consistency is the index of item objective congruency (IOC), each activity plan had an IOC consistency index greater than or equal to 0.50, so it was considered suitable for use in research. The result of the Index of Item Objective Congruence (IOC) analysis of this activity plan has an IOC = 1.00 for all questions. After that, take the activity plan received from the review. Let's improve according to the suggestions of experts to achieve more accuracy, before actually applying it to the sample group.

2. The basic athletic skills test (performance test).

Procedures for creating the performance test, which is a practical test, with 3 contents, and 9 items, with steps to create and find quality as follows: 2.1) Content Analysis, competence, and learning objectives consistent with the activity plan on (1) running: relay running, endurance running, fast running, (2) jumping: single-foot jumping, double-foot jumping, standing long jumping and (3) throwing: throw the ball at a fixed point, throw the ball forward, throw the solid ball, 2.2) Ddetermine scoring criteria for practice tests by authentic assessments (holistic rubric) rating on 5 scales and quality of confidence values in performance tests by test-retest with 30 non-sample students, by Pearson's correlation coefficient = 0.81.

4.4 Data Collection

This research the data collection was as follows.

1. Contact the Graduate School Bansomdejchaopraya Rajabhat University to request an official letter for an expert to inspect research equipment.

2. Organize a test before starting the experiment to understand students how to study student role learning objectives evaluation method and the benefits that will be gained from taking the ability test and learning activities during the experiment.

3. Test before teaching (Pre-test) with 30 students in fourth grade students of Weifang Wenhua Primary School, which was a sample group, and checked the scoreing record in order to analyze the data.

4. The experiment with the sample group used the activity plan developed by the researchers based on the situational teaching method. The teaching time from 8th July - 18th July total of 63 hours. Because the students were in primary school, while practicing basic athletic skills the teacher had to do carefully to avoid safety problems, they repeated exercises to complete the teaching content and emphasized training individual students to be able to truly practice.

5. After all the content has been taught, post-test with 30 students in fourth grade students, which was the same group, and checked the scoreing record in order to analyze the data.

4.5 Data Analysis

The researchers analyzed the data. Using a program computer, the order in which the data were analyzed was as follows:

The quantitative data were analyzed through descriptive statistics; means, and standard deviation. Data were analyzed through inferential statistics, and the different scores of learning ability before and after using the instructional model were analyzed through t - tests for dependent samples.

5. Research Findings

1. The result of the development of the sports training course based on the situational teaching method to improve the basic athletic skills of primary school students, The researcher has studied the documents and research related to situational teaching method from many researchers: Wang Chengkai (2019), Zhang Siming (2018), Zhao Haiyan (2021), Wang Peng & Hua Ming (2021), Li Jilin (2017) was used to develop the basic athletic skills and has synthesized into 5 steps used to develop activity plan and testing standard according to the situational teaching method of primary school students. The data analysis was the assessment of the quality of the activity plan according to the situational teaching method by 3 experts. Quality of suitability of the activity plans, overall, the suitability of the research objectives is the most suitable.

2. The comparison of students' basic athletic skills between before and after learning by using situational teaching method of primary school students. The average total score before was 26.07, and the average total score after was 34.87. The results were found that the basic athletic skills of students after learning higher than before learning statistically significant at the level .01. When considering the results of data analysis classified by content: Running, Jumping, and Throw the ball. The results found that the basic athletic skills of students after learning higher than before learning statistically significant at level .01 for all contents, as in Table 2

Table 2 The comparison of the basic athletic skills scores between before and after learning

Basic athletic skills	testing	n	Score total	$\bar{X}$	SD.	t	p
Running	Pre-test	30	15	8.83	2.05	21.24**	.00
	Post-test	30	15	11.80	1.69		
Jumping	Pre-test	30	15	8.70	1.88	18.11**	.00
	Post-test	30	15	11.50	1.61		
Throwing	Pre-test	30	15	8.53	1.74	19.54**	.00
	Post-test	30	15	11.57	1.65		
Total	pre-test	30	45	26.07	3.22	34.01**	.00
	post-test	30	45	34.87	2.94		

6. Discussion

Research results on the development of the basic athletic skill of 30 fourth-year primary school students in the Weifang Wenhua primary school, Weifang, China, in the first semester of the academic year 2023 by using the situational teaching method can be discussed as follows.

1. The development of the sports training course is based on the situational teaching method to improve the basic athletic skills for primary school students. The researcher had studied the documents and research related to the situational teaching method from many researchers and has synthesized: it into 5 steps used to develop an activity plan and testing standard according to the situational teaching method of primary school students. The data analysis was the assessment of the quality of the activity plan according to the situational teaching method by 3 experts, and the results show the quality of the activity plan by experts; overall, the suitability of the research objectives is the most suitable. This is because the developed learning plan is consistent with the concept of the situational teaching method, and the developed activity plan contains critical elements of the activity plan, completely related the content is clear and the goal is specific. The activities that are established emphasize that learners can actually learn and Practice specific skills. In terms of measurement and assessment, the assessment is determined to be based on actual situations and measured according to the learning objective, which is consistent with the research of Sun Wanqing (2021), and Liu Zhaohui (2022) through the development of an actual activity plan cases based on the situational teaching method, to fully verify the

teaching effect and student learning effect of the situational teaching method applied to actual teaching, it is consistent with the research Liu Wei (2015) mentioned in his article that as one of many teaching methods, the situational teaching method can undoubtedly bring greater results in primary school physical education teaching, which can not only improve students' enthusiasm for physical education and learning effect, but also promote the improvement of teaching effect.

2. The comparison of students' basic athletic skills of sports training courses between before and after the implementation based on the situational teaching method of primary school students. The average total score before was 26.07, the average total score after was 34.87. The results were found that the basic athletic skills of students after learning higher than before learning statistically significant at level .01, which was in accordance with the hypothesis. The situational teaching method is that teachers purposefully introduce or create vivid and specific scenes to arouse students' attitudes and experiences, so as to help students understand action skills. This is the same as Du Xinwang (2020) In the teaching process based on the physical and mental development characteristics of contemporary children, he applied the situational teaching method to Elementary school students teaching, giving full play to the advantages of teaching methods so that students have the skills of all-round development. And through situational teaching method, student's academic performance and skills have been significantly improved, this is consistent with Wang Kun (2022) Compared with the traditional teaching method, students' performance has been greatly improved. The results show that the teaching of situational teaching method has a positive impact on students, and consistent with the research Feng Xiaolei' (2023) application situation teaching methods in high school martial arts teaching way of tai chi influence students' martial arts skills, which said: the traditional teaching methods and situation teaching way compared, students under the situation teaching way, can better understand the principle and connotation of teaching action, can better grasp the rate of technical action rhythm, movement trajectory, can more skilled to ensure the accuracy of action, it is beneficial to improve the quality and efficiency of the teaching and learning the whole process, it follows that situation teaching method has a positive impact on students.

In conclusion, the situational teaching method can improve the students' learning interest and consolidation of athletic skills in the sports training course of primary school students. The situation teaching method is through the setting of "situation", making the teaching content in the situation of the story, it conforms business level development is not enough mature junior students' physiological characteristics, the setting is to make the skills of a teaching carrier, which conforms to the guiding ideology of "health first", conform to the basic concept of the new curriculum standard. The country should cultivate the overall quality of the students, not only letting the students master the book knowledge but more importantly, letting the students have a healthy body.

7. Suggestion

1. In China, the situational teaching method is still in the trial operation stage, especially in physical education, it still needs to be adjusted and improved to promote the implementation of situational teaching methods in sports training teaching.

2. The situational teaching method has been very perfect and mature in foreign training, but it has not been much recognized in China, so more promotion and development are needed to make Chinese teenagers use the most appropriate training method.

8. Acknowledgement

9. References

[1] Du Xinwang. (2020).**Experimental research on the teaching of situational teaching method in children's table tennis forehand ball**. Master of Physical education teaching. Shandong Normal University.

[2] Feng Xiaolei. (2023). **Research on the practice of context teaching in 24 style Taijiquan teaching in high school physical education**. Master of Physical Education Teaching, Yili Normal University.

[3] Fu Yinyin. (2019). **Experimental research on the situational teaching method in first-grade basketball teaching in Beijing Heingli No.1 Primary School.** Master of Physical Education, Capital Institute of Physical Education.

[4] Li Jilin. (2017). Construction of Chinese children's situational learning paradigm. *Educational Research*. 03,91-102.

[5] Li Yulian & Fan Lixia. (2022). The relationship between basic motor skills and cognition of Chinese children from the perspective of embodied cognition. *Sports Science and Technology Literature Bulletin*. 7, 116-118.

[6] Liu Zhaohui. (2022). **Studies the application of situational teaching method in primary school badminton teaching.** Master of Physical Education Teaching, Physical Education College of Liaocheng University.

[7]Ma Ce & Wei Pilai. (2015). Application cases in sports training course teaching in physical education institutions. *School Physical Education.* 2, 97-98.

[8]Marsh Superchi. (2010).Tools used to assess the quality of peer review reports: a methodological systematic review. *BMC Medical Research Methodology.* 1,11-12.

[9] Qiu Meilan. (2022). On the effective application of situational teaching method in primary school physical education. *Questions and Research.* 22, 188-190.

[10] Shi JiaTing, (2022). **Experimental research on the situational teaching method in high school volleyball teaching.** Ph.D. Dissertation in pedagogy Hebei Normal University.

[11]Shi Lihua, (2022). The application of game scene teaching method in primary school basketball training. *New Sports.* 14, 64-66.

[12]Shi Tie, (2013). The important role of college physical training courses Journal of Changchun University of technology. *Social Science Edition.* 9, 204-205.

[13] Sun Wanqing. (2021). **Empirical study on the influence of situational teaching method on physical learning of third grade students.** Master of PE, Liaoning Normal University.

[14] Wang Chengkai. (2019). **Experimental study on football situational teaching method on the skills of 10-11 years-old children to control the ball.** Master of Physical Education, Beijing Sport University.

[15] Wang Kun. (2022,8). **Research on the education system of college football special course teaching from the perspective of "curriculum ideology and politics".** The 6th China Football Culture and Campus Football Development Conference in 2022. On August 24,2022, Huaibei Normal University.

[16] Wang Peng & Hua Ming. (2021). Create diverse situations and optimize physical education teaching. *Primary School Teaching Research .* 26, 40-41.

[17] Wang Qiang. (2022). Application of situational teaching method in primary school physical education. *Youth Sports.* 6, 102-103.

[18] Zhao Haiyan. (2021). Situational teaching infuses "vitality and vitality" into the history classroom. *Middle school history teaching Reference.* 14, 22-23.

[19] Zhang Siming. (2018). Math fun, play good math - pursuit will think, will use, will learn the teaching. *Primary school teaching.* 7,11-12.

Appendix H

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Chapter 1

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