

The Application of Behavior Oriented Teaching Method in the Construction of Practical Teaching Content System of Taekwondo in Colleges and Universities

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In order to achieve the goal of physical education reform, this paper investigates and analyzes the application of behavior oriented teaching method in the construction of practical teaching content system of Taekwondo in Colleges and universities, puts forward corresponding system optimization suggestions, fully grasps and analyzes the problems and deficiencies in Taekwondo Teaching, and ensures Taekwondo Teaching through continuous optimization and adjustment, strictly following scientific teaching principles Learning has made great progress.

Keywords: behavior oriented, taekwondo, practical teaching, teaching content

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INTRODUCTION

The actual combat teaching of Taekwondo in Colleges and universities is an important part of physical education. Taekwondo practical combat is a world-wide sport, which has a long history and continues to today¹. The actual combat teaching of Taekwondo in Colleges and universities is a lifelong education realized through language and behavior. Nowadays Taekwondo education is popular in the society and is deeply loved by students. However, the current situation of Taekwondo education in Colleges and universities in China is not optimistic, and it fails to give full play to its educational function². Taekwondo, as a favorite sport for college students majoring in physical education, has unique sports characteristics and various educational functions, and has a positive role in promoting the ideological and moral, cultural quality, intellectual progress and willpower quality of college students. Starting from the characteristics of Taekwondo and its technical structure, this paper studies the application method and effect of behavior oriented teaching method in the construction of practical teaching content system of Taekwondo in Colleges and universities³. To learn and master the technical skills of

Taekwondo, learners are required to have good overall physical and psychological quality, quick reaction ability, thinking ability, physical and mental quality, communication and cooperation Ability, emotion regulation ability, etc. The multi teaching organization form of Taekwondo under the guidance of behavior teaching method mainly includes five parts: guiding ideology, teaching objectives, teaching contents, teaching strategies and methods, assessment contents and standards. To cultivate students' body movement intelligence, spatial intelligence, interpersonal intelligence and white self cognitive intelligence, it is very necessary to cultivate the intelligence and ability of Taekwondo learners from many aspects⁴. In the teaching of Taekwondo for physical education major, the behavior oriented method is adopted to analyze the effect of Taekwondo teaching on students' behavior orientation, sports characteristics and teaching significance by means of mathematical statistics, theoretical analysis and teaching design. Competitive sport is an open sport⁵. Combined with the changes of various technical structures, it is helpful to cultivate its multiple intelligences, especially the body movement intelligence, spatial intelligence,

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communication intelligence and self cognitive intelligence.

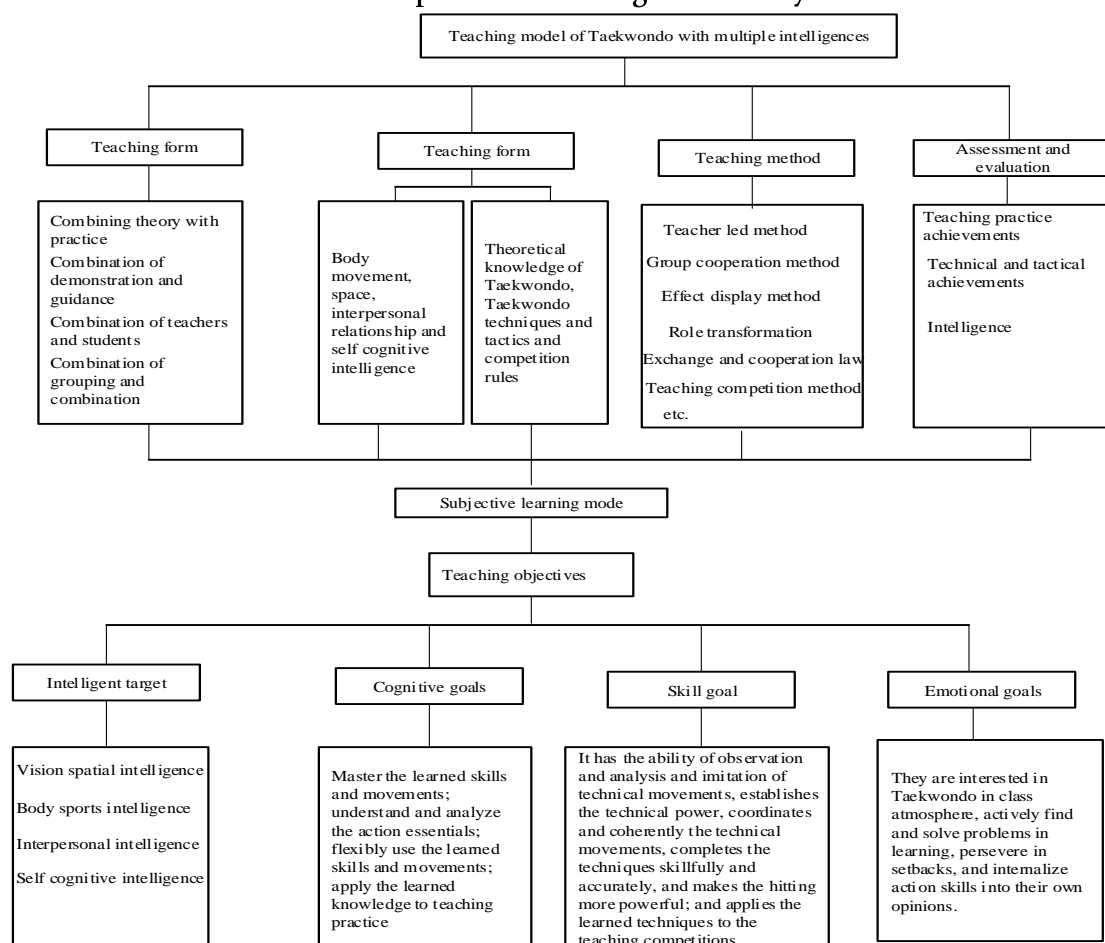
RESEARCH ON THE APPLICATION OF BEHAVIOR ORIENTED TEACHING METHOD IN TAEKWONDO ACTUAL COMBAT TEACHING SYSTEM

Optimization of Behavior Oriented Teaching System in Taekwondo Actual Combat Teaching System

Traditional Taekwondo teaching only focuses on improving students' technical and tactical level, but ignores the development of students' multiple intelligences. Fighting itself requires students to have a variety of abilities in order to improve their technical and tactical level. There is complementarity between the two⁶. In order to better improve the education effect, further combine Taekwondo teaching with behavior

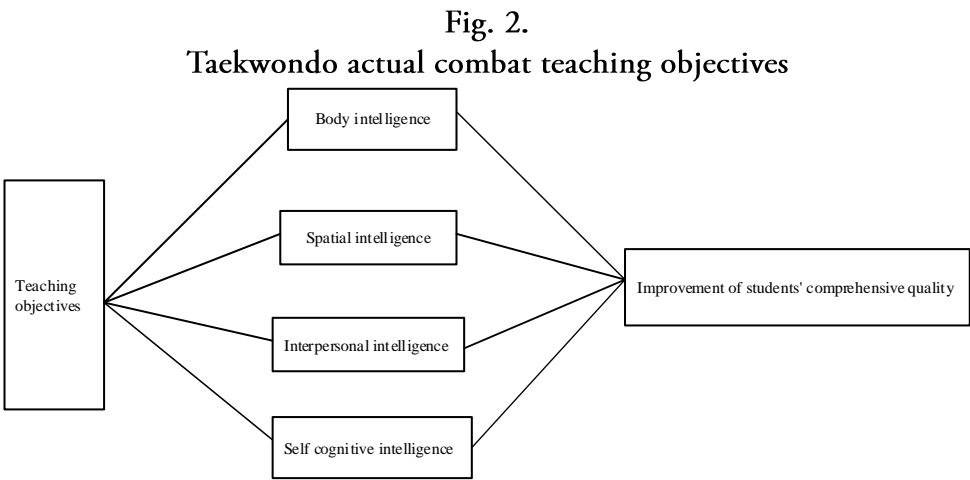
oriented teaching, cultivate students' technical and tactical ability, improve students' behavior oriented ability, and make students become comprehensive development talents. According to the behavior teaching method, scientific research theory and the characteristics of Taekwondo teaching, the evaluation index system of teaching experiment effect is established⁷. Based on the theory of behavior oriented teaching, this paper analyzes the law of Taekwondo teaching, infiltrates the concept of behavior oriented teaching into Taekwondo teaching, forms the form, content, method and theme of behavior oriented teaching, so as to organically combine the main content of Taekwondo teaching system with Taekwondo physics teaching, and achieves good teaching effect. The specific teaching structure is shown in the figure 1.

Fig. 1.
Taekwondo practical teaching structure system



Taekwondo teaching plan is based on a certain theory, has a certain structure, for the purpose of operation, according to the behavior oriented teaching method, designed a set of behavior oriented teaching plan, including: teaching guiding ideology, teaching objectives, teaching content, teaching methods and means, teaching evaluation and other aspects, in order to cultivate students'

behavior oriented level and promote students It pays special attention to the cultivation of students' ability, skillfully uses a variety of intelligent control technologies and strategies, improves the level of Taekwondo, and maximizes the training of students' actual combat skills⁸. The design of Taekwondo teaching objectives is based on behavior orientation, as shown in the figure 2.



According to the technical rules of Taekwondo and the characteristics of students' learning process, the behavior teaching method is adopted to

optimize the design of Taekwondo teaching content according to the Taekwondo teaching plan.

Table 1.
Teaching contents of Multiple Intelligences

| content of courses | Intelligent composition | Teaching requirements |
|--|--|--|
| Restore physical fitness, review the front kick, horizontal kick, back kick technology, strengthen the special quality. | Motion intelligence; spatial intelligence. | 1. Using the method of collective and group practice to carry out the air attack practice; 2. Improve the quality of individual technical movements and master the level of skilled movements through students' self practice. 3. Develop the coordination, speed, strength and flexibility of the body. |
| Review the skills of double flying, horizontal kick, counter attack, whirlwind kick and side kick, and strengthen the special quality. | Motion intelligence; spatial intelligence. | 1. Using air strike practice to improve and consolidate the proficiency of mastering technical movements; 2. Using self practice, let the students practice in front of the mirror, focusing on the movement route, direction, angle, exerting skills and hitting accuracy. |
| Review footwork and technical connection, strengthen special quality. | Motion intelligence; spatial intelligence. | 1. Combine the corresponding footwork to carry out the air strike exercise of a single action, so that students can maintain body balance in dynamic and improve the ability to complete technical movements during walking; 2. The focus of training is to solve the coordination and integrity of all parts of the body. |
| Connect the two chapters of Taiji and strengthen the physical training. | Sports intelligence; interpersonal intelligence. | 1. Two people face each other, one holds the target, after slow repetition practice, after getting familiar with the technical movements, carry out the activity target exercise, improve the students' reaction speed, sense of distance and accuracy of hitting. 2. Technical target practice, through kicking the target to experience and regulate a single technical action. |

| | | |
|--|---|---|
| Review the front cross kick, front and down chop technique and Tai Chi. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. The fixed target practice of two people focuses on improving the movement speed and maximum strength, and the practitioner should complete a certain group of actions in a certain time. 2. Technical target practice, through kicking the target to experience and regulate a single technical action. |
| Review the back kick technique and consolidate it | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. Self practice, facing the mirror air attack, focus on the movement route, direction, angle, exertion skills and hitting accuracy of the back kick, and do not emphasize the strength and speed of the action temporarily. 2. Two people use square target to practice fixed target, focusing on the accuracy, speed and strength of back kick. |
| Review the technique of front cross kick and front down chop, and learn the technique of double flight counterattack. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. In the connection of horizontal kick and front and down chop techniques, we mainly use the target kicking practice of mutual cooperation between two people, focusing on the accuracy of action, hitting speed and hitting strength. 2. To learn the technique of double flight counterattack, the students mainly use the mirror's self practice and the opposite air attack practice with their peers. They should pay attention to observe the completion quality of each other's actions, observe each other, and focus on error correction. |
| Review the double flying and whirlwind kicking techniques, and consolidate the counterattack skills. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. Review the skills of double flying and whirlwind kicking. Let students experience and standardize the technical movements by kicking the technical target. The key points are to experience the body posture, the height of the center of gravity, the running route of legs, the hitting position and the ending posture. 2. Carry on the activity target practice to complete the consolidation of double flying counterattack, mainly to improve the students' reaction speed, sense of distance and accuracy of hitting. |
| Review the horizontal kick counterattack and double flight counterattack techniques, and learn the technical connection between horizontal kick counterattack and double flight counterattack. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. In the review of horizontal kick counterattack and double flight counterattack, it is mainly to cultivate students' proficiency in technical movements, movement speed and action strength. 2. In the technical connection of cross kick counterattack and double flying, on the one hand, it is to cultivate the tacit understanding between the groups; on the other hand, it mainly cultivates the students' control of the speed of body center of gravity, the movement of footwork and the hitting parts. |
| Review footwork and technical connection, learn the practical application of horizontal kick technology. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. After continuously strengthening the practice and mastering the movement standard, combine with the corresponding footwork to practice, as long as the students keep balance in the dynamic and improve the ability to complete the offensive and defensive movements. 2. In the practical combat practice of horizontal kick, the key point of training is to solve the coordination and integrity of the connection between horizontal kick and other technical movements, which is carried out by moving first and then attacking, or attacking, moving and then attacking. |
| Review the technique of front cross kick and double flight, and strengthen attack and defense practice. | Sports intelligence; spatial intelligence; interpersonal intelligence; self cognitive intelligence. | <ol style="list-style-type: none"> 1. Opposite air attack practice, cultivate students' observation and judgment, improve students' ability to distinguish and control the opportunity, as well as quick and decisive reaction and counterattack ability. 2. Adopt the practice of "one attack and one defense" and "attack and defense for each other" to improve the speed and strength of students to complete the movement. 3. Imagine the actual combat practice, as long as the students practice alone, assuming that there are opponents against them in the actual combat, they will start from the actual combat, choose several groups of offensive and defensive counterattack methods, and do imaginary individual exercises. <p>Conditional actual combat refers to the actual combat practice method with certain conditions. It is a training method set according to the training contents, tasks and some abilities of students.</p> |

| | | |
|---|---|---|
| Application of technology in actual combat | Sports intelligence; spatial intelligence; interpersonal intelligence; self cognitive intelligence. | <ol style="list-style-type: none"> 1. Improve the defensive skills of one side to cross kick, and stipulate that the other side can only attack with horizontal kick 2. In order to improve one side's ability of retreating and counterattack, the other side must attack forward. 3. After class, students are required to write a summary of training, summarize the points they have scored and lost in practice, and point out the corresponding countermeasures. |
| Practical application of technology - actual combat; review Chapter 3 of Taiji. | Sports intelligence; spatial intelligence; interpersonal intelligence; self cognitive intelligence. | <ol style="list-style-type: none"> 1. Actual combat training refers to the method of actual confrontation training between athletes under the condition of similar competition in strict accordance with the requirements of rules. One of them is the ability to diagnose the player's mental ability and intelligence in actual combat. 2. Ask the students to write a miss contest after class, analyze their own gains and losses in the competition, and put forward relevant technical countermeasures for the loss of points, so as to avoid the same mistakes in future competitions. |
| Physical training | Sports intelligence; spatial intelligence; interpersonal intelligence; self cognitive intelligence. | <ol style="list-style-type: none"> 1. Adopt the method of repeated training, focus on the development of students' speed quality, special endurance quality and speed strength quality, and improve the students' ability to use skills and tactics under the condition of high intensity. <ol style="list-style-type: none"> (1) A. leg technique combination practice (air strike) for 1 minute → B. 30 meter sprint running practice → C. leg technique reaction shooting → D. leg technique reaction shooting for 1 minute: training by the way (2) A. reaction target practice (load time 1 minute) → B. abdominal and back muscle exercises 30 times → C. two person group condition actual combat → D. squat up and cross kick 30 times. 2. After class, urge the students to write training notes and summarize their practice experience. |
| Review the whirlwind kick technique and learn the spin kick technique. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. Whirlwind kick skill practice, there are fixed target, excessive movement target, mainly to cultivate students' body center of gravity stability, footwork movement, hitting part and end posture control. 2. Spin kick technique should be that students understand the lag of technical action, start from self practice, and experience body posture, height of center of gravity, position of arm, running track of leg, hitting part and technical posture in front of mirror. |
| Review hook kick and back kick, consolidate spin kick. | Sports intelligence; spatial intelligence; interpersonal intelligence. | <ol style="list-style-type: none"> 1. Combine the self practice with the opposite space practice, let the students correct each other and improve the correctness of the action. 2. Help students to experience and standardize these technical actions by kicking technical targets, so as to achieve the accuracy and strength of hitting. 3. Through the password target practice, focus on improving the hitting speed of students and the stability of body center of gravity. |
| Watch the video of 2015 National Taekwondo Championship. | Sports intelligence; spatial intelligence; self-knowledge intelligence. | <ol style="list-style-type: none"> 1. Through watching the competition, comprehensively improve students' overall perception of the competition, understand the application characteristics of various technical movements, the combination skills of footwork and technical movements, attack and defense opportunity, etc. 2. After class, write notes of watching and observing the competition, record the experience learned from the competition of high-level athletes, and put forward relevant training methods. |
| Review techniques | Sports intelligence; spatial intelligence; interpersonal intelligence; self-awareness intelligence. | Combined with the learning content, let the students choose their own practice methods, review the technical movements, and fully demonstrate their ability to communicate with others and their ability of self cognition and learning. |

Optimization of Taekwondo Actual Combat Teaching Evaluation Index System

Based on the teaching content and framework,

the evaluation index and scoring standard of students' actual combat ability are further determined, which is an important content of comprehensive evaluation of teaching experiment⁹.

Taking teaching quality as the evaluation standard, the evaluation index system of Taekwondo teaching effect is established¹⁰. The first level indicators include four categories (A_1, A_2, A_3, A_4), which are teaching attitude, teaching quality, teaching team and teaching satisfaction. The standard method is used to process the original data set of each evaluation index:

$$A_1 = \begin{bmatrix} B1 & B2 & B3 & B4 \\ x_{11} & x_{12} & x_{13} & x_{14} \\ x_{21} & x_{22} & x_{23} & x_{24} \\ x_{31} & x_{32} & x_{33} & x_{34} \\ \dots & \dots & \dots & \dots \\ x_{20,1} & x_{20,2} & x_{20,3} & x_{20,4} \end{bmatrix} \quad (1)$$

Under the Taekwondo club coach teaching effect index system, in view of the different dimensions of each kind of detailed indicators, in order to eliminate the dimensional influence of different indicators, the information determination

formula is used to normalize and sum the decision matrix X in the same direction:

$$x'_{ij} = A_1 x_{ij} / \sum_{j=1}^{20} x_j \quad (2)$$

Furthermore, according to the definition of information inheritance, the class I inheritance value is calculated according to the definition formula of information inheritance:

$$e_{ij} = -A_1 x_{ij} / \ln 20 \sum_{i=1}^{20} x'_v \ln x'_{ij} \quad (3)$$

The calculation formula of entropy weight vector is as follows:

$$w_j = (1 - e_{ij}) / \sum_{i=1}^4 (1 - e_{ij}) \quad (4)$$

Through the comprehensive experimental study of Taekwondo, two scoring standards, quantitative and qualitative, are obtained to standardize the weight of each index:

Table 2.
Weight of primary and secondary indicators

| Primary indicators | Weight% | Secondary indicators | Weight% |
|-----------------------|---------|--|---------|
| physical quality | 25 | 800 meters (endurance) | 18 |
| | | Speed (100 meters) | 20 |
| | | 30 times supine leg lift (psoas strength) | 20 |
| | | 50 times left and right horizontal kicks (agility) | 19 |
| | | Vertical and horizontal split (flexible quality) | 23 |
| Technique and tactics | 40 | Protective equipment technology | 25 |
| | | Foot target technology | 15 |
| | | Practical skills | 60 |

In this index system, the scoring standard of physical quality is combined with quantification, and the scoring standard of technical and tactical ability, intelligence development and teaching practice ability is combined with qualitative index¹¹.

The test results of self-knowledge intelligence and interpersonal intelligence related to students' intellectual development are summed up and the average value is obtained:

Table 3.
Scoring standards for physical fitness of Taekwondo Athletes

| Score | 800 meter race | 100 meter run | 30 sit ups | About 50 cross kicks | Split vertically and horizontally |
|-------|----------------|---------------|------------|----------------------|-----------------------------------|
| 100 | 2'23"6 | 11"90 | 25"6 | 22"7 | 0 |
| 95 | 2'24"2 | 12"00 | 25"9 | 22"9 | 1 |
| 90 | 2'24"8 | 12"1 | 26"1 | 23"1 | 2 |
| 85 | 2'25"4 | 12"2 | 26"4 | 23"3 | 3 |
| 80 | 2'26"0 | 12"3 | 26"7 | 23"5 | 4 |
| 75 | 2'27"0 | 12"4 | 26"9 | 23"7 | 5 |
| 70 | 2'28"1 | 12"6 | 27"0 | 23"8 | 5 |
| 65 | 2'29"4 | 12"8 | 27"2 | 23"9 | 6 |
| 60 | 2'30"8 | 12"9 | 27"5 | 24"1 | 6 |
| | 2'31"8 | 13"1 | 25"8 | 24"2 | 7 |

| | | | | | |
|----|--------|------|------|------|---|
| 55 | 2'32"0 | 13"3 | 28"3 | 24"3 | 8 |
| 50 | 2'32"8 | 13"5 | 28"6 | 24"4 | 8 |

Table 4.
Scoring standards of special techniques and tactics for Taekwondo Athletes

| Project | Excellent | | | Good | | | In | | | Difference | | |
|---------------------------------|--|----|-------|--|----|-------|---|----|-------|---|----|-------|
| | upper | in | lower | upper | in | lower | upper | in | lower | upper | in | lower |
| Foot target technology | Standard movement, coordinated force, smooth strike, powerful and accurate force point | | | The movement is more standard, lack of strength and coordination, and the strike of Shunda is more powerful and the force point is more accurate | | | The work is not standardized, the force is uncoordinated, the impact is more powerful and the force point is more accurate | | | The movement is not standardized, the force is not coordinated, the impact is weak, and the force point is not accurate | | |
| Protective equipment technology | The movement is fast and accurate, strong and powerful, coordinated and smooth, good sense of time and space, great, simple and loud | | | The action is fast, powerful, smooth, and has a good sense of time and space, and the hitting is loud and accurate | | | Slow action, weak, inaccurate force point, poor sense of time and space, no loud effect | | | Slow action, weak, inaccurate force point, poor sense of time and space, no loud effect | | |
| Actual combat capability | They are active in attack and defense, dare to fight well, attack in defense, use skills and tactics properly, have a strong sense of score and score relatively high | | | They are more active in attack and defense, dare to fight, use techniques and tactics properly, have a strong sense of score and score high | | | Offensive and defensive initiative, no counterattack, improper use of techniques and tactics, good sense of scoring, and not many scores | | | Passive attack and defense, no counter offensive action, improper use of technology and tactics, no score | | |
| Will quality | Training and competition are very conscious, serious, not afraid of hardship and setbacks, can overcome all kinds of difficulties, in any case, can maintain a strong fighting spirit, victory is not proud, defeat is not discouraged, dare to fight, without any interference, can give full play to their own level and style | | | Training and competition more serious, not afraid of hardship, tenacious to overcome difficulties, in most cases can ensure a strong fighting spirit, dare to fight, better play their own level and style | | | Basically can do according to the coach's request, when encountering the difficulty and the setback, still can control oneself, can correctly treat the opponent's strength and the score rise and fall, has played the certain level and the style | | | They are afraid of hardship and tiredness, have poor consciousness, are afraid of difficulties, can't stand setbacks, act indecisively, and can't give full play to their own level and style | | |
| Emotion control | They are good at controlling their emotions, can eliminate emotional barriers in time, are not affected by subjective and objective factors, and always maintain positive and stable emotions | | | Good at controlling their own emotions, can quickly eliminate emotional barriers, less affected by subjective and objective factors, can maintain a positive and stable mood | | | It is easy to be affected by subjective and objective factors, and its emotion fluctuates greatly, but it can be controlled | | | It is easy to be influenced by subjective and objective factors, and has great interference on training and competition | | |
| Judge strain force | Observation is very keen, the judgment of the situation on the field is fast and correct, and can quickly take corresponding measures according to the changes of hand skills and tactics, and timely and accurately adjust their response actions | | | Keen observation, correct judgment of the situation on the field, can adjust their tactics according to the changes of the situation | | | The observation is still keen, the judgment of the situation on the field and the response measures adopted are basically correct | | | The observation is slow, the judgment of the situation on the field and the response countermeasures adopted are biased | | |

Table 5.
Assessment criteria of teaching practice

| evaluating indicator | assessment element |
|-----------------------|---|
| explanation skill | 1. The purpose of explanation is clear, the content structure is reasonable and the level is clear |
| | 2. The explanation language is concise and vivid |
| | 3. The explanation is loud, moderate and infectious |
| | 4. The explanation is clear and the key and difficult points are prominent |
| | 5. The explanation is targeted and practical |
| | 6. The tone of the festival is gentle, the intonation fluctuates, and the language is enlightening |
| | 7. Good combination of explanation and skill teaching |
| Demonstration skills | 1. The purpose of demonstration is clear and the content is reasonable |
| | 2. The demonstration movement is accurate, standard and has certain strength |
| | 3. The location and direction of demonstration are reasonable |
| | 4. Be able to point out the key and difficult points of technical action in the demonstration process |
| | 5. The timing of demonstration is appropriate and the time control is reasonable |
| | 6. The steps of demonstration are reasonable |
| | 7. The combination of demonstration and skill teaching is natural and reasonable |
| Organizational skills | 1. The teaching organization is serious, the teaching process is orderly, and the teaching rhythm is moderate |
| | 2. Clear password, loud voice and strong directivity |
| | 3. Actively mobilize the enthusiasm of students in class, the classroom atmosphere is good |
| | 4. The arrangement of class content is compact and the time distribution is reasonable |
| | 5. Reasonable arrangement of intensity and density |
| | 6. Be able to control the bad factors affecting the teaching progress in time |
| | 7. Students' attention can be easily focused in teaching |

According to the syllabus of physical education institutions (Taekwondo), the practical teaching ability is graded¹². The main teaching contents are as follows: understanding the rules of Taekwondo competition and the training methods of basic quality of Taekwondo, learning kickback, double flying counterattack, spin kicking counterattack and their technical and tactical application, and reviewing the skills and tactics mastered. In order to embody the behavior oriented teaching method in

the teaching content, it is necessary for teachers to study the behavior oriented teaching method and understand its teaching¹³. According to the characteristics and teaching tasks of Taekwondo, this paper uses the theory of Taekwondo sports skill education theme, and explores its effect on cultivating students' behavior orientation through teaching experiments. The specification of measurement indicators is as follows:

Table 6.
Various intelligence measurement indexes of students under the guidance of Multiple Intelligences Theory

| Evaluating indicator | Test indicators | Test standard | | |
|----------------------------|---|---------------|---------------|------------|
| | | good | secondary | difference |
| Body movement intelligence | The number of kicks (n) of left and right leg cross kicks completed in 30 seconds; the required action is standard, the force point is accurate, and the strike is powerful | n≥60 times | 40≤n<60 | N<40 |
| | From 1 minute reaction target practice, and then complete abdominal and dorsal muscle exercises each 30 times, then complete squat cross kick 30 times, and finally complete the 50 meter sprint run time (s); required to complete the movement specification, complete the number of times. | S≤150 | 190≤s<150 | S>190 |
| Spatial intelligence | The effective kicking times (n) of five fixed target spin kicks in different directions and the same height can be completed by one leg in 30 seconds; the effective requirement is that the action is standard, the hitting is accurate and powerful. | n≥18 times | 12≤n<18 times | n<12 times |

| | | | | |
|--|---|-----------------------|---------------|--------------|
| The number of kicks effectively completed according to the 20 different target signals given by the other side; among them, only the students' reaction is quick, the kicking action is correct, and the hitting is accurate, incisive and powerful. | | n≥17 times | 14≤n<17 times | <14 times |
| Interpersonal intelligence | Do you have a regular practice partner | There has always been | Often | Occasionally |
| Self cognitive intelligence | Relationship with teachers and teammates | very good | commonly | Not good |
| | Do you have self-control in class | All the time | Often | Occasionally |
| | Whether to write the training experience seriously after class and have a clear goal to pursue. | It has always been | Often | Occasionally |

According to the research on the evaluation index system and the objective of the feasibility evaluation of the operation process, three club coaches were selected as the evaluation objects, and the questionnaire survey was conducted in the form of Richter's 5-level evaluation questionnaire¹⁴. The specific evaluation design is as follows: the evaluation level is divided into five levels: A (excellent), B (good), C (qualified), D (unqualified), 1 point for each level, which does not meet the index requirements. Based on the above indicators, the teaching system is evaluated to ensure the teaching effect¹⁵.

Suggestions on the Optimization of Taekwondo Practical Teaching System

Taekwondo is a multi sensory learning experience course, which provides students with rich learning opportunities through seeing, listening, touching, talking, cooperating and thinking. In the teaching process, teachers should choose the best Taekwondo practical teaching strategy according to the teaching content and teaching objectives, mobilize students' learning enthusiasm, and involve in the intellectual field as much as possible¹⁶. Although four different teaching methods are adopted in taekwondo course to cultivate students' four kinds of intelligence, it does not mean that teaching is divided into four stages, some activities can be carried out separately, others can be carried out at the same time. Behavior oriented teaching is a common teaching method in Taekwondo teaching¹⁷. No matter what kind of teaching method, it can reflect one or more levels of students' intellectual development.

In Taekwondo teaching, demonstration is a common teaching method, which means that students learn by observing the teacher's correct demonstration action and using their own visual acceptance technology¹⁸. By demonstrating the learned technical movements, teachers can make students understand the structural characteristics, technical points and completion skills of the learned technical movements, so as to form the action image more quickly. The specific requirements are as follows:

The demonstration action should be standardized and concise: the teacher should ensure the quality of the demonstration, be standardized, coordinated and fluent, and should be accurate from the sequence and track of the movement to the coordination of various parts of the body.

Teaching should highlight diversity and pertinence: first, according to the needs of students to master the actual situation, teaching should not be conducted blindly; second, key teaching should be carried out according to different teaching stages, different teaching objectives and teaching tasks¹⁹. The demonstration movement should be beneficial to the students' observation: the teacher's demonstration action should be visible to all students, and the factors such as speed and angle should be fully considered. Demonstration teaching should be combined with explanation to inspire students' Thinking: for the demonstration teaching of new technology, it can be explained first and then demonstrated, or demonstrated first and then explained, or demonstrated at the same time²⁰. During the demonstration process, some small questions were designed for students to answer, so as to stimulate students' Thinking on technical

actions. Teachers describe teaching tasks, action names, action points, practice methods and error prone teaching links through language. In the teaching process, the teacher guides the students to master the knowledge of Taekwondo. The specific contents are as follows: learn the name, essentials, requirements, route, orientation, essentials and posture requirements of all parts of the body. Understand the function of power amplifier, collision point and different parts, actual combat time and use value.

In the actual combat teaching of Taekwondo, the construction of educational administration system is a complex construction process, which involves many factors and relationships. In order to construct the teaching service system, it is necessary to conduct a comprehensive investigation and Research on the main body of the club, such as managers, service providers, coaches, students, parents, etc. Therefore, the construction of teaching service system is particularly important, and the construction of teaching service system is inseparable from the transformation of ideas. According to the characteristics and classification of teaching, the teaching service system can be divided into three stages: before class, during class and after class.

Special pre class services include student information collection, physical examination and assessment. The research object is athletes, including height, weight, age, psychological state, sports interest, sports motivation, sports expectation and other behavioral characteristics. The premise of teaching students in accordance with their aptitude is to sum up the students' behavior rules, understand the characteristics of their needs and prepare well before class. It includes the choice and use of teaching mode, teaching content, teaching methods and means, design of environment and atmosphere, etc. Whether the coach adopts the teaching concept of "taking students as the main body" directly affects the teaching service for students. Therefore, it is necessary to change the traditional concept and form a teaching mode in which students are the main body and teachers are guided by students' learning needs. We should keep pace with the times

and constantly innovate teaching methods and means. On the basis of students' psychology, behavior, motivation and other information, it resonates with students' learning attitude and learning objectives. In terms of teaching content, it creates a classroom environment and atmosphere for students' needs, understands the deficiencies and problems in students' extracurricular life, and evaluates the whole teaching service system, including the feedback and evaluation of teaching information. Through effective collection of after-school information, carry out after-school visits and exchanges, solve the problems left over by students after class, sort out, summarize and record the problems, so as to achieve the purpose of effective prevention.

Therefore, we should change the traditional teaching concept, actively encourage students to reflect on their learning behavior, and find its advantages and disadvantages from their daily learning performance. The coach should guide the trainees to carry out self-assessment and strategic planning in each link of training, and teach them how to inspect their training status. Second, highlight the main position of students in teaching, coaches should be good at listening to the voice of students, respect the personality of students, enrich the course assessment system, the satisfaction of Taekwondo teaching is mainly reflected in the promotion pass rate, the traditional assessment method mostly uses the situation assessment, lack of attention to the students' comprehensive quality, should establish the students' emotion, psychology, physiology, situation, skills and so on Comprehensive quality as the main content of the situation assessment mechanism, the assessment mechanism as feedback, to modify and improve the teaching mode. Thirdly, the communication mechanism between parents, clubs and coaches should be established. In order to achieve this goal, the club has established a good communication mechanism with parents, regularly feedback students' learning situation to parents, and parents understand students' learning situation. To strengthen parents' recognition of coaches, to pass Taekwondo related knowledge to parents, to improve the frequency of information transmission

between each other, and to form an effective information feedback channel.

ANALYSIS OF EXPERIMENTAL RESULTS

In order to avoid the interference of other subjective and objective factors in teaching experiments and ensure the objectivity of evaluation, various experimental factors are strictly controlled in teaching experiments. In addition to adopting different teaching schemes, experimental teaching is conducted by different teachers in experimental group and control group. Under the same teaching conditions, teaching contents, teaching progress and teaching environment, different teachers carry out experimental teaching. According to the flow chart, the teaching method of "Multiple Intelligences" was adopted. The control group was composed of teachers from the teaching and research section of Taekwondo in the Institute of physical education.

Before the experiment, the same test method was used to test the basic physical health status of the students in the experimental group and the control group. Because the two groups of students are physical education students of Grade 2007, and randomly selected, it can be judged that there is no difference in the level of intelligence between the two groups of students. In addition, in order to avoid the influence of external factors on the experimental results, a "single blind" control

experiment was adopted. The evaluation group (3 persons) are associate professors or above. The "single blind" scoring method is used to evaluate, and the average value of cooperation between teachers and students is calculated. The expected indicators were arranged before the experiment and after the course. The experimental group and the control group were combined to obtain the predictive index.

In order to ensure the effect of teaching experiment, avoid the systematic difference between the experimental group and the control group before the experiment, and avoid the influence of external factors on the experiment, this study adopts the "single blind" control experiment. All groups were students of Grade 2007, and were randomly divided into classes. Through the test of the basic quality of the two groups of students, the results of the experimental group and the control group in the 800m competition are 80.30 and 80.85 respectively. The results of 100 meter dash are 79.50 and 78.85; the scores of 30 sit ups are 88.75 and 83.80; the scores of about 50 cross runs are 85.25 and 86.15; the width are 64.70 and 64.90. The results showed that the two groups of students performed well in endurance, speed, agility, flexibility and other original environmental conditions, and there was no significant difference in the scores of 800 m, 100 m, 30 m, 50 m horizontal kick and split kick ($P > 0.05$);

Table 7.
Statistical table of related factors of the two groups before the experiment

| group | | | experience group | control group | T | P |
|------------------|------------------------------------|-------------------|------------------|---------------|--------|-------|
| Number of people | | | 20 | 20 | | |
| physical quality | 800 meter race | Endurance quality | 80.85±7.596 | 80.30±8.418 | -0.221 | >0.05 |
| | 100 meter run | Speed quality | 78.85±7.295 | 79.50±8.282 | 0.259 | >0.05 |
| | 30 sit ups | Endurance quality | 83.80±6.592 | ±9.940 | 1.960 | >0.05 |
| | 50 left and right horizontal kicks | Agility | 86.15±10.667 | 55.25±9.063 | -0.385 | >0.05 |
| | Split vertically and horizontally | Flexibility | 64.90±17.880 | 64.70±22.119 | -0.380 | >0.05 |

Sports skill is a method for athletes to give full play to their physical strength and carry out technical movements reasonably and effectively. Action skill refers to the ability to complete an

action according to technical requirements. Sports skill teaching is an important content of Taekwondo teaching, and also the main form of Taekwondo teaching. The experiment mainly discusses the influence of behavior teaching

method on students' mastery of motor skills. At the end of the teaching experiment, the test was

conducted to understand the influence of behavior oriented teaching method on students' motor skills.

Table 8.
Taekwondo skills and tactics scores of the two groups after the experiment

| Examination items | Number of people | Experience group | Control group | T | P |
|-----------------------|---------------------------------|------------------|---------------|-------------|-------------|
| Technique and tactics | Protective equipment technology | 20 | | | |
| | Foot target technology | 20 | 88.84±4.537 | 83.47±5.670 | 3.875 <0.05 |
| | Practical skills | 20 | | | |

The results showed that after the experiment, the average score of the experimental group and the control group was 88.84 and 83.47 respectively, while the average score of the control group was significantly lower than that of the control group. By t test, $P < 0.05$, there was significant difference between the experimental group and the control group. Practice has proved that the teaching under the guidance of meta intelligence theory is more conducive to improving students' technical and tactical level. Using behavior oriented teaching method to guide teaching, from the teaching design, teaching methods, teaching means and other aspects, give full play to students' various intelligence, put forward knowledge intelligence, make students understand their own advantages and disadvantages, fully mobilize students' enthusiasm and initiative, and better grasp the skills and skills of physical exercise. In addition, the improvement of technical and tactical level of Taekwondo athletes is closely related to the behavior orientation of students. The improvement of students' intelligence level reflects the improvement of athletes' technical and tactical level to a certain extent. The improvement of students' technical and tactical level proves the development of students' behavior oriented level from one side.

CONCLUSION

Taekwondo education should be based on public sports elective courses, should change the concept, always adhere to the concept of lifelong education, lifelong, universal, flexibility as its

ultimate goal, in strict accordance with the curriculum design, pay attention to classroom teaching practice, and constantly improve education and teaching methods, so as to promote students to form lifelong exercise. In addition, while improving the quality of classroom teaching, colleges and universities should also strengthen the guidance of Taekwondo associations to make them play their due role in the lifelong education of Taekwondo.

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REFERENCE

1. Xu R D , Yu H C . Effects of Building Orientation on Fatigue Behavior of Ti-6Al-4V Alloy Produced by Selective Laser Melting[J]. Key Engineering Materials, 2019, 795(7):208-214.
2. Véchambre, Cyril, Buléon, Alain, Chaunier L , et al. Understanding the mechanisms involved in shape memory starch: Macromolecular orientation, stress recovery and molecular mobility[J]. Macromolecules, 2018, 44(23):9384-9389.
3. Jafari H , Sepehri S , Yazdi M R H , et al. Orientation-dependent mechanical properties of planar microtubule-based bio-nanometamaterials[J]. Physica Scripta, 2020, 95(8):85004 (20pp).
4. Amoros F , Paya L , Mayol W , et al. Holistic descriptors of omnidirectional color images and their performance in estimation of position and orientation[J]. IEEE Access, 2020, PP(99):1-1.
5. Arenas-Guerrero P , Ángel V. Delgado, Ramos A , et al.

- Electro-Orientation of Silver Nanowires in Alternating Fields[J]. *Langmuir*, 2019, 35(3):687-694.
6. Lee J , Jung H . TUHAD: Taekwondo Unit Technique Human Action Dataset with Key Frame-Based CNN Action Recognition[J]. *Sensors*, 2020, 20(17):4871.
7. Ahmad H S , Abu-Elhaija W , Qandoos Y . New Strategy for Enhancing Engineering Practical Teaching through the Development of Infrastructure Learning Hub (ILH)[J]. *MATEC Web of Conferences*, 2020, 312(1):02001.
8. A B H , B K K , A P B . Scalable and Practical Teaching Practices Faculty Can Deploy to Increase Retention: A Faculty Cookbook for Increasing Student Success[J]. *Education for Chemical Engineers*, 2020, 33(5):45-65.
9. Akuma F V , Callaghan R . A systematic review characterising and clarifying intrinsic teaching challenges linked to inquiry-based practical work[J]. *Journal of Research in Science Teaching*, 2018, 56(5):619-648.
10. Kubiyeva S , Akhmetova A , Islamova K , et al. Electronic Physical Education Textbook: Effective or Not? Experimental Study[J]. *International Journal of Emerging Technologies in Learning (iJET)*, 2020, 15(15):64.
11. Ortigosa I . An experience with varied teaching methodologies at mechanical engineering program[J]. *The International journal of engineering education*, 2018, 34(4):1285-1288.
12. Kevin, Burn, Chris, et al. A hands-on approach to teaching system identification using first-order plus dead time modelling of step response data:[J]. *The International Journal of Electrical Engineering & Education*, 2018, 57(1):24-40.
13. Popova S V , Petrisheva L P , Popova E E , et al. Modern educational formats: technology of flipped chemistry teaching[J]. *Journal of Physics: Conference Series*, 2020, 1691(1):012193.
14. Guo C . Research on the three-dimensional practical teaching framework of computer graphics for game development[J]. *International Journal for Engineering Modelling*, 2018, 31(1):90-95.
15. Mazzetto S . Multidisciplinary collaboration: an integrated and practical approach to the teaching of project management[J]. *International Journal of Continuing Engineering Education and Life-Long Learning*, 2020, 30(1):52.
16. Liu X , Zhang J . Application of Computer Distance Education in Practical English Writing Teaching[J]. *International Journal of Emerging Technologies in Learning*, 2018, 13(4):71.
17. Prasanna T A . QUANTIFICATION OF PHYSICAL AND PHYSIOLOGICAL ASPECTS OF ACCLIMATION TO ALTITUDE AND RELATED CHANGES ON PHYSICAL EDUCATION TRAINING COLLEGES IN KERALA[J]. *High Technology Letters*, 2020, 26(6):385-390.
18. Feng D , Liu Y , Mazloomi M S , et al. A virtual reality system to augment teaching of wood structure and protection[J]. *International Wood Products Journal*, 2020, 11(2):46-56.
19. Hoad, Kathryn, Kunc, et al. Teaching system dynamics and discrete event simulation together: a case study[J]. *The Journal of the Operational Research Society*, 2018, 69(4):517-527.
20. Kao C C , Luo Y J . Effects of Multimedia-Assisted Learning on Learning Behaviors and Student Knowledge in Physical Education Lessons: Using Basketball Game Recording as an Example[J]. *International Journal of Emerging Technologies in Learning (iJET)*, 2020, 15(1):119.