# Research on Using Modern Educational Technology to Training Students Ability of Producing Aerobics

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Abstract: In modern education for the students Aerobics Creation regard ability, scholars have conducted a series of studies, such as aerobics based on a combination of action and research on aerobics extends to extra-curricular studies, calisthenics action on creating capacity, as well as research on improving teaching mode. In recent years, with the development of aerobics in the international, it gradually started with its own unique charm and rich species in a sport, becomes the masses love sport. At the same time, it is also an important content of major colleges and universities sports in teaching process. In order to look for the related technology support of current PE teaching process, many colleges put their eyesight into current teaching technology. According teaching practice, we can know that an important ability is students' creative ability aerobics teaching. The establishment of this ability is more complicated and it be affected by many factors, it is the result of many aspects' interaction. In the aerobics professional teaching process, it not only needs enhancing the operation technique and movements for aerobics teaching, but also needs pay attention to students to cultivate their innovative ability, guides students to put on students' thinking cap and active thinking, stimulates the student to carry on the independent creative enthusiasm, develop and rich aerobics' movement and content, improve the interest of aerobics practice, guide students use learned knowledge creation to learn creatively. It can lay the foundation for the students after the independent creation of independent exercise. The main point of this study is creating aerobics capacity, teaching applications, students compose capabilities approach, as well as specific training methods and so on.

**Key words:** Modern education technology, aerobics, creation ability

### INTRODUCTION

With the deep of education inform in our country, in order to look for the related technology support of current PE teaching process, many colleges put their eyesight into current teaching technology. Through all kinds of network auxiliary teaching form and computer media cooperates to create new modern sports model. Currently, this research is still in relatively early stage, by means of the modern education technology can help students learn the new Aerobics movements, effectively completed the details of movement, to improve students' movement quality, to improve comprehensively students' own creation ability. To a great degree, aerobics professional teaching has gradually been inseparable from the modern educational technology. Aerobics main is Collection by music, dance and sports into one thing, which has Ornamental, entertainment and fitness. As a sport project which ordinary existed in the college PE teaching process in recent years, its teaching is affected by traditional PE, for culturing the students' ability main reflects on the creation ability. In the teaching practice process, because

of too much attention to the role of teachers, often ignore the innovation of teaching methods, which enables students to compose the general low level. Aerobics creation must request fully demonstrated the characteristics of the aerobics sports items, according to the effective combination of theories knowledge and creative effect will be scattered action continuous mixing to be complete and can be used for exercise and game project learning. The core of aerobics creating is the creator, which requires the creation must have the psychological quality and the psychological quality. At the same time, methods experience skills, creating the effect also depends directly on the creation of the use and mastery of professional knowledge. The aerobics creation ability is not the signal, its form always be affected by different factors and it can be reflected by many aspects (Zoellner et al., 2013).

As a new development PE sport project, aerobics have been favor about many PE lovers since nineteen seventies. In recent years, with the development of aerobics in the international, it gradually started with its own unique charm and rich species in a sport, becomes

the masses love sport At the same time, it is also an important content of major colleges and universities sports in teaching process. Many colleges have not only made the aerobics sports as a public sports class. The colleges basically set up the course, but it is existed some problems, such as the purpose of teaching repeatable and the curriculum unitary. It leads students lack the ability of creation and innovation consciousness in the process of learning. Not less college set the course that according the teaching outline's need to make the related teaching plan. Teachers' main leading, dull test, senseless theory, fixed routine exercise and so on plays a decisive role in the development of the ability of students. Before graduate from college, they always can't continue exercise and they have no time to exercise the movement they learn before. This will gradually forgot the aerobics related knowledge, which requires teachers must possess certain creation and innovation ability (Xanthacou et al., 2013).

The purpose of this study is to explore a new model of the students aerobics compose ability. The main research content is the connotation of creating capacity in aerobics, modern educational technology in the field of practical application and the ability of students compose specific methods.

### Concept and significance of aerobics creation ability:

Aerobics creation ability is that the student makes the sports technology and knowledge be learned well together, the student did not learn or have learned movements to create and combination, creative layout into a set of Aerobics ability. It can be adjusted by different aerobics movements change the movement rhythm, the movement speed, the movement frequency, the movement route, the movement direction, body posture. Arranged the novel can adapt to different individual and group action, action routines connected

and single action, fully meet the needs of their physical and mental health and work, so as to achieve life-long benefit function (Chatpakkarattana and Khlaisang, 2012).

#### **METHODS**

Lay the foundation for students' lifelong fitness: The traditional aerobics usually imitate exercise for movement, teachers only stress that students need reproduce these movements, have not enough stress innovation and application of already acquired knowledge action. The result of students often just know but not know why, only make the students have learned in school and technical knowledge into complete set the movement practice. If the students want to improve the quality of aerobics teaching and culture the aerobics creator who has high creation ability, the teachers should stress the culture of the students' creation ability, guide students to put on students' thinking cap and active thinking, stimulates the student to carry on the independent creative enthusiasm, develop and rich aerobics' movement and content, improve the interest of aerobics practice, guide students use learned knowledge creation to learn creatively. It can lay the foundation for the students after the independent creation of independent exercise. Schematic diagram of function module of modern teaching system is shown as Fig. 1.

### Culture the self-confidence and enthusiasm of aerobics

**teaching:** In the process of aerobics teaching, the student creation process arouses the development of idea. This creation process can be concluded for practice, writing, creation and conceive these stages. It requests students need have the vivid idea. Aerobics creation is helpful to improve the self-confidence of the students, to culture personality of students. After completing the creation, it

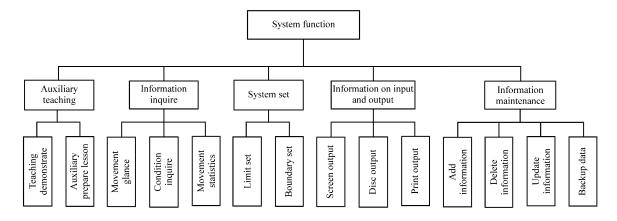


Fig. 1: Schematic diagram of function module of modern teaching system

can greatly enhance students' self-confidence. In the creation process, it can effectively enhance students' interest for aerobics sports (Saleewong *et al.*, 2012).

# CONCEPT OF MODERN EDUCATION TECHNOLOGY AND THE APPLICATION IN THE AEROBICS TEACHING

Modern education technology main contains the technology of modern teaching design, modern disseminate media technology and modern media technology three aspects. Modern media technology is called by electronic technology media. Modernization of education means that in the process of education, its components include hardware appliance and software appliance, hardware appliance mainly includes network technology, computer, TV, film, video, photography, slides, teaching software mainly includes the use of teaching media, film, disc, etc., modern media technology mainly use of educational media to educate. The design technology of modern teaching is also the teaching process system optimization method, it is a kind of widely software technology. Modern education technology's has many applications in college aerobics professional teaching.

Application in the professional theory teaching: Aerobics traditional theory teaching is teacher through painting, writing on the blackboard and talking and demonstration teaching. In the classroom, only the imagination and understanding from the teacher's drawings and the explanation process, it is difficult to achieve the theory course of Aerobics professional expected effect. Teachers in the teaching for the theory of conventional create certain situation, carries on the explanation to the curriculum using multimedia teaching system, make full use of the image data, a large number of flash animation and pictures will abstract theories become visual image to fully mobilize the enthusiasm of students in learning theory knowledge, to deep the understand of learning content. It effectively improves teachers' teaching effect. In the process of teachers' teaching in the use of the law, teachers can while playing the video side of the content of the course is to explain, in class allows students side to watch the video side to practice, strengthen the combination of theory and practice, to grasp the students for the master degree of knowledge timely. Aerobics species schematic is shown as Fig. 2 (McMay et al., 2013).

**Application of the basic action teaching:** The main objectives of aerobics learning is so that students can

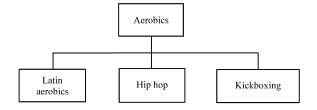


Fig. 2: Basic structure categories schematic of aerobics

Table 1: Total aerobics class table

Field name	Class of classes	Movement name	Key word
Field type	Char	Char	Char
Field width	1	20	10

make the aerobics movement rhythm, which requires students to complete after studying for a long time, through the modern education technology can help the students to try to shorten the process from quantitative change to qualitative change. It makes the students learning to steady and rapid increase. PE teachers master the basic movement under the situation, the students' action be recorded and then played for students to watch in the learning process, so that students can watch the video to find out the problems of its own motion and promptly corrected to gain an intuitive, comprehensive and clear self-evaluation and analysis. Make use of the information feedback related video data is one of the most effective and accurate method of education, modern education technology can greatly enhance the training of students, make students aerobics operation progress, improve students' performance, students continue to improve their posture, is also an effective means of training, the general category table of aerobics teaching system library as shown in Table 1 and Fig. 2.

Table 2 shows the basic combo moves of aerobics. Table 3 shows the difficulty moves table of aerobics. Table 4 shows the basic footwork table of aerobics.

Application in the difficult actions teaching: In the aerobics teaching process, the difficulty is mostly by two and more than two difficulty movement compound formed, with movement of our eyes are often difficult to see parts of the body and action specifications, it is difficult to implement the decomposition demonstration. In the current teaching aerobics teaching process, PE teachers because of the objective factors by their professional ability, age and gender restrictions, it is often difficult to do every action demo. This will not favor the student resume correct action concept and clear action representation. It's difficult movements such as shown in Table 3. Use the modern education technology can greatly shorten the time of students learning. Teachers

Table 2: Basic combo moves of aerobics

Field name	Class of classes	Choose	Coding	Place coding	Pace coding	Key word	Note	Video path	Count	Recently change
Field type	Char	Logic	Char	Char	Char	Char	Remark	Char	Char	Date
Field width	1	1	4	2	2	10	4	20	2	8

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Field name	Class of classes	Choose	Coding	Action name	Teach or unexpectedly	Key word	Right path	Side path	Note	Recently change
Field type	Char	Logic	Char	Char	Char	Char	Remark	Char	Char	Date
Field width	1	1	4	10	1	10	20	20	4	8

Table 4: Basic footwork table of aerobics

Field name	Class of classes	Choose	Coding	Step name	Key word	Note	Video path	Count	Recently change
Field type	Char	Logic	Char	Char	Char	Remark	Char	Char	Date
Field width	1	1	1	10	10	4	20	2	8

through the teaching making films were broadcast cycle, fixed, slow down and the decomposition of play can help students quickly establish the action concept. After students mastered the basic essentials movement, through the modern educational technology teaching software can calculate their own body motion trajectory, velocity, acceleration, displacement and other parameters in the operation of a difficulty. In the same standard after the comparative analysis of parameters can be more intuitive understanding of the difficulty movements. Using this method for correcting the student mistakes and gradually formed a very obvious effect of their action technology. After the students mastered the basic difficulty movement exercises, teachers can be targeted to improve students' action, make student movements can be more perfect (Lisichko et al., 2012).

## Application of cultivation students learning ability: In the process of student learn the completed set of movements, teachers can ask student use effectively modern education technology to prepare the class, at the same time to watch videos of each action drawing down their own memory, teacher can check at random in the classroom. Use this method, it can not only cultivate students drawing ability and self-learning, but also can greatly improve the students in the classroom learning efficiency, enhances the student to the action of the memory speed. The student in the combination of memory operation often used method of related imagery training, it is through imagination and representation technology in the mind can help the students to consolidate the learning action. By the means of the modern education technology can help the students to deepen their action memory. Students can through teaching and classroom video files from the main learning, also can with the network with the teacher contact timely, solve the related problems in learning, give full play to their imagination to the idea of their heart. Speed up the action itself formation of fine efforts (Pei et al., 2012).

Application of cultivating students aerobics creation ability: After college student mastering the basic movement and creative theory knowledge, they have some certain sport ability. Teacher should consciously cultivate their aerobics creation ability. The aerobics basic footwork is shown as Table 4.

In the process of cultivation of students' creative ability, effectively use modern education can achieve the effect which twice the result with half the effort. Network technology and computer multimedia technology can provide rich information, fully improve student creation ability. Through the modern network technology, students can see a lot of aerobics sports related performances and competitions in the network, such as dancing, swimming, skating and gymnastics. After mastering certain sports material, students in the process of creation of the aerobics movement will appear in the sense of insight. It can stimulate student enthusiasm and inspire, realize the effective combination of logic thinking and intuitive thinking. Fully apply modern education technology can make student to develop the habit of active participation, active thinking, careful observation. This teaching mode is helpful to complete the change from movement into creation. At the same time, the computer technologies can analysis and statistics times on each link of the aerobics activity. Through the application and development of the software, it can provide scientific and fitness to complete action creating security. Computer technology has the function of effective for music, for example synthesis of editing, music rhythm music and sound adjustment are more convenient. Through careful treatment, the music can greatly enhance the artistic appeal of aerobics (Wang and Li, 2012).

# USING THE METHOD OF AEROBICS TEACHING TO CULTIVATE STUDENTS' INNOVATIVE ABILITY

Aerobics creating is a complex process, which requires students to have certain creativity, which should be especially creative characteristics and style of their own. It should have requested action must be beauty of compiling, music, structure and movement, have some certain exercise. Only in this way can help the students physical fitness, in teaching the process of the calisthenics course, methods of cultivating students' aerobics to creation ability is mainly composed of the following (Song and Huang, 2012).

Cultivate the sense of music: Music is the soul of aerobics project and it can fully reflect the charm of its action. It is helpful to stimulate the enthusiasm of students, training students for the aesthetic appreciation and sentiment. Students in the learning process to obtain the aerobics sports fun, Aerobics movements will get a beautiful sublimation in beauty music accompaniment. In order to solve the music in coordination with the aerobics movement, needs to make contact with students of music in class and extracurricular time, only the skilled aerobics music rhythm to help students understand the music, grasp the rhythm of music, continue to stimulate students' inner feelings of creative inspiration and emotion expression. This needs teachers in the different stages of learning to the students play a variety of music, for example in the preparation stage, can play the teachers adopt in the teaching of music to students, let students fully familiar with the main melody and rhythm, while in the process of teaching in the basic stage, the teacher issued a certain password, after student master a set of actions or several movements to play music, so that students can repeat exercises on the action and gradually establish a festival rhythm and musicality, asked the students every day in the after-school time to listen to 20 to 30 min of music. Make the melody and rhythm of music listening and teaching process are compared, in next class by teachers on the movement and rhythm of different music for guidance, so that the students can grasp the rhythm of the music and understand the melody of music, so that the action and the music can be perfect combined. Operation flow is shown as Fig. 3.

Cultivate students' ability of creation material accumulation: One of the basic conditions of aerobics creating is the creation of material, especially for the beginning engaged in creation is more important. More material accumulated in the process of the creation of students, aerobics degrees of freedom combined is formed in the creation, for action and content of choice is greater. In the process of learning, students have to remember more, thinking more, practice more, think more, see more and imitation more, usually to watch some TV, video, books, in the process of practice and learning is good at thinking on the relationship between action and action

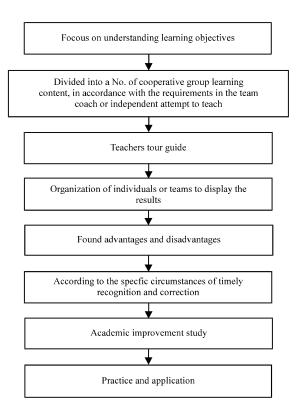


Fig. 3: Cultivation of college students' sense of music teaching process schematic diagram

and comparison of different structure of the action, on the different structure of the same nature of the action form more thought. More practice in the class, associate more similar action in practice, thinking their actions change and suitable action. Students should more record teachers' action. With certain requirement makes the movement to be rearranged in the process of teaching, teachers also should arrange students to imitate and observation in the process of teaching. It will enable students to fully feel the effect, it can play a role for students to accumulate material ability and strengthen the correct action. At the end of each semester, the quality and quantity of material can be rated as one of the important contents of their students' performance, thus it can effective cultivation of the students' ability of material accumulation (Wang et al., 2012).

Cultivation of students creating practice ability: To cultivate students' creative ability is from practice to theory, then from theory to practice in the teaching process. In the teaching process, mainly is practice exercise, while the theory is the center link of the practice process. After the students master some basic elements of aerobics, teachers should teach students some related

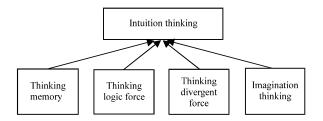


Fig. 4: Effect factors of intuitive thinking

theoretical knowledge, through basic knowledge learning can make students use what their master basic knowledge to open their own thinking. College students' thinking intuitive influence factors such as shown in Fig. 4.

Actively use our brains and comprehensive analysis, deep the understanding of aerobics. The students are able to create really suitable for their own set of aerobics through practice, first, teachers should with some new operation practice training for the students in the teaching process, after a period of practical training and learning, according to certain requirements make students to choose based on past the action for rearranging their action. For the formation of combined their aerobics eventually. When the teachers give students complete combined movements in teaching, they should have the objective of leaving part movements and music to enable students to self-practice, self-creative, self-thinking, then combine the creation of movement and music. It will be combined into a new set of aerobics. After a certain improvement in the students to compose ability, teachers can teach students the relevant action has certain difficulty, so that students can around these movements to design the whole set operation structure. And it can be matched with various basic factors and steps. Finally, teachers can make students according to the performance aerobics and aerobics requirements, regular and the general principle to compose out a more complete performance aerobics and aerobics. In order to improve the students' enthusiasm and initiative of creating continuous mining student's potential. It requires students should actively participate in the competition, as an important part of evaluation of student achievement, so as to improve the students' aerobics creation ability.

### CONCLUSION

The students' physical and mental development has been basically mature, their behavior and mental activities have gradually started from simple imitation towards to self-regulation and development. If aerobics teaching cannot adapt to the needs of the development of students, it will make the improvement of creativity and creative ability of students. According to teaching experience, the teachers can know that an important ability is students' creative ability aerobics teaching. The establishment of this ability is more complicated and it be affected by many factors, it is the result of many aspects' interaction. Through the analysis can be learned that aerobics teaching in colleges and universities must give full play to leading the students themselves, strengthen the cultivation of students' creative ability and innovation consciousness, it is a very important role in future health education and physical activity. The students will not aerobics professional learning that only limited in the classroom, through various training and social practice to guide and elicitation in the creation and innovation as well as teachers in the practice process.

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