

Discussion on the Application of Dance Science Concept in the Development of Dance Teaching

Lin Jing

Modern College of Northwestern University, Xi'an, Shaanxi, China

Abstract: *Dance teaching is a comprehensive subject. In actual teaching process, dance teachers should discover the characteristics of students, combined with the theory of practice, emphasis professional theory knowledge and apply the scientific way on dance teaching, only in this way can train more excellent dance talent and promote the vigorous development of dance in China.*

Keywords: *Dance teaching; Practical training experience; Scientific training*

1. Introduction

The traditional teaching mode has given dance educators certain professional ability. Dancers have already had a solid foundation to meet this special form of art from the external form of dancing and technical movements of the body.^[1] In recent years, due to the prosperity and development of economy, culture and society, there has been a trend of interdisciplinary integration in the field of scientific research. This makes dance take this opportunity to create a "new world", the introduction of foreign cutting-edge ideas and scientific training means to enrich the teaching practice of dance. This paper expounds the particularity of dance training analyzes the theoretical basis of MIND-body techniques, lists some specific training means combined with teaching experience to make up for the lack of "inner consciousness" of the body.

Dance science is an interdisciplinary and comprehensive science highly recommended by dance teaching professionals at home and abroad. Dance Science aims to improve the performance of dancers, promote the physical and mental health of dancers, and ensure the safe and healthy training practice of dancers by integrating the expertise of the arts and sciences and applying the disciplines of physiology, nutrition, biomechanics, neurology and psychology to dance. Those working in the field of dance may include researchers, health personnel, dance teachers, artistic directors and performers. Dance science is a relatively young field, with initial research and some early activities starting around the 1970s, and became more formal in 1990 with the establishment of the International Society for Dance Medicine and Science. Dance science follows the development law of dance specialty, so that dance practitioners can carry out dance training more scientifically and effectively. At the same time, dance science also has positive value in reducing dance injury and maintaining the physical and mental health of dance practitioners. The teaching department of dance specialty in colleges and universities should follow the scientific concept of dance, so as to continuously improve the practice level of dance and cultivate more high-quality dance professionals.

2. The necessity of integrating dance scientific concept into dance teaching practice

For contemporary young dancers, the emergence of a new field, dance science, provides some enlightenment to solve these problems. For example, in the daily training of dancers will encounter the problem of fatigue. Fatigue is a potential risk factor for injury in dancers because it may affect their ability to maintain the muscle coordination required for steady movement. For example, rupture of the anterior cruciate ligament (ACL). Biomechanical differences in landing during jumps were found between dancers and team athletes, especially female athletes, which may explain the differences in the epidemiology of ACL injuries between dancers and team athletes, as well as within dancers.^[2] However, it is not known whether these biomechanical variables change differently when team athletes and face fatigue. Dancers may be more resistant to fatigue than team athletes, but once fatigue is reached, they may have different biomechanical responses during landing than team athletes. Therefore, fatigue a potential risk factor for injury in dancers. While quadriceps and hamstring muscle group activation patterns have been reported to change in athletic people in response to fatigue arising from jumping at

high altitude to landing, dancers show similar muscle activation patterns and respond to fatigue. In the study of dance science abroad, experts assess and test a group of dancers after completing specific high-intensity dance movements, in order to test the activation level of quadriceps and hamstrings before and after dancing. The co-contraction ratio of quadriceps femoris and hamstring muscle groups increased significantly after fatigue compared with before fatigue, which was similar to many studies in the literature. It follows that neuromuscular activation of knee extensors and flexors in dancers changes in response to dance-specific fatigue. In addition, the co-contraction ratio of the quadriceps and hamstrings is substantially higher than before, due to the lower level of hamstring activation. Future investigations of the biomechanical adaptation of dancers to fatigue will be beneficial to further investigate the potential influencing factors of injury risk in dance. To sum up, the application of the concept of dance science to dance research, in-depth analysis of the reasons behind dancer injury, can be specific injury prevention implemented.

In the teaching practice of dance major in ordinary colleges and universities, the active integration of dance science related concepts plays a very positive role in improving the dance skills of trainers and protecting their physical and mental health. The necessity of integrating dance scientific concept into dance teaching practice in colleges and universities can be summarized as follows:

Firstly, dance science concept conforms to the development law of dance discipline. Based on the characteristics of human physiology and psychology, dance science puts forward that only by starting from the physical and mental development of dance trainers and following the development rules of dance discipline, can dance professional teaching practice be better carried out. In this way, students' professional quality of dance can be solidly and effectively improved, and their potential for professional development can be maximally explored. Meanwhile, students can be guided to carry out self-protection and injury treatment in training practice more scientifically.

Secondly, dance science concept improves the effectiveness of dance teaching. Scientific concepts experienced professional dance training colleges and universities dance teaching professionals, able to set up a more rational science dance training program, and in the dance teaching practice can be fully according to different dance classes, dance venues, dance training professionals such as reasonable selection dance training methods, it can more effectively arouse the enthusiasm of the college students to participate in the dance teaching practice, It is easier to achieve the expected teaching goals of dance majors.

Thirdly, dance science concept is the advanced teaching concept obtained from the continuous sublimation of dance teaching practice research. ^[3]Dance science courses such as dance physiology, dance psychology, dance injury therapy and dance science training are practical courses. Therefore, there is a logical symbiosis between the concept of dance science and the practice of dance teaching. Fourthly, dance science can help colleges and universities to train high-quality dance professionals more scientifically and effectively. In addition to mastering the necessary professional knowledge and skills of dance, dance professionals also need to have more interdisciplinary knowledge and skills related to dance training, so as to better meet the needs of future dance training guidance, venue performance, teaching and other jobs.

In a word, dance teaching practice in colleges and universities must be actively integrated into the scientific concept of dance, which is the inevitable requirement of the reform and development of college dance teaching in the new era, and is also the necessary condition for colleges and universities to improve the effectiveness of dance teaching. Is of vital importance to the scientific concept in the dance dance injury prevention, for centuries, dance and dance performance practice skill teaching is focused on the master of art form, dance classes exist primarily to broaden one's vocabulary and skills, the development of a person's music ability and vocabulary, and through a particular voice or style to improve its own unique creativity and expression. Although traditional dance teaching methods embody excellent means of training dance artists, too many dancers are plagued by injuries and frustrated by seemingly insurmountable physical obstacles.

3. The measures of integrating dance scientific concept into dance teaching in colleges and universities

3.1 Advocating the coordination and unity of dance teaching and knowledge and ideology

Dance teaching should focus on students' psychological activities, thoughts and feelings and other potential factors as the teaching content. Teaching about specifications, concepts, principles, etc., can

not only use knowledge to guide the growth of thought. We say that dance teaching has more rigorous knowledge in movement training specifications. Human training in teaching can not be arbitrary, dance students (skeletal ligament muscles) are in the stage of growth and development, more demanding to master the correct dance movements. Teachers can press the crotch root to open the crotch root ligament to improve the students' leg toughness; Training the ability of crotch root ligament by "hitting crotch"; Solve problems such as hip joint and ligament laxity through "crossover" exercises. Dance teaching is mainly for the "hip root" joint training period, this training is very key to the school dance students are also very bitter.^[4]Therefore, the teaching should encourage and cultivate students to bear hardships, stand hard work and be intrepid, cultivate students to study actively and not afraid of difficulties, develop the concept of safe activities through training and explanation, lay a solid foundation for future dance practice, and make students become dancers with elegant temperament, graceful curves and vitality. In dance teaching, teachers should be based on the physical and mental conditions of students in the growth period, which may lead to unclear learning objectives and depressed mood. Dance teaching should unify the existing emotional fluctuations with dance-related knowledge, give students more guidance and care, and pay attention to their emotional dynamics in the growth period. Teachers should often allocate and clarify the state of teaching knowledge step by step, and guide students to grow healthily according to the teaching content. Understand their physiological, psychological and action subtle changes, grasp their ideological situation, guide the correct direction of education, and apply the concept of "teaching and educating people" and "text to carry Taoism" in the whole process of teaching.

3.2 The practical training experience in dance teaching should inspire students to practice with movement theory

At present, dance teaching is characterized by strong practicality, and the teaching mode of dance has special attributes. The first layer: teaching process language should be less rather than more, and the use of words to inspire physical training is a lot; The second LEVEL: through human body movements as the carrier of dance vocabulary, the training plan should be scientific and accurate to prevent the occurrence of falling and sprain. A long lecture is not an option in a dance course. Through the concise language teaching, professional terms, precise body theory teaching. Through a large number of dance body movements demonstration, guide students to correct practice, so that they can understand the basic essentials of dance, gradually learn the feeling and force method, accumulate corresponding practical experience, find the correct movement consciousness. In the training of basic skills of Chinese classical dance, the dance posture training with more complex elements, "big tuck twist", is required on the basis of big tuck -- the upper body with bending over, twisting sideways and lifting the chest. Such as teachers in teaching this class hour, not only to "from here to the" imitation dance teaching, and try to use first joints and body, limbs and the body terms (such as verbs, adjectives) expression and performance, simple dance professional term make students clear of the specifications of the action, finally to guide students to practice repeatedly drills, give students with plenty of practical experience, Let them get the basics right.

Actively practice dance theory with body movements to train dance students, actively develop good habits. Teachers on the dance movement class first specification requirements, let the students know the principle of movement, through repeated physical training inspired, so that their dance sense consciousness gradually established. In the dance teaching class, students need to go through repeated practice for many times to master the correct movements of dance training, many students have a deep feeling: to achieve the full proficiency of body and movement consciousness, we can really master the movements and specifications. Therefore, students should deepen their understanding of the principles of dance movements, and then actively practice and think, so as to fully cooperate with the ideological guidance of the mind and body, so as to show freely in the dance form. The combination of theory and practice emphasizes that every dance teacher should do it. In the process of dance teaching, the theory of professional dance movements should be clear and accurate, and the lessons should be prepared according to the teaching characteristics, difficulties and key points, and the practical experience of my movements should be used to recheck whether the choreographed dance training combination movements are practical and reasonable. Start with the first dance training movement details, and finally arrange the tutorial step by step as you choreograph the training movements. The height and rhythm of dance teaching in the movement design of repeated research and experiment, we should first experience the dance movement, confirm the dance movement teaching content is feasible, and then teach students practice. In this way, dance teaching can achieve the educational purpose and improve the effect of dance teaching.

3.3 Follow the scientific concept of dance, vigorously promote the reform of dance teaching

In the teaching reform of dance specialty in ordinary colleges and universities, we must follow the scientific concept of dance. The idea of dance science should be the important theoretical guidance of dance teaching reform. In the teaching practice of dance major in colleges and universities, more school-based courses of dance science should be developed, so that more students can participate in the learning activities such as dance training and training of dance skills more scientifically and rationally with the help of school-based courses. One of the goals of dance teaching reform in colleges and universities is to cultivate high quality comprehensive dance professionals. Only by following the concept of dance science can we help colleges and universities achieve the goal of teaching reform better. At the same time, dance science itself is established on the basis of fully respecting the law of dance teaching. Therefore, when colleges and universities carry out the reform of dance teaching, to follow the scientific concept of dance is to respect the teaching law of dance specialty to some extent. In related studies abroad, with the popularization of scientific information about dance, teachers who teach dance have begun to debate whether to integrate this knowledge into the practice context and, if so, how to achieve this goal most effectively. Most of the content and organizational concepts included are: proper warm-up procedures, information and methods of body therapy, basic conditioning principles, proper flexibility and strength levels, and work to correct alignment problems. Some teachers insist that a well-designed skills lesson must address these issues. Others argue that it is impossible to incorporate everything that is now known about the body and its conditioning needs into the teaching of dance techniques. Therefore, we must vigorously promote the reform of dance teaching and carry out the scientific concept of dance.

4. Conclusion

Dance is the real feeling of music, educational means should be constantly innovated. As a dance educator, we should draw and accumulate dance nutrition from life, inspire emotion from music, and refine performance elements. Adopt various situations to guide students' emotional experience; Often experience different actions, figure out a variety of emotional manifestations, etc. We must firmly grasp these principles, carry out dance education with advanced teaching concepts, and improve students' dance performance level through individualized teaching with high teaching standards.

References

- [1] Kelli L. Cain, Kavita A. Gavand, Terry L. Conway, Emma Peck, Nicole L. Bracy, Edith Bonilla, Patricia Rincon, James F. Sallis. *Physical Activity in Youth Dance Classes [J]. Pediatrics* . 2015 (6).
- [2] Brooke Longworth, Robyn Fary, Diana Hopper. *Prevalence and Predictors of Adolescent Idiopathic Scoliosis in Adolescent Ballet Dancers [J]. Archives of Physical Medicine and Rehabilitation*. 2014.
- [3] Nili Steinberg, Israel Hershkovitz, Smadar Peleg, Gali Dar, Youssef Masharawi, Aviva Zeev, Itzhak Siev-Ner. *Morphological characteristics of the young scoliotic dancer [J]. Physical Therapy in Sport*. 2012.
- [4] Robyn K.Fuchs, Jeremy J.Bauer, Christine M.Snow. *Jumping Improves Hip and Lumbar Spine Bone Mass in Prepubescent Children: A Randomized Controlled Trial [J]. J Bone Miner Res*. 2009 (1).