Application of Situational Cognition Theory in Teaching of Vocal Music Performance

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ABSTRACT

The teaching of vocal music performance is strongly technical, which can not only help students obtain a rich emotional experience in the melody of music, but enrich people's cognition of emotion. This paper applies situational cognition theory to the teaching of vocal music performance. Based on the theoretical connotation of situational cognition theory and the characteristics of teaching of vocal music performance, this paper constructs a four-step teaching model of vocal music performance based on situational cognition theory: "situation—experience—exploration—application", aiming at cultivating and enhancing students' awareness of autonomous learning of vocal music performance, improving the accuracy of vocal music performance, and ultimately improving students' comprehensive skills of vocal music performance.

Key Words: Situational Cognition Theory, Vocal Music Performance, Teaching Mode

Introduction

Vocal music performance is a unique art with very strong rhythm sensation and expressive force. Behind this feature is the need for expression and transmission of specific emotions (Pallant, 2012). Therefore, in the process of vocal music learning, it is necessary to accurately and scientifically grasp the emotions of a particular work, to put more emotions in the process of playing and practicing, to express and interpret vocal music more accurately, and to organically integrate learning skills with emotional expressions so as to more accurately understand the rich thoughts and emotions contained in musical works so that the unique charm of music can be showed more accurately and comprehensively (Sundberg *et al.,* 2011). In the reaching of vocal music, teachers can use contextual cognition theory to cultivate students' emotions (Liu *et al*., 2014). To apply the situational cognition theory to teaching of vocal music performance, a "practice field" should be created. The field is a functional learning environment and atmosphere created to achieve the preset goals in order to achieve the following goals: first, in the space-time flowing three-dimensional environment generated by the work, students can more objectively grasp the original attributes of the work and then play the work accurately; secondly, students' interest in learning can be stimulated to make them enjoy the learning so as to enhance the learning drive; third, it is to trigger problems to inspire the psychology of exploration (Woodcock, 2011). At the same time, the analysis of works under situational cognition theory should not look at the work from the perspective of a bystander traditionally, but should be the reconstruction of the author, performer, and audience in the same environment. Teaching is a bilateral activity of teaching and learning where teachers and students are mutually dependent, interacting and promoting each other.

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Table 1. The hypothesis of this study

The Teaching of Vocal Performance Based on Situational Cognition Theory	1.Raise awareness of independent learning vocal performances
	2.Improve the accuracy of vocal performance knowledge
	3.Improve the appropriateness of the use of vocal performances
	4.Improve the comprehensive skills of vocal performances

It is necessary to create a good learning atmosphere and learning environment for students to explore and analyze the knowledge in a positive, active, relaxing, and free environment (Spiro, 1991). This will not only help students effectively learn the knowledge, but also help them apply knowledge to solve practical problems so as to achieve real learning goals and achieve good learning results. The teaching of vocal music performance under situational cognition theory pays attention to the cultivation and training of students' overall quality instead of simple technical training. Focusing on cultivating people, developing people, and improving the structure of knowledge, it attaches importance to teach students from "inner" to "outer" instead of just from the perspective of "vocalist" (Beatriz, 2013). Situation creation provides a suitable atmosphere for students, inspiring students to feel and understand singing so as to evoke their inner feelings, thereby externalizing this feeling and making this invisible, imperceptible, uncontrollable, and unimaginable abstraction singing becomes a reality. This paper applies situational cognition theory to the teaching of vocal music performance. Based on the theoretical connotation of situational cognition theory and the characteristics of teaching of vocal music performance

The Application of Situational Cognition Theory in Vocal Performance Teaching
Research hypothesis
There are four assumptions in this research, as shown in Table 1.

Research objects and methods
In order to ensure the accuracy and preciseness of the experiment and reduce the influence of unrelated variables, this research takes 100 students from two parallel classes (Class 1 and Class 2) as the research subject. Students of the two classes are basically the same in marks and the vocal music performance is similar. The experimental time is the first semester of the 2016-2017 school year. Class 1 is taken as the experimental class and situational cognition theory is used to conduct teaching of vocal music performance. And a four-step teaching model of "situation-experience-exploration-application" is applied in the teaching of vocal music performance. Class 2 is taken as a control class that uses traditional teaching method to teach vocal music performance. This research uses the method shown in Figure 1.
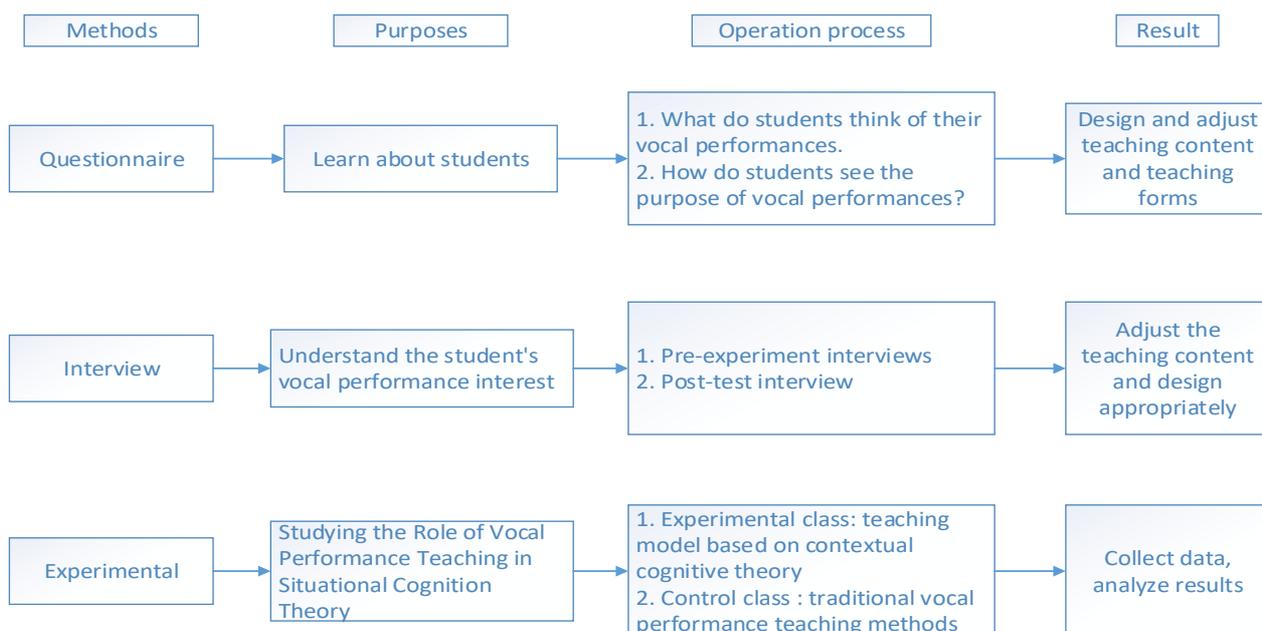
Figure1. Research methods

Research process

(1) Application of situational cognition theory in teaching of vocal music performance

The theoretical connotation of situational cognition theory is relatively abstract and it is difficult to operate in the specific teaching process. Therefore, a teaching model of situational cognition theory based on situational cognition theory and language learning characteristics of situational cognition theory has been constructed after consulting a large amount of literature, which relatively reduces the difficulty of using situational cognition theory in classroom teaching. The specific operating steps are shown in Figure 2:
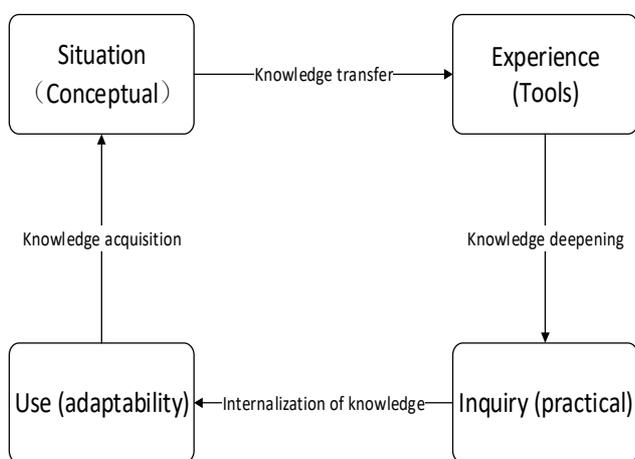

Figure 2. The Application of Situational Cognition Theory in Vocal Performance Teaching

(2) Experimental procedure

To basically understand the relevant conditions of the experimental subject (such as class size, age, individual differences, vocal music performance ability, etc.), questionnaires, interviews, and tests are conducted before the experiment. Before the start of the teaching experiment, questionnaires are distributed to all students in the experimental class and the control class. Through the data obtained from the questionnaires, students' current learning of vocal music performance and students' evaluation of teaching of vocal music performance are obtained. After the questionnaire survey, the students in the experimental class and the control class are interviewed and tested. The purpose of the test is to understand the vocal music performance level of the experimental class and the control class (Wang, 2017).

In the experimental class, the teaching model of "situation-experience-exploration-application" based on situational cognition theory is used for teaching, emphasizing the creation of situations, the emotional experience of students, the autonomous exploration of students, and the use of multiple forms of vocal music performance while the control class uses traditional teaching methods for the teaching of vocal music performance.

The vocal music performance level test is conducted on all students in the experimental and control classes and the results are analyzed.

Teaching situation design

The violin teaching in vocal music performance is taken as an example to specifically demonstrate the application of situational cognition theory in the teaching of vocal music performance. Students are guided to perceive and master situational cognition learning in the process of playing the violin. The model of "situation-experience-exploration-application" based on situational cognition theory is applied to the process of teaching of vocal music performance to promote the students to play their main body role in the process of learning the violin, to recognize their position in the teaching process, to take initiative to construct new knowledge, and to learn to communicate and learn in cooperation so as to increase team awareness. In this way, they are able to actively solve problems encountered in the learning process, and use this method to deal with the difficulties and problems encountered in their own teaching process. It is to use what you learn.

(1) Study of teacher-student interaction situation

In the teacher-student interaction situation, teaching is a bilateral activity of teaching and learning where teachers and students are mutually dependent, interacting, and promoting each other.

In order to achieve a better teaching effect, teachers shall make greater efforts for this teaching process. And it is the advantages of situation creation. Normally, any song has situational portrayal, and the singer and the audience all come from the situation to the picture and to emotion. The songs with prominent situational features are "nocturne", "cradlesong", and "barcarolla". For example,

Nocturne is shown in (Figure 3) (Brown *et al.*, 1989; Erickson, 2012).

The situational feature of nocturne is clearer, and the situation of night is very impressive in each individual's mind, such as wood in the night, garden in the night, sky in the night, lights in the night, love in the night, and thoughts in the night... The impressions and associations in these memories are good situational images. The situational experience and communication in the song are very important. If a singer can grasp the situation of the song, he or she will enhance the artistic expression of emotions and feelings.

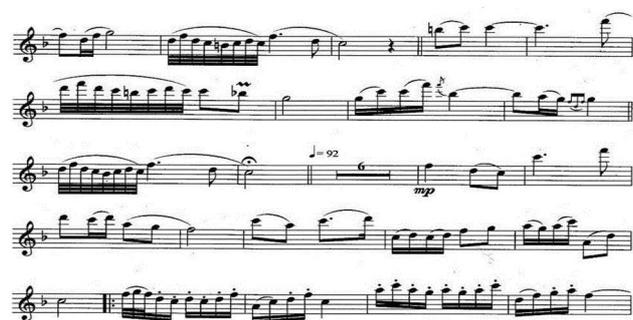**Figure 3.** The Spectra of "serenade"

Figure 4. The spectrum of Chunxiao

(2) Study of cultural situation

Vocal music is a lyrical art of expressing the thoughts and feelings of music by voice. It pays more attention to the expression of human feelings. Ancient poetry is also an art of lyricism and a flash of human spirituality. Both are similar in expression of thoughts, feelings and connotation (Balfer and Bajorath, 2014). So whether vocal music teaching can penetrate literature education, and what way is used to penetrate this? It shall start from analyzing and mastering poetry so that students can understand the connotation of poetry, and then experience and comprehend the connotation of poetry again based on the change of song melody.

Finally, in the combination of song melody and poetry, students' understanding and interpretation of music and poetry are completely reproduced. It is very important that teachers give timely guidance, as shown in the ancient poetry song *Dawn of Spring* (Figure 4):

In the process of violin teaching, students of higher grades who have mastered certain playing skills and have certain knowledge of educational theory can provide simple training for beginners who are new to the violin. Teachers can supervise them and provide help when they need. This will not only enable students to gain primary teaching experience and truly experience the entire teaching and learning process, but also allow them to deepen violin performance skills and internalize knowledge and migrate to new students' learning behaviors, which can be described as double benefit (Li, 2017). At the same time, joint learning groups can be established where members of the group play different roles. One student acts as a teacher and others act as students and perform role-playing. This can also make full use of mutual cooperation between learning bodies under limited learning resources to exercise their own teaching practice abilities.

(3) Study of moral situation

The process of vocal music teaching is the process of producing beauty. The embodiment of beauty comes from the external performance of students' inner ideological contents. The outer perfect performance of students' ideological contents comes from teachers' education methods and the external role and influence of the environment. Morality, as a criterion for judging people, is indispensable for vocal music teaching. The value of moral situation, as a situation that stimulates beauty, is represented by the "beauty" of teaching means and teaching methods to stimulate students' inner beauty feeling and experience (Long, 2017). In the violin teaching, when teaching the martele technique, the students are generally more difficult to understand when they are simply told to start bow fast, and then relax the hand to let the bow slowly stop itself, so the sound can't meet the requirements. At this time, students can be guided to associate the sound of the bells in their life. When the clock is ringing, the first sound is always the loudest. Finally, the sound gradually disappears rather than abruptly stops. This is the

Table 2. Data statistics after the experiment

Form		N	Mean	SD	Std.Error Mean
Teacher-student interaction	Test group	50	20.43	2.97	0.434
	Control group	50	16.62	2.37	0.346
Cultural context	Test group	50	32.66	1.15	0.634
	Control group	50	28.96	1.87	0.734
Moral situation	Test group	50	29.38	2.36	0.668
	Control group	50	25.03	2.56	0.612

natural sound. This can be combined with the practice of martele. Only when the bow is fast at the beginning and the hand is relaxed later will the sound gradually fade and finally disappear. After practicing, they can play the natural sound and achieve the requirements. In this way, by combining examples in real life to explain and guiding students to use associations, students can better understand the principle of the pronunciation of martele and thus better teaching results can be obtained on the basis of teachers' explanation and demonstration.

Post-experiment data collection and result analysis

After the experiment, all students in the experimental class and the control class are tested for violin performance. The scores obtained through the test are compared with that before the experiment to test whether the situational cognition theory can improve accuracy, appropriateness and violin performance skills in the violin performance teaching experiment. The results and analysis are shown in Table 2.

First, as for study of teacher-student interaction situation, the data shows that the average score of experimental class and control class is 20.43 and 16.62, and there is a gap of nearly 4 scores between the experimental class and control class. The standard error and standard deviations of mean value of experimental class are also smaller than those of the control class, indicating that the application of situational cognition theory in teacher-student interaction teaching is more conducive to improving students' comprehension and judgment ability, namely the accuracy of violin performance than traditional teaching. Secondly, in the study of cultural situation, there is a gap of 3.36 between the average scores of experimental and control classes. The reason may be that in the teaching of experimental class, teachers create cultural learning situations that help students understand cultural knowledge in violin performance. Thirdly, in the study of moral

situation, the gap between the experimental class and the control class in the average score is 4.35, which fully shows that violin teaching based on situational cognition theory can improve the appropriateness of students' violin playing and improve their comprehensive skills. In summary, the experimental data shows that teaching of vocal music performance based on situational cognition theory has a positive effect on students' learning, which can not only objectively improve students' vocal music performance, but also improve the accuracy of students' vocal performance.

Conclusions

The teaching of vocal music performance should focus on situation creation, placing knowledge and skill learning in specific real or virtual situations. This is neither simple teaching contextualization nor simply learning in the situation or practice. Its essence is to understand knowledge and skills of vocal music to truly make learners become the main body of teaching so that they can study autonomously, study in a research way, and learn collaboratively so as to obtain dynamic open knowledge and skills that are easy to use in practice. At the same time, situation teaching of vocal music advocates the idea of "emotion" education, which is a supplementary teaching method for a single vocal music teaching idea. It starts from the students' inner emotional experience to guide, educate and influence the entire life experience of the students so as to achieve the effect of cultivating student in an all-around way. Its teaching ideas focus on the process of teachers and students' participating in and enjoying teaching at the same time, as well as focuses on the harmonious atmosphere of teachers and students in the classroom.

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