

# Research on Teaching Practice of Ear Training and Sight Singing (University Program) from the Perspective of the Educational Ecology

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**Abstract:** Educational ecology is to take the interconnection and action mechanism between education and the environment as the research object, try to reveal the law and ecological mechanism of educational development, and explore the ways and methods to optimize the educational Ecological Environment.<sup>[1]</sup> This paper takes the above methods as a perspective to observe the university Ear Training and Sight Singing classroom, sort out and discuss the problems existing in Chinese universities, and provide theoretical reference for the sustainable development of the university Ear Training and Sight Singing teaching practice.

**Keywords:** Ear Training and Sight Singing; Education Ecology; classroom teaching

## 1. Introduction

Educational Ecology is the result of the mutual penetration of education and ecology, and it is a new discipline produced after integrating educational problems into ecology. This concept was first proposed by Lawrence Cremin of Columbia University in the book *Public Education* in 1976. China's research on Educational Ecology took the Taiwan region first, and it started late in the mainland region. Since the end of 1990s, the research of Educational Ecology in China has begun to change from macro to micro, focusing more on the implementation and application of practical teaching activities, and providing the means to solve specific problems. As an important part of education, classroom teaching not only relies on teachers' personal experience and logic, but also needs comprehensive, meticulous and logical theoretical guidance. Therefore, the micro-education ecology focuses on the seven aspects of the curriculum teaching values, teaching objectives, teaching tasks, teaching methods, curriculum setting, teaching mode and teaching evaluation, to provide theoretical support for guiding the teaching practice.<sup>[2]</sup>

## 2. The ecology of the university Ear Training and Sight Singing classroom

Class is a basic system formed by the interaction between people and the environment in educational situations, including three important factors: people, education and the environment.<sup>[3]</sup> In university Ear Training and Sight Singing classroom, the classroom teaching content and various information all flow in the ecosystem within the classroom, forming a multi-level ecological teaching field.

In the university Ear Training and Sight Singing classroom, "People" contains a variety of roles. In addition to the teachers as educators and the students of educateds, it also includes the group cooperation teams in the classroom and the role of educators in student's classroom presentation. These roles interact and influence each other, and at the same time, the educated have the function of switching to the educator.

The "Education" in university Ear Training and Sight Singing classroom in mainly has two meanings. First, the teaching of ear training mainly includes two aspects: ear training and sight singing, there is a strong correlation between the two, forming a complete curriculum system; second, it is the fundamental way to learn music language and establish music literacy, which is a required program for all music majors. The development of teaching activities depends on the curriculum setting, which plays an important role in guiding the teaching activities.

"Environment" contains the external physical environment and the human inner state of mind. The physical environment in the Ear Training and Sight Singing classroom not only refers to the classroom, seats, light and other natural environment, but also includes the teaching materials, piano or other musical

instruments and various multimedia equipment. However, people's internal psychological environment plays a particularly prominent role in Ear Training and Sight Singing classroom. Students not only need to transform the vision into the actual pitch through the inner hearing of singing or playing, but also need the inner hearing to judge the information received by the hearing and transform it into the actual musical symbols. The physical environment at all levels in the classroom is the carrier of the inner psychological environment, which is the only way for students to display the information in the physical environment.

From this point of view, different levels of people, education and environment are interrelated and interact with each other to constitute the complex system of visual and ear training classroom. Especially in Ear Training and Sight Singing classroom, which includes both theory and practice, people, as the main part of ecological education, just should seek a balanced development in such a dynamic relationship, as shown in Figure 1.

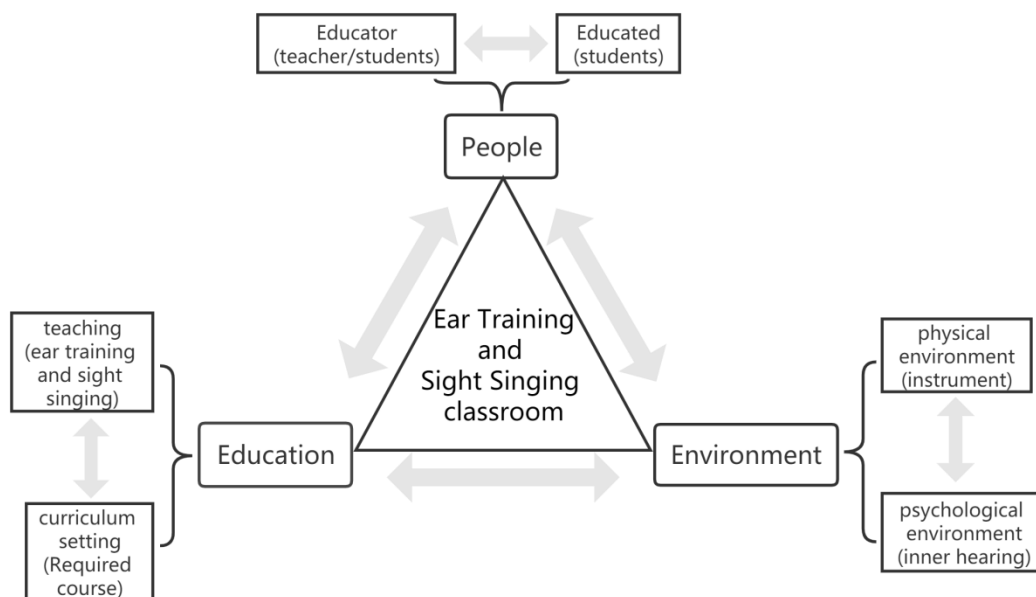


Figure 1: Ecological relationship diagram of Ear Training and Sight Singing classroom.

### 3. The Application of the Basic Principles of Educational Ecology in Ear Training and Sight Singing classroom

For a long time, Ear Training and Sight Singing program in domestic universities have been carried out in the single line mode of "teachers teach—students receive", which emphasizes form rather than quality, resulting in students unable to effectively use basic skills in professional practice and meet the needs of music performance, creation and analysis development.<sup>[4]</sup>

Facing this phenomenon, Educational Ecology provides an analytical perspective and thinking. As an independent discipline, Educational Ecology has its own basic principles, which include some laws or effects. The author regards university Ear Training and Sight Singing classroom as a micro education ecosystem, to discuss the current situation of the Ear Training and Sight Singing classroom in Chinese universities by referring to the basic principles of Educational Ecology. In addition, these basic principles, as an important part of the discipline theoretical system, provide a solid theoretical foundation for the implementation of classroom monitoring and regulation.

#### 3.1. Law of limiting factors and teaching method

The law of restriction factor, also known as the barrel theory, usually the shortest board determines the capacity of the bucket, that is, the restriction factor determines the survival and development of living organisms. In the specific classroom teaching of visual, singing and ear training, there are also obvious differences in the limiting factors due to the different professional direction of each student. Teachers find out and accurately judge the reasons why each student does not achieve the established teaching objectives through teaching activities. This behavior is looking for limiting factors. Simply put, it is about

understanding "where the problem is wrong".

For example, when dictation from a single interval, the teacher will usually give the standard note first, and then press two keys with different pitch at the same time. Students need to record the specific location of the two notes on the staff. If the student does not present the correct answer, he may have two limiting factors:

- He can hear any sound in the interval and can find the specific pitch of the sound through the standard tone, but because it is difficult to judge the nature of the interval, he cannot calculate the other pitch;
- The nature of the interval can be judged, but no pitch in the interval can be determined by the standard pitch. Therefore, the judgment of the nature of the pitch interval and the perception of the specific pitch have become the limiting factors in the process of the student's pitch interval listening and discrimination training. At this time, teachers need to play the subjective dynamic role and change the limiting factor into the non-limiting factor.

In class practice, for the first kind of students, only give them two sounds at the same time, required to quickly speak the nature of the tone, strengthen their perception of the longitudinal relationship between sound and sound. For the second type of students, they are first trained to judge the single pitch, and then use the mold singing way to strengthen the position of the single pitch in the harmony. Therefore, through the transformation of the restriction factors, we have found a breakthrough for the promotion of the teaching content.

### ***3.2. Flowerpots effect and teaching content***

The Ecological Environment of the flowerpot is artificial and limited, therefore, the individuals or groups in the flowerpot will lose the ability to survive once they leave this small Ecological Environment. From the traditional point of view, the activities occurring in the classroom is basically based on the teacher before class preparation lesson plans (according to teaching materials, literature and other fixed resources preset classroom activities), students only need to passively accept the knowledge indoctrination from the teacher, lack of independent thinking, understanding application, breakthrough innovation ability.<sup>[5]</sup> Similarly, if the teaching content of Ear Training and Sight Singing is only from theory to theory, and books to books, it is bound to lead to the separation of inside-class and outside-class, and the consequences of theory divorced from reality.

First, Ear Training and Sight Singing is an open program, which is closely related to other professional music program, such as music theory, harmony, music style, polyphony and so on. If you just blindly pursue "listening to the sound correctly and singing correctly", without telling the students what the logic of the existence and arrangement of each sound is, then this program becomes "behind closed doors", unable to play its instrumental role.

Second, in the current university Ear Training and Sight Singing classroom, piano is still the core "teaching AIDS". But in the actual music environment, the sound material of the music is obviously more rich and huge. If the students are only familiar with the single timbre of the piano and are in a closed auditory environment for a long time, once they return to the actual polytone music works, they are unable to recognize and grasp the basic musical elements, which deviates from the original intention of music professional education.

Third, if the Ear Training and Sight Singing program focuses too much on the training of basic music skills, ignoring the cultivation of music aesthetic appreciation and the shaping of human spiritual development, it is not conducive to the sustainable development of students' music learning.

### ***3.3. Tolerance law, most moderate principle and teaching objectives***

The law of tolerance is what we often say, "do what you can do.". From the perspective of teaching ecology, the amount of classroom knowledge, the difficulty of teaching objectives and the speed of the progress should be within the scope of the students can accept.<sup>[6]</sup> As the only compulsory program for students at different levels of all music majors, Ear Training and Sight Singing has the problems of large individual differences and uneven levels among the teaching objects. The music major students in colleges and universities have different background of ear training before entering the school. If all the students are "go hand in hand", not only the good students can not improve, the poor students can not keep up with the teaching progress, and the teachers are also prone to ignore one and lose the other.

Students have a certain threshold of tolerance, "too" and "not as" will have a negative impact on the teaching effect. Therefore, based on the different tolerance and the most moderate of each ecological individual, teachers should fully understand the foundation and background of students before conducting classroom teaching, put forward different teaching goals and set different teaching processes for different students.

#### **4. Ecological development strategy of university Ear Training and Sight Singing classroom**

##### ***4.1. Based on the demand, clear on goals***

As the foundation of music major learning and an important part of the basic music subject, the Ear Training and Sight Singing program plays an important supporting role in the training of music performance, creation, education and other related majors. The teaching of visual music and ear training should always focus on the current situation and needs of music development, combined with the ability of students of different degrees, so that each student can receive the education suitable for them as far as possible.

Based on the needs of music development, modern music content is incorporated into the teaching content of university Ear Training and Sight Singing classroom. Since entering the 21st century, with the continuous exploration and practice of composers in the music road, more and more excellent modern music works have appeared in the public view. Only by following the pace of music creation and talent training, constantly updating and adjusting the teaching content and objectives, can the Ear Training and Sight Singing classroom achieve ecological sustainable development.<sup>[7]</sup>

Based on the needs of different students, the teaching system of Ear Training and Sight Singing is implemented. Grading teaching is to divide students from different majors and different grades into different groups according to the scores of the entrance grading examination. This teaching system not only optimizes the allocation of teaching resources, but also gives students more space for development. Only by controlling the difficulty and progress within the tolerance range of students, "tailoring" for students, and realizing "teaching students in accordance with their aptitude", can students achieve sustainable and stable development.

##### ***4.2. Collaborative interaction, dynamic balance***

As a micro ecosystem, visual music and ear training class should pay attention to the integrity of people and establish an integrated music cognition. Ecological Ear Training and Sight Singing classroom should break free from the shackles of the traditional single teaching mode, and change the classroom mode of teacher-centered content delivery to students. Take the teaching of seven chords and their solved structure singing as an example. At present, the most common thing in university Ear Training and Sight Singing classroom is that each student sings all the included pitch training forms one by one in the form of decomposed chords. In fact, the seventh chord itself is a harmonic sound, so in the practice should be more groups of 4 people cooperative singing (play), each person sing (play) a part and exchange three times. Such a teaching mode is a dynamic process, not only to pay attention to their responsible certain pitch, more important is how to adjust the balance of the overall sound effect.

The multi-voice classroom teaching mode of group cooperation creates a more integrated, hierarchical and interactive classroom ecology, allowing students to place themselves in the three-dimensional sound, and use the relationship between local and overall sound to feel the specific direction of each sound in the process and the solution tendency of the whole seventh chord. In this way, the coexisting teaching mode of dialogue, guidance and discussion can transform the simple knowledge and understanding into the cultivation of ability and the construction of thinking, and promote the students' scientific, healthy and sustainable development.

##### ***4.3. From music, return to music***

The program itself has the characteristics of "practical", "open" and "instrumental", which are interrelated and are in an equally important position. For a long time, the teaching of Ear Training and Sight Singing in domestic universities has intentionally magnifies the characteristics of "tool", with more emphasis on the training of technical ability, and not enough attention to the application of tools in practice. Therefore, the teaching of Ear Training and Sight Singing should enrich the practice inside and outside the class, serve the works, and return to the category of actual sound.

At the present stage, the practical form of "visual and singing concert" is the most worthy of application and promotion in colleges and universities. By taking grade or class as units, students' learning results are displayed in the form of concerts, which roughly includes personal visual singing, personal playing and singing, multi-part visual singing, body rhythm and rhythm, etc. In the selection of materials, students should not only include different styles of works from ancient times to middle to west, but also encourage students to adapt or create visual songs according to the theoretical knowledge they have mastered and report them in class and concerts. On the basis of ensuring the normal teaching plan, the classroom extends to a certain performance hall, in addition to can stimulate the students' learning enthusiasm and self-consciousness, more is through the form of practice to achieve the purpose of consolidating classroom teaching, pioneering learning ideas, for the development of students' personal music ability and the improvement of classroom teaching quality has a practical effect.

## 5. Conclusion

By drawing on the basic viewpoint of Educational Ecology, this paper clarifies the relationship between various factors and teaching methods in colleges and universities from a more theoretical and logical perspective, so as to realize a more macro and clear understanding of the ecological problems existing in the classroom. Therefore, the Ear Training and Sight Singing classroom in Chinese colleges and universities should clarify the teaching objectives, optimize the teaching methods, return to the teaching practice, build an ecological teaching system, improve the students' music literacy, and lay a solid talent foundation for the sustainable development of music education.

## References

- [1] Cremin, L. A. (1980). *Changes in the ecology of education: The school and the other educators. The Future of Formal Education*, 18-29.
- [2] Wu, D., Zhu, W. (2000). *Educational Ecology (New Century edition)*. Jiangsu Education Press.
- [3] Fan, G. (2000). *Educational Ecology*. The People's Education Press.
- [4] Guo, L., Chen, Z., Liu, J., Zhang, Z. (2018). *An Introduction to Higher Education Ecology*. The Social Sciences Academic Press.
- [5] Dong, Y. (2012). *Music education from the perspective of ecological view*. *Journal of Xinghai Conservatory of Music*, (1), 160-165.
- [6] Ma, J. (2016). *Exploration on the Practice Way of Music Education Based on Ecological View*. *Chinese Music Education*, 8, 14-18.
- [7] Li, Na., Ling, G. (2022). *Exploration on Higher Music Education from the Perspective of Educational Ecology*. *Contemporary Music* (02), 51-53.