

# The Electone Improvisation Teaching and Learning Technique in China

Zeng Yawen,

Nicha Pattananon and Niwat Vannatham

Bangkokthonburi University, Bangkok, Thailand

Corresponding Author, E-mail: nicha.musiced@gmail.com

\*\*\*\*\*

## Abstracts

Electone or Electronic organ improvisation is a performance ability similar to piano improvisation and requires higher overall quality of the performer than piano improvisation. Due to the diversity of musical instruments, it not only requires the performer's creativity but also requires the performer to master various musical styles, rhythm accompaniment patterns, orchestration methods, and composition methods. Because the instrument has three layers of keyboards, it also requires a higher level of physical coordination on the player's part. This academic article presented the electone improvisation teaching and learning technique in China.

**Keywords:** The Electone Improvisation Teaching; Learning Technique; China

## Introduction

Keyboard instruments have a long history and are of various types, such as pianos that strike strings and percussion, pipe organs such as reeds, and electronic keyboards that utilize modern electronic technology. The electronic keyboard, a new family member, has recently become very popular in China. The uniquely designed Electone brings fresh blood to keyboard instruments, and its features of wide timbre, realistic timbre, and re-editable timbre further enhance its functions. With the continuous popularization and promotion of the electronic keyboard, the electronic keyboard plays a certain role in social and professional music education. Dozens of colleges and universities in China have successively offered electronic keyboard courses in music performance majors. Music education majors in some colleges also take electronic keyboard as a compulsory or elective course. However, it found that due to the relatively late origin of these musical instruments, many first-year students majoring in electronic organs are "halfway monks." Some students learn from the piano and some from the electronic keyboard. As a result, many students majoring in Electone are not well-founded and need more understanding of Electone, so they can only play the works they have learned before and cannot learn new works independently. Popular singing has been a new subject in recent years. It needed constant development and construction to be more mature. Due to the late start of popular singing teaching in Chinese universities, there needed to be a relatively perfect internationally acknowledged education system, teaching methods, and textbooks. How to better carry out popular singing teaching and train more talents in compound music to meet social needs? Its research and discussion are of great significance, and it also has a certain challenge and strong sense of the times. The integration and development of "The Musical" teaching mode are new paths for our teachers to explore the professional research and teaching field and establish a new subject. We need to think deeply about the significance of constructing "The Musical" courses and carrying out the teaching practice.

---

\* Received: October 31; 2022; Revised: November 10, 2022; Accepted: November 14, 2022

In teaching popular singing, it should be realized that the teaching research of the sound skill training level can neither meet the needs of teaching nor the development needs of popular singing as a discipline. It must constantly reform and improve the course in colleges and universities. The theme of this paper is to integrate the "The Musical" course into the popular singing curriculum, which is in line with the law of discipline development and is of great significance to the future planning of teaching methods of this discipline.

## **The electone teaching**

In China, the education and promotion of double-row keys is relatively late, and the teaching method of double-row keys needs to be improved. Among the existing double-row key teaching methods, some piano practice methods and etudes are used to help students improve their skills. The textbooks used are also compiled by themselves based on experience, and the content in the textbooks needs to form a complete system. This kind of teaching method is monotonous and has no learning focus. Especially in this teaching method, the learning focus is on performance, ignoring the development of composition and student skills.

On the other hand, the lack of professional teachers and the neglect of employment needs in teaching are also common. These problems have always existed in the double-row key teaching method. The scientific positioning of the subject will have an impact on the long-term development of the subject. If only the double-row key professional is positioned as the professional musical instrument performance, it will severely limit the long-term development of the professional. We need to cultivate academic talents with multiple abilities in instrument performance and music creation to explore more possibilities in the profession. Such a discipline positioning is scientific. Taking comprehensive development as the teaching goal, rationally designing courses, and gradually improving the subject's teaching materials and methods will promote the level of musical instruments and a reasonable path for subject construction.

The core of training the electone music talents with comprehensive abilities is to improve curriculum design. The electone has been developed in our country for nearly 40 years. From the initial exploration of a few schools, more than 30 colleges and universities have opened double-row keys. The electone have been unpopular at the beginning, and now they are showing off on large and small domestic stages, and they have established a solid foundation for the masses. In this process, many colleges and universities in our country have worked hard to promote the electone and played an important role in cultivating double-row keys. The electone has formed a relatively complete system under the continuous efforts of many colleges and universities. Its teaching innovation will continue to develop with the further development of college education (Yang, 2021 : 3-4)

The professionalism of music education in colleges and universities cultivates students' comprehensive music quality and promotes students' all-around development. At present, quite some colleges and music colleges have opened the Electone course. Teachers must set different teaching goals and choose different teaching materials according to the differences between students of different majors. Music majors focus on more practical content, such as music performance and performance. Students have mastered a certain number of the electone performance techniques, understand the performance methods and sound effects of commonly used timbres, and play different styles of works. The function of the electone is to edit the tone; the students of the normal major focus on learning music skills to lay the foundation for future work. When this kind of students teach, they mainly let the students master the basic playing

techniques and the touch training of different timbres, to play different styles of works. With the development of the Electone, the diversified development of Electone Music has been promoted. For example, Japanese Matsuda Masao's "Dao," Kashiwagi Reiko's "Dream of Dream," Watanabe Mutsuki's "Comical Train," and other classical-style works; Hirota Naashiko's "Anniversary," Iwanai Saori's "Song of the Sea" And other popular works. These works cover the basic, intermediate, and advanced teaching content of the Electone, with various music styles and clear rhythms. When choosing teaching materials, music teachers must choose different teaching materials according to the differences between students of different majors. Basic professional knowledge, such as the electone performance, common style performance, work analysis, etc., is the knowledge and skills every student should master. College Music (Zhang, 2020 : 111-112).

Most professional teaching adopts the single-person small class mode. When teaching, teachers must formulate different teaching goals according to the individual differences of different students. Some students have relatively strong hands-on skills. When practicing the Electone with their feet, some students cannot easily master the skills, and some students have flexible feet and higher comprehension skills. They may have mastered the practice skills in one lesson. According to the individual differences of different students, music teachers should adjust their teaching goals in time to maintain students' enthusiasm for learning.

The adaptation and creation of the Electone is an ability that high-level students must master. In the adaptation process, students need to use notation software to create. With the development of music informatization, there is more and more music notation software. The early Cakewalk, Muscator, and XG works have evolved into the current software such as MuseScore, Eduis, and Sibelius. This notation software have relatively high requirements for students. Students must not only master the different timbres and frequency spectrums of the basic electone, but also use computer software to make arrangements of these timbres and frequency spectrums, so they must master the computer operating ability. The traditional way of demonstrating and explaining is not suitable for arrangement teaching. Therefore, in the teaching process, teachers should fully use computer information technology and apply micro-classes to the teaching link of the Electone. According to the teaching requirements of the course, the teacher records the teaching course of the notation software. Students can watch the teacher's teaching using mobile phones and computers, solve the problems and problems encountered in the learning process, and improve teaching efficiency

Throughout the development of the electone in China, from the early 1980s to the present more than 20 years, double-row keys have emerged from scratch. From the establishment of the electone in some colleges and universities to the opening of this major in more than 30 colleges and universities, we can see that the education of the electone keys has been achieved with the efforts of many teachers. Rapid development. For example, Shanghai Conservatory of Music, Shenyang Conservatory of Music, Central Conservatory of Music, Tianjin Conservatory of Music, and other old colleges and universities have played a great role in the development of the electone, trained a large number of electone players, but also trained a large number of teachers. However, developing the electone for more than 20 years, the development of the electone is also difficult. Such as the shortage of teachers, the shortage of students, the expensive equipment, the lack of teaching materials, and many other factors are affecting and restricting the further development of the electone. The following is a discussion on teaching materials and teaching methods (Liu, 2019 : 78-80).

The electone entered the public's field of vision after the emergence of the Jiuyue miracle combination. In the past few years, more than 130 colleges and universities have offered electone majors, and the teaching resources and the construction of professional systems have been gradually improved. Analyze from the perspectives of the universality of learning electronics, the employment rate of graduates, and the employment situation. In addition to participating in popular teaching and promotion applications, graduates can also use the electone in various types of practice. Widely acclaimed. In recent years, the number of trainees of the electone has been increasing rapidly, which shows that the profession of the electone will have better development prospects in the future. There have been related music reports in the past few years, analyzing the future of the electone. The article pointed out that the future of electronic pipe organs will appear in China. Therefore, domestic efforts should be strengthened to promote and popularize the electone. Of course, This also requires the corresponding departments to invest a lot of human and material resources, and at the same time, improve the comprehensive quality of teachers, so that they can use better methods to teach knowledge and cultivate skills (Liu, 2020 : 135-144).

From the above scholars, researchers can conclude that electone teaching should be like this: Electone teaching activities have a relatively short history, probably for decades. It originated in Japan and was introduced to Asian countries in the 1980s. Electone teaching, represented by China, rose rapidly at that time. Now universities in Japan, Singapore, China, and other countries have specialized electone majors and undergraduate and postgraduate courses. In decades of teaching activities, most colleges and universities have focused on the teaching of electone performance. The sources of performances are mostly works arranged or created by electone players and composers, such as Japan and China. In recent years, many colleges and universities have also realized the importance of electone arrangement teaching and tried to reform and join arrangement training. The simple electone playing teaching system is relatively complete, but the electone teaching model for joining the arrangement training has yet to be constructed very maturely.

## **Electone work arrangement**

The electone creation generally refers to original works and works re-arranged from original works. Original works refer to completely independent composition, including melody, harmony, and orchestration, and the presentation of the final performance on the electone. Of course, the works of some composers will be presented in various ways, such as band arrangement (symphony or pop band) and electone arrangement. The arrangement of original works is the most common arrangement method for electone. Whether it is classical or popular works, the second creation must be combined with the characteristics of the electone during the process of arranging. Otherwise, the presented works will lose the original There is a sense of hearing that corresponds to the performance of an instrument. However, there is no characteristic of the electone itself.

The creation process of the electone is diversified, and the types are also endless. In the study of the electone, creation and editing are undoubtedly. A skill must be mastered and determining the method of creation, or the style of creation is the beginning of completing a work. Common electone creation works can be roughly divided into three types. The first is to imitate the transcription based on the original work. This transcription follows the original work's musical structure, orchestration, and harmony and does not do any deletion work. This arrangement has two purposes. First, it is to maintain the integrity of the work; the second is to

use the electone arrangement to deepen the player's understanding of the original work and learn the composition's harmony and orchestration. The second kind of arrangement is to break the original works and innovate. In the development process of the electone, technology has always been with it. Because of the development of technology, the electone can realize more realistic musical instrument simulation and add more novel electronic musical instruments and effects. The electone music works further explore the meaning of "sound" and expand the scope of arranging and creating music to the field of "non-note" intentions.

In addition to the analog adaptation of orchestral works, more and more piano works are transplanted into the electone. With its unique timbre expressiveness, various style changes have been realized, and classical works have been adapted into the style of a jazz band or adapted for the "new age," this new style of music. For example, in Chopin's "Heroic Polish Dance," Japanese performer Uchikawa Genta reorchestrated it to create the grand vibe of the orchestra. Another example is Beethoven's "To Alice." The performer Naoko Hirota adapted it into the style of Flamenco, and the orchestration was changed to guitar, violin, bass, etc., adding the unique percussion music of the nation. The original classical piano music is transformed into brisk dance music. The third type of arrangement is originally based on the instrument's characteristics. The electone was introduced by the Shenyang Conservatory of Music in the 1990s. Then other music conservatories followed suit, such as the Wuhan Conservatory of Music and Xi'an Conservatory of Music. The creation and arrangement of the electone mentioned above are based on the original composer's work. During the development process, some players will create works unique to the electone based on the unique advantages of the electone, such as Japan Composer and performer Hiroshi Kubota has created a series of popular styles of the electone. Music such as 'Real in D' and Spin Kick are often used as selections in domestic professional competitions. After the development of the electone by China Yinfai Company, a large number of Chinese performers are no longer limited to the arrangement of original works but also create original works of different styles based on the knowledge of the function of the electone (Xu, 2021 : 52-56).

The relevant theoretical knowledge that the Electone arranger needs to master includes the orchestration method, the harmony method, and the texture knowledge. The music score orchestra table shows the configuration and types of all musical instruments. Understanding the types of musical instruments used in music is an effective way to master the framework of the score. The performance part should be fully considered in the arrangement of the Electone. Too many over-octave performances and long-term rapid repetitions are unsuitable for Electone, and this type of music should be handled flexibly in the arrangement. For the arrangement work, we can use the notation software to input the score of the music into the computer. Combining the software with the arranging work is useful for those with weak arranging abilities. When entering the score, we must deeply analyze each tone of the music and be familiar with the trend of the part. The Electone can play various types of music, which must be meticulously edited, including downsizing the score.

As the quality of the arrangement directly affects the performance, it is necessary to make preparations before the arrangement. We must study the orchestral score before double-row key arrangement, including extensive and intensive reading. Extensive reading includes musical structure, mode structure, orchestration arrangement, timbre characteristics of each section, harmony direction, and color matching. Intensive reading is for composers to use orchestration, divided into two types: vertical distribution of harmony proportions and horizontal combination and matching. The effect of a double-pipe orchestra is different from that of a mixed-type orchestra, which is related to the choice of timbre in the arrangement. Over

time, various morphological changes have been derived from the combination of instruments (Liu, 2021 : 121-124).

The electone can play various types of music, imitate the sounds of various musical instruments, and produce realistic effects of various bands in different combinations. This is its biggest advantage over other musical instruments. Such a function is determined by its special pronunciation principle, which is different from other musical instruments and the complicated pre-creation and editing mode. All the music of the electone must be edited very carefully, including the score's downsizing, timbre selection, and the adjustment of the volume ratio, reverberation, and sound equality, which are stored in the tone palette. The quality of the arrangement directly affects the performance, so it is used as a compulsory part of the course for learning the electone (Zhao, 2014 : 230).

"Arrange" is a word that has appeared in recent decades and first appeared in Japan. The arrangement is the process of using musical techniques to recreate the original song's structure and orchestration without affecting the original song's main melody to expand more in terms of expression, form, and expressiveness. The so-called "electone arrangement teaching" is designed and implemented based on the characteristics of theoretical composition combined with electone teaching. It relies on regulating the functions of musical instruments as a medium and uses music theory and composition techniques to realize the re-creation of melody or works. That is to say, in the teaching of double-row key professional courses, some music theory content learning should be appropriately added to simplify the boring knowledge of composition and arrangement and apply it to practice. Let students participate in the music production process while acting as performers and combine the learning content of the two subjects (Liu, 2020 : 135-144).

From the above scholars, researchers can conclude that the electone work arrangement should be like this: The arrangement of the electone, as the name suggests, is arranged on the electone. It can be roughly divided into three categories: the first category is transplanted arrangement, the second category is the second creation of folk songs, folk songs, pop songs, and vocal fragments, and the third category is the original arrangement. The first type of transplant arrangement is the transplantation and adaptation of large-scale symphonies, concertos, chamber music, etc., with scores to the electone, which are adapted into the electone solo, or ensemble works. Transplant type arranger requires the arranger to master the theoretical knowledge: reading of the score, reduction of the score, orchestration, and use of harmony, etc. The practical knowledge that needs to be mastered is notation software, the correct selection and use of timbre, Percussion settings, peripheral controllers, etc. Of course, the transplant arranger also requires the arranger to be able to adjust the sound, reverberation, and contrast of strength and weakness of the entire work, roughly like a conductor, after the entire work has been adapted. The second category: The second creation of folk songs, folk songs, pop songs, and vocal fragments, refers to the adaptation of certain vocal works to the electone, using some means such as expansion, variation, timbre change, and tuning to adapt it into a complete electone work. This arrangement requires the arranger to have a solid foundation in music theory and music performance and to be able to fully combine the diversified characteristics of the electone to enrich the pieces of music they want to arrange. The last type of arrangement refers to the arranger's original work, specifically for the electone. The musical score of the electone is a three-line score. The transplanted arrangement mentioned above reduces the score into a three-line score and then arranges and produces the timbre. The original arrangement is that the arranger writes three-line music from the beginning of the composition. The arranger gives full play to his imagination and uses his knowledge of

composition to create on the electone. Regardless of the type of arrangement, the arranger must combine performance to arrange not only the production of scores and timbre but also the design of actions, multi-layer keyboard combinations, and stage effects. The latest models of the electone can even control stage lighting. These are all the arrangers need to consider when arranging the electone works. Because the electone is a diversified musical instrument, with hundreds of tones, rhythms, accompaniment patterns, functions, etc., as an arranger of the electone works, he should be more open-minded and improve his musical performance.

### **The electone improvising**

Compared with classical music, the improvisation of pop music, especially the electone, can be regarded as either the improvisation of an orchestra or band or the improvisation of an instrument according to the actual situation. Whether it is a pop band or an instrument, mastering the elements of improvisation is crucial. The most important thing in the electone improvisation is "the grasp of the tune." I say this because the tempo, rhythm, prelude, etc., are all determined by it. Getting the most natural melody out of the rhythm or phrase is very important. In order to grasp the tune, the performer first needs to conceive the musical idea or phrase without playing it. This requires quieting down and training yourself to capture the response of a musical thought or phrase in your mind and capture the most suitable tune. No matter what kind of music is thought or phrase, it can be changed into various tunes according to the speed, rhythm, and playing method. However, usually, there should be the most natural tempo, and the rhythm should be determined from that. A brisk melody needs a speed commensurate with it, while a melodious melody needs a speed that can be fully sung. If the tune idea is stuck and cannot be broken through, we can use the appropriate accompaniment rhythm to change the style. The accompaniment rhythm starts from the basic rhythm pattern, and we can choose the appropriate rhythm pattern according to various musical styles. The specific improvisation requires the organic cooperation of various elements to present a rich electone improvisation (Li, 2020 : 59-60).

Compared with other traditional instruments, the electone is more difficult to improvise. "The electone belongs to the major of keyboard performance from a physical point of view and the perspective of editing and creation. It belongs to the major of composition. From the point of view of the principle of sound production, it belongs to the major of electronic technology. Therefore, it should be a comprehensive course higher than keyboard performance and involve a major in sound and composition technology. The electone has three layers of keyboards, including the upper two layers of the hand keyboard and the lower layer of the pedal keyboard. These three keyboard layers also show the music's most basic structure: the melody layer, the harmonic texture layer, and the bass layer. First of all, the upper keyboard is generally played with the right hand, stating the main melody of the music, which is the most important element to describe the image and express the emotion of the whole music. Secondly, the lower keyboard is generally played with the left hand. According to the rhythm of the music, the appropriate harmony is used to set off the melody layer. It is important to set off the atmosphere and push the music to a climax—an important sign of being out of tune. The left and right hands sometimes alternate on the upper and lower keyboards. Finally, the Pedalboard is played with the left foot and sometimes with both feet as needed. The Pedalboard plays the bass layer, which determines the harmonic direction and rhythm of the piece. In addition to this, it sometimes plays a melody or sub-melody. Mastering the improvisation of the three-layer keyboard requires the player to have a high level of coordination. At the same time, performers are required to have solid basic skills in melody creation and harmony arrangement, as well as

the ability to apply theoretical knowledge to practice freely. In addition, the electone can play hundreds of musical instruments such as strings, woodwinds, brass, percussion, etc. It can control various musical styles and genres and shape a band's sound effects. Therefore, players are required to master the playing techniques and orchestration knowledge of various musical instruments and grasp various musical styles. Compared with other traditional musical instruments, the improvisation of the electone requires a higher and more comprehensive quality of the players. It not only requires the performer to have solid basic playing skills but also theoretically requires a wealth of comprehensive professional knowledge to support. This requires improving improvisation ability through long-term systematic practice (Yang, 2019: 3-4).

The principles of electone improvisation are 1) Aesthetics. The essential feature of the music is to give people a feeling of beauty. Therefore, when improvising, it is necessary to follow the framework of harmony and the rhythm system so that the music formed by improvisation has a unified style. 2) Integrity. Have a complete musical structure. The main part can have several themes, but there must be transitions between the parts, and the connection is natural. 3) Innovation. To keep the composition fresh, perform exploratory improvisations. The ways of improvisation include 1) Variation, a variation of the existing melody. 2) Creation type, that is, according to the player's sense of music, the new motive melody is re-created. 3) Accompaniment, improvising to accompany other art forms. The electone, also known as double row keys, is a "one-man orchestra." Its predecessor was the pipe organ. The electone retains the advantages of the pipe organ: the unique shape, playing style, and rich sound. In recent years, in major domestic and international electone competitions, improvisation has been included as one of the competition items, and the importance of improvisation has been paid more and more attention (Wu, 2013 : 87-88).

The electone is a multi-part musical instrument that can play complex multi-part music. Its improvisation is more complex than an instrument that can only play a single melody. That is, in addition to the melody part, there should be a good accompaniment part. Of course, such improvisations will be more colorful. The improvisation of the electone is an instrumental performance in which the melody and its accompaniment parts are improvised at the same time. In impromptu performance, the accompaniment parts, mainly composed of harmony and rhythm, play a role in rendering and contrasting the genre and style of the melody. At the same time, it can also enrich the improvisation of the melody, expand the idea of improvisation, and make the improvisation full of vitality. Many theoretical books on piano improvisation provide us with many improvisation techniques worth learning and researching. Due to the special structure and automatic accompaniment function of the electone, its accompaniment parts can be arranged very richly. Many accompaniment methods should be learned from the orchestration method. Some accompaniment textures of the band should be mastered. Due to the special performance of the electone, we can use percussion as the melody accompaniment or use guitar timbres, piano timbres, and pipe organ timbres to arrange various distinctive accompaniment patterns. You can also use the auto accompaniment function to assist in improvisation. These accompaniment methods are unmatched by other instruments. On the electone, collecting and arranging or creating fixed accompaniment patterns and mastering their usage is an important part of improvisation. This link can be gradually improved by the usual accumulation and training (Wang, 2013 : 59-60).

## Conclusion

Electronic organ improvisation is a performance ability similar to piano improvisation and requires higher overall quality of the performer than piano improvisation. Due to the diversity of musical instruments, it not only requires the performer's creativity but also requires the performer to master various musical styles, rhythm accompaniment patterns, orchestration methods, and composition methods. Because the instrument has three layers of keyboards, it also requires a higher level of physical coordination on the player's part. Basic training is an important way to contact and learn music and is the only way to go. Students can only be confident in future music tests by laying a solid foundation. Our basic music training is like the cornerstones of a building. Only when the cornerstone is solid can the future building be solid. Basic music training has value and significance for the students' music department and patience training. Through basic music training, students can accurately grasp the lack of knowledge acceptance and the lack of music learning. Making up for it will play an important role in the development of music at a higher level in the future. At the same time, it can also improve students' overall music literacy, overall level of music learning, and ability to respond to emergencies and music in music learning to improve the comprehensive quality development of students.

## References

Li, X. (2020). Exploration of the Creation Form of Electronic Organ Works. *Drama Home*, (30), 59-60.

Liu, H. (2020). Electric Organ Teaching Reform and Innovative Performance Exploration. *Northern Music*, (06), 135-144.

Liu, L. (2019). The Exploration and Practice of Double-Row Key Arrangement Teaching in Secondary School Teaching. *Art Grand View*, (18), 78-80.

Liu, S. (2021). Research on the arrangement of the double row keyboard. *Art Education*, (01), 121-124.

Wang, O. (2013). A Preliminary Study on the Accompaniment Method of Electronic Organ Improvisation. *Northern Music*, (02), 59-60.

Wu, T. (2013). The significance of cultivating students' electronic organ improvisation ability. *Art Education*, (05), 87-88.

Xu, S. (2021). Creation and classification of electronic organ works and their second creation in performance. *Journal of Bengbu University*, (06), 52-56. doi:10.13900/j.cnki.jbc.2021.06.011.

Yang, C. (2019). *A Practical Exploration of Variation Techniques in Electronic Organ Improvisation*, [Master's Thesis], Chongqing Normal University.

Yang, Z. (2021). Exploration and development of double-row key teaching mode in higher music colleges. *Academic Weekly* (02), 3-4. doi:10.16657/j.cnki.issn1673-9132.2021.02.001.

Zhang, L. (2020). Electric keyboard teaching under the Suzuki teaching method. *Art View*, (30), 111-112.

Zhao, G. (2014). On the performance of the double-row electronic keyboard. *Private Science and Technology*, (12), 230.