

Research on APP Model of Online Piano Music Education in China

Xinying Xia

Qingdao University, Qingdao, Shandong Province, 266071

Abstract: In today's era, the rapid popularization of the Internet has entered the field of education, which plays an immeasurable role in promoting the innovation of education and also promotes the emergence of various online piano music education apps. This paper will discuss the "education mode of existing online piano music APP in China", from the "current situation of online piano music education APP, advantages and disadvantages of online piano music education APP, suggestions for the future development of online piano music education APP" three aspects, to get the use of online piano music education APP thoughts and insights.

Keywords: Online education; Piano teaching; Investigation and Research.

In the 21st century, China attaches more and more importance to aesthetic education. As an important branch of aesthetic education, music education, especially the study of piano, has been enthusiastically pursued by many parents and children. The increasing development of Internet technology also creates new possibilities for people's learning methods. In the process of the further improvement of national artistic and cultural quality, online piano music teaching with its unique educational form provides a new way for piano music lovers to learn, and makes an important breakthrough for the development of music education.

1. Current situation of online piano music education APP

The earliest form of online learning is Mobile learning, the research project of mobile learning and Mobile Education.

It was initiated by the University of California at Berkeley in 2000. In the same year, Desmond Keegan, an international distance education expert, introduced the concept of mobile learning to China for the first time, which triggered a strong response in China. At present, online piano music education apps are in the initial stage of development. There are VIP piano practice APP, Xiaoye Piano practice APP, Piano bar and other apps for learning piano. For all groups, APP users can mainly be divided into two categories: one is "K12" (kindergarten through twelfth grade), which includes children from five years old to teenagers from 18 years old. Most of them can learn piano music under the advice of their parents. The other category is adult users, most of whom choose to learn piano because of their hobbies.



(Pictures from the Internet)

The learning modes of these apps generally include the following categories:

1.1 Record teaching content in advance

For the most basic music theory knowledge and entry-level piano repertoire, we will directly teach them by recording teaching videos and audio recordings in advance. These videos are generally available for free or after watching advertisements. Students can choose appropriate teaching resources to learn according to their own needs in advance and master simple basic knowledge of piano, which not only saves the time of subsequent formal courses, but also arouses students' subjective initiative with rich learning resources.

1.2 Online teaching guidance for teachers

Formal piano learning is conducted in the form of one-on-one online video, through which the teacher can communicate with the students in real time. This part needs to be locked. The class content is mainly divided into three parts: before class, students upload their own practice scores, the teacher will understand the degree of students. In the class, the students practice the content of real-time guidance, the key and difficult points for targeted practice. After class, assign the next practice task to the students, or communicate with the students' parents.

1.3 "Community" sharing and communication

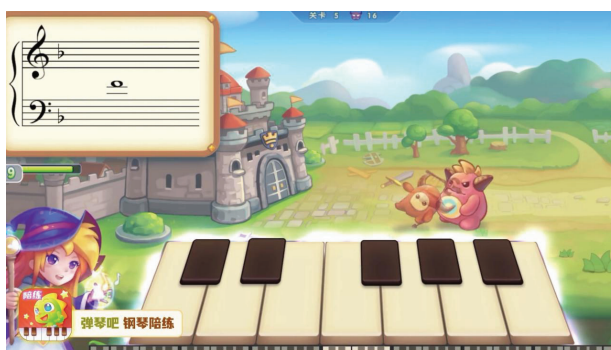
A "community" communication board is established in the APP. In the "community", students can post their progress of piano practice, share their problems or experience of piano practice, find online peers to learn and communicate with each other, and teachers can make comments by watching videos to discuss and share learning experiences with teachers and classmates. You can also find the score and music knowledge you want here.

1.4 Intelligent piano teaching

At present, a variety of intelligent instruments have appeared in China, such as intelligent piano, intelligent guitar and so on. Among them, intelligent piano is taught by installing intelligent hardware and APP software on the piano. Generally connected with APP through Bluetooth or wireless network, intelligent piano uses the change of indicator light to assist teaching. Through AI recognition or optical recognition, sound recognition technology is used to judge the accuracy of the playing sound, and problems such as rhythm, speed and mispronunciation are corrected. Finally, a practice report is formed.

1.5 Gamified teaching model

The piano learning is closely combined with games. In the teaching process, the instrumental music practice is developed into a number of small games. The students' music recognition, listening and rhythm are taught and trained by using exquisite pictures and audio. Learning music through "games" simplifies the teaching process and improves students' interest and initiative in music learning.



(Pictures from the Internet)

2. Advantages and disadvantages of online piano music education APP

2.1 Advantages of using online piano music education APP

2.1.1 Not limited by time and space

Using the APP, you can make an appointment for classes by yourself. Classes can be held anytime and anywhere, regardless of the location. After class, you can also communicate with teachers and students around the world through the "community" to share contact information and problems. Office workers can also arrange the time and progress of piano practice according to their own work situation, so as to realize the freedom of piano learning cycle and progress, and reduce the threshold of learning.

2.1.2 Face to face with a famous teacher

In some small cities, teachers may be weak, and it is difficult to find a particularly good teacher to guide. Through the online piano teaching APP, you can invite very professional teachers, even well-known teachers at home and abroad, to help you customize the course, and the course can be reviewed repeatedly. Cross the unequal distribution of educational resources caused by regions and other aspects to make educational resources shared.

2.1.3 Built-in rich functions

APP built-in metronome, music library, teacher class and other rich resources. The music library contains commonly used textbooks and books. You can click on it to watch and download the music, realize the conversion of staff and simple score, and also play music, adjust the level of tunes, playing speed and other functions. These built-in rich functions have solved various problems encountered when practicing piano to a large extent.

2.1.4 Improve the popularization rate of piano learning

As the economy continues to develop, most people will choose a musical instrument to learn. Online piano learning has the advantages of lower tuition and high cost performance than offline piano learning. Even if they do not become professional piano players in the future, they can popularize the way of playing Musical Instruments through online piano teaching mode, so that most students can learn to play simple music and master basic piano playing skills. So that every family can enjoy and learn music, which has a positive effect on the mass music education, promote the universal education of music and basic education.

2.2 Disadvantages of using online piano music education APP

2.2.1 Video classes lack comprehensiveness

Due to the video method in class, it is difficult for teachers to watch all the situations of students' performance completely. They cannot fully notice whether students' sitting position, hand shape, fingering and pedal use are correct. Most of them can only judge whether students are playing correctly by the sound of playing. When the network signal is poor, it will affect the teacher's judgment.

2.2.2 The emotional skills of "musicality" are blocked

Online piano teaching can not do on-site teaching. The explanation of hand shape, fingering and other action skills can only use language teaching, unable to carry out physical interaction, which may lead to students unable to understand the correct posture. When you learn some of the more difficult pieces, the expression of the emotion of the music, as well as the understanding of the whole piece, these things are still relatively difficult to do online.

2.2.3 Lack of standardized teacher standards.

Most of the online piano teachers are hired or part-time on the platform, and some are just music majors. There is no unified teacher training assessment, and there is no unified standard for each teaching platform to measure teaching quality. Most music teachers have distinct personalities, and their teaching contents and styles are obviously influenced by their own level and preferences. Therefore, the teaching quality needs to be improved.

3. Suggestions on the future development of online piano music education APP

3.1 Suggestions for APP

3.1.1 Continue to improve the corresponding technology

Further development of online piano education has put forward higher requirements for the application of new technology and new mode. Combined with the development of science and technology, it is necessary to constantly improve the functions required by music teaching, especially in the aspect of class video. Whether the future class shooting can adopt AI camera to capture and track students' performance intelligently, and whether the functions in the aspects of audio-visual transmission, courseware display and student management can be improved, all these need to be updated and developed by technical personnel.

3.1.2 Establish a teacher evaluation mechanism

At present, the evaluation of teachers in online piano education apps is only limited to the initial interview and students' evaluation of teachers. The lack of professional comprehensive evaluation mechanism leads to the phenomenon of uneven teaching results. In addition to the above assessment, should we establish a multi-subject assessment model, such as teacher self-assessment, teacher mutual assessment, professional organization certification assessment, etc. The content of assessment and evaluation can also be divided into multiple factors, such as teaching attitude, teaching content, curriculum design, teach-

ing methods and other aspects. A more comprehensive evaluation of teachers' teaching ability.

3.2 Suggestions to teachers

3.2.1 Improve my ability and teaching quality

The teacher is the leader of teaching activities and the central link of teaching and solving doubts. Teachers should be aware of the promoting effect of the development of science and technology on teaching and the opportunities and challenges brought to themselves. It is particularly important to strengthen self-learning, master the application methods of APP, and improve my professional ability and teaching quality.

3.2.2 Improve teaching methods and enrich teaching content

According to the age, cognitive characteristics and interests of students, customized learning plans and learning modes are designed to meet the physical and mental development characteristics of students of all ages. The key and difficult points of teaching are well addressed, so that students can fully enjoy the music class and exploit their musical potential with their own advantages.

3.2.3 Maintain a professional attitude and ensure the quality of the classroom.

Teachers must correct the attitude of class, can not be relaxed because it is not offline class. Prepare lessons carefully before class, strengthen teacher-student interaction during class, and grasp students' practice progress after class. All links should be closely combined to ensure the quality and effect of students' learning.

3.3 Suggestions for students

The application of online piano music education APP is a very good learning method for students in the enlightenment and primary and intermediate stages. However, if they want to achieve the professional piano level in the future, they still need the specific guidance of offline teachers. A new form combining traditional teaching mode and online teaching can be adopted to supplement online teaching and offline teaching and expand the ways of piano learning.

4. Conclusion

With the continuous innovation of science and technology, network technology has been widely applied in the process of education development, creating a new online teaching method and providing people with more diverse learning methods. Especially with the sudden emergence of the novel coronavirus epidemic, online education has played a significant role. Therefore, online piano music education APP should actively adapt to the development trend of The Times, seize the development opportunity, adjust the direction of music teaching according to user needs, give users a better experience, and look forward to its future development.

References

- [1] Tan Yang. The Application of Music Teaching APP in the Internet Era[J]. Northern Music, 2018, 38(15): 155.
- [2] Zhang Jie. On the Current Situation, Mode and Trend of Online Music Education[J]. Art Education, 2020, (5):51-54.
- [3] Ren Lu. Take Advantage and follow the trend -- Online music teaching in primary and secondary schools Reflection on learning[J]. Modern Music, 2020, (11):34-36.
- [4] Wang Sijia. Exploration and reflection on online music teaching[J]. Home Drama, 2021(33):176-177.
- [5] Liu Yang. Investigation and Research on the Teaching of three APP online instrumental Music from the Perspective of "Internet Plus"[D]. Hunan Normal University, 2020.
- [6] Xu Yishao. Research on the Mode and Development Trend of Domestic Piano Spanring[D]. Shanghai Conservatory of music, 2022.

About the author: Xinying Xia (1998- -), female, Han Nationality, Rizhao City, Shandong Province, postgraduate, Qingdao University, Music and Dance.