

# We-Media for Digital Vocal Music Education- A Reflection of Feasibility of a Technology-Based Vocal Classroom

Jiahui, Du & Mei Foong Ang

Department of Music, Faculty of Human Ecology, Universiti Putra Malaysia 43400 Serdang, Selangor, Malaysia

Email: gs58290@student.upm.edu.my, meifoong@upm.edu.my

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## Abstract

Over the past decade, there have been remarkable advancements in information and communication technology (ICT) worldwide, particularly in China. Notably, We-mediaplatforms like WeChat, Weibo, and DouYin have emerged as prominent examples. These platforms offer diverse communication tools and have recently shown potential in expanding and promoting traditional education. China's status as having the world's largest Internet user base provides a strong foundation for the growth of these new media. This presents exciting prospects for education in the age of We-media in China, but also brings forth new challenges for educators and teachers. To delve deeper into the impact of We-mediaplatforms on education, a case study was conducted, focusing on how students utilize these platforms for vocal learning. The study employed qualitative research methods, using participant observation to gather data. The primary goal of the study was to explore the trends and changes in music education and vocal teaching within the context of the We-mediaera. It specifically investigated how We-media tools influence contemporary music education, including vocal teaching methods, tools, and philosophies in China.

**Keywords:** We-media, WeChat Public Platform, Music Education, Internet-based Vocal Education, Vocal Education Technology.

## Introduction

Information and communication technologies (ICTs) offer increased opportunities to accelerate the achievement of economic and social development goals. The global spread of smartphones, computers, and other communication systems, as well as the Internet, broadband infrastructure, and wireless installations, have significantly impacted international production and trade patterns. The dynamics of information and communication technologies are the main driving force behind the contemporary knowledge society (Pentzaropoulos, 2014). Due to technological advances, many new forms of media are rapidly

emerging. These new forms of media have replaced the functions and status of traditional media in many ways.

New media, as opposed to traditional media, is a broad concept that encompasses mobile media and web technology and is a media that uses digital means to disseminate information (Bai, 2018). It encompasses both We-media and social media, whilst We-media and social media are intertwined (Chen, 2022). We-media is a new media where the publisher is an individual, a product of the mass dissemination of information (Xia, 2017). Social media is a network simulation of real-world relationships and social ecology, with strong interaction and community (Xia, 2017).

One of the fastest-growing forms of media is We-media which has undergone significant changes (Li, 2019). We-media is a means of electronically disseminating information. It is based on network technology, and individuals are transformed from recipients to disseminators of information and can rely on network technology as a tool for disseminating information to the outside world (Wu, 2013). Therefore, individuals become an important way to disseminate information through We-media (Zheng, 2019). More specifically, when people create and manage their We-media, the main goal they have in mind is not just to disseminate information; instead, they do so for a variety of reasons, including self-entertainment, teaching, and making money (Xia, 2017).

With the development of music education, the use of traditional education models cannot meet the total current needs of teaching and learning, and new music teaching models such as We-media and APPs on mobile Internet terminals have aided the traditional classroom model in some ways (Liu, 2013). In the past, many music lovers did not have access to music due to economic and spatial constraints, but with the advent of mobile internet, more opportunities are available for music learners (Sharon, 2014). It has not only brought changes to human life, work, and learning but also brought opportunities for music education in the new era.

Music education through mobile internet platforms can break time and space constraints, and students can learn online anytime, anywhere, and at their own pace. These technological tools can fully motivate students and make their learning more personalized, adaptive, and intelligent, leading to the emergence of emerging teaching models such as music-based We-media publics (Ma, 2014).

At present, the most used We-media platforms in China are Weibo, WeChat, QQ, Douyin, and Xiaohongshu. Through these We-media platforms, a change in the subject and mode of information dissemination has been realized. Anyone can be the object of communication. The mode of communication has also changed from the traditional one-to-many model to a new model in which points, lines and surfaces are integrated and alternated with each other. These We-media platforms are characterized by extensiveness, interactivity, flexibility, and complexity (Li, 2019).

### **Literature Review**

With the rise of We-media, numerous researchers have explored We-media vocal music education from diverse angles. Zhang (2017) examined the growth, operations, practices, and dissemination of vocal microblogging platforms, and presented the role and impact of We-

media in vocal music education using specific cases. Yi (2015) elucidated the significance of microblogging, particularly "international vocal music," in vocal music teaching. Through a qualitative study, the functions and content of these platforms were analyzed, and their advantages and drawbacks in vocal music education within the Internet context were assessed. Zheng (2019) categorized Chinese music education We-media public platforms into three groups and conducted a quantitative study, analyzing questionnaire data gathered from WeChat public platforms. The study identified the distinctive advantages and challenges of the novel model of vocal music teaching in the Internet context and offered corresponding solutions.

In China, the evolution of We-media has been categorized into four stages (Bai, 2018; Liu, 2020). The initial phase commenced in 2009 with the introduction of Sina-Weibo, triggering the trend of self-publishing on social platforms. The second stage started in 2012 with the launch of WeChat's official account, marking a shift towards mobile platforms from self-publishing. During the third phase, from 2012 to 2014, portals, video-sharing platforms, e-commerce platforms, and other domains emerged, leading to a more diverse array of platforms. The fourth phase began in 2015 and continues today, where live streaming and short videos have become the new hotspots for We-media content creation.

According to Kentnor (2015), the Internet forms the bedrock for the development and establishment of online classrooms. The Internet's capacity to overcome traditional constraints of time and space now enables learners to pursue their studies conveniently from their own homes, offering them unrestricted flexibility in terms of time and location. This provides learners with the opportunity to access lectures from esteemed university professors across the country and the world. Shi and Li (2021) conducted a comparison between traditional classroom education and online education and proposed enhancements for both, recognizing them as the primary means to foster human growth and development.

Text and animation were employed to emphasize and highlight certain points in Vakaliuk et al.'s (2021), which offered students a variety of approaches to teaching and learning and resulted in the creation of a more diverse range of instructional materials. The central idea that runs through John's virtual classroom is that the advent of online education will eventually allow the traditional campus's walls to come tumbling down and that the once-impossible task of effectively exchanging high-calibre educational resources is now unavoidable in the modern era. Changes that will shake the planet to its core will come about because of online classroom instruction becoming an integral element of national culture and the production of soft power (Barton, 2017). The online education platform system that was developed by McCutcheon et al. is a representative example of an online education platform that makes active use of digital textbooks and e-books and has more than 100 million users that have registered with it (Lee et al., 2017).

According to the findings of Firat and colleagues (2018), traditional voice teaching methods are superior to online voice teaching in many respects. However, traditional voice teaching methods are superior to online voice teaching when it comes to the specificity of vocal music. Online voice teaching is not a substitute for traditional voice teaching methods. Only by combining the two will the benefits of each be able to be fully utilized to ensure the continued growth of vocal music teaching in a manner that is both sustainable and conducive to good health (Firat et al., 2018).

Fotiadou and her colleagues (2017) have created a web-based training courseware of development and administration systems that is entirely dependent on a web browser (Fotiadou et al., 2017). Not only can courses that are delivered entirely over the web be created, but pre-existing courses also have the potential to be published online. Weller et al. (2018) introduced an educational system concept that equips even non-technical general teachers with the means to easily create online courses. The system encompasses secure websites for the courses, home pages, student administration, and tracking capabilities for monitoring the learning process (Weller et al., 2018).

Koodziejczak and Roszak (2017) developed a cloud education platform that can provide a wide variety of educational resources. Some of them include resource modules, assignments, tests, glossaries, chat rooms, discussion boards, interactive assessments, polls, and blogs (Koodziejczak & Roszak, 2017). Due to the rapid development of information technology, learning has become increasingly decentralized, non-linear, networked, and social, which expands the ways people acquire knowledge. The online education model, due to its accessibility and adaptability, proves advantageous to students across all age groups and proficiency levels. As a result, this mode of education is rapidly gaining popularity in numerous countries seeking to revamp their education systems.

### **Statement of Problems**

The WeChat platform is the most familiar and widely used platform in China, and it has a variety of features that allow anyone and any organization as long as fulfilled the authentication required to edit text, audio, and video in the background of the WeChat public platform to display a large amount of reference music information to users who subscribe to the WeChat public platform in an unlimited and rapid manner. Due to the convenient mode of the WeChat public platform, the We-media platform now has a wide market and has found a new way to spread music education (Wang, 2017).

However, some We-media platforms have low threshold standards for registration and management, further expanding the spread of music education. Each music educator can have an independent voice of his or her own, providing an important avenue for the dissemination of music education (Sun, 2014). The growing number of related music education WeChat public websites have made it possible for users to meet their own needs for music learning at any time and any place, however with standards unknown.

We-media platforms may be beneficial to students, but educators continue to be concerned about the use of the We-media in official educational settings due to concerns on data privacy, online harassment (Kaplan & Albert, 2015) as well as the unknown quality control of the given lessons. At the same time, students' use of We-media for vocal learning can be severely impacted using smartphones to watch movies and play games for students with poor self-control. On the contrary, if students use it correctly, it could bring various benefits to learners. These unknown quality control of self-learning through a We-media platform brings new challenges to teachers (William, 2014; Hebert, 2016).

Whilst the mode of online education is swiftly becoming popular in many countries as they strive to modernize and overhaul their education systems, more studies should be done to study the effectiveness of this new model of music education in the context of the internet. It is crucial to foster discussions regarding the teaching model from various perspectives,

particularly in cases like China, where a plethora of online classes were introduced through the WeChat public platform without a proper quality control system. Such investigations are essential to understand how online education can create positive learning opportunities for the wider public.

This study adopts a bystander perspective to observe the entire teaching and learning process. Through an examination of We-media teaching platforms using the WeChat public platform, the research revealed insights into the teacher's approach to teaching, the content delivered, and the methods employed by students during the learning process.

### The Case and Participant Selection

In this study, one of the We-media vocal teaching platforms named the *Vocal Music Assistant* is taken as a case example through purposive sampling. The inclusion criteria are samples that can provide sufficient information for the research questions and objectives of this study. *Vocal Music Assistant* was selected because this platform stands as one of the most popular online vocal education platforms in China. The platform comprises teachers from various music conservatories across the country who primarily offer online courses catering to music majors. The platform's main objective is to provide learning opportunities for both music professionals and non-music enthusiasts. It accommodates singers from the beginners' stage up until the professional level.

The participants included all the students registered using this platform for vocal music learning. Students who drop out mid-way due to network connectivity issues or do not complete the online classes don't meet the inclusion criteria for this study. According to the statistics provided by the platform, there was an average of 135 students who had participated in *Vocal Music Assistant* We-media vocal teaching platform, with 56 males and 79 females.

The research analyses the impact of mobile Internet-based vocal education on traditional teaching methods and content. It assesses the benefits of this approach and identifies potential issues, proposing suitable solutions.



Figure 1. The *Vocal Music Assistant* teaching platform

## Methodology

### Research Design

In this study, the researchers employed a case study approach, using the We-media vocal music teaching platform named *Vocal Music Assistant* as the subject of investigation. Observation data was collected through complete participation where the researcher joined the platform as a full member of the group, where information was gathered during the phases of observation in the sessions. By analysing the teaching and learning methods employed on the We-media platform, the study aimed to identify its strengths and challenges in real-world application.

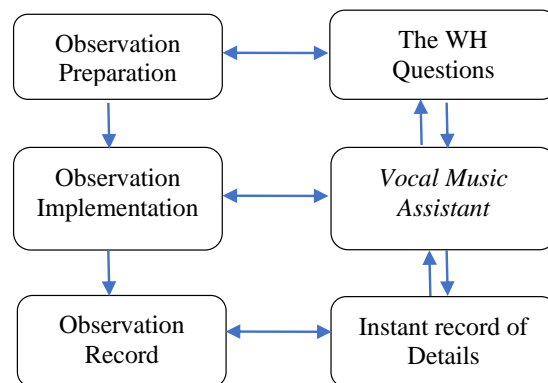


Figure 2. Research Process

In the preparation stage of the observation, the researchers identified the object for observation, which *Vocal Music Assistant* of the WeChat official account platform was determined based on its foremost credibility. The WH questions were prepared by the researchers as a means to observational records down the observation stage. Since a mobile smartphone is used as an observation tool, there are no restrictions on the time and place of observation. The frequency of observation was once a week for one hour each time. The observation was done by focusing on teachers' teaching contents, teaching methods, and problems encountered in the learning process.

During the observation implementation phase, the researcher gains access to the observation site. The chosen platform fulfils the data collection requirements, possessing the necessary equipment, teachers, students, and channels for feedback. To maintain the natural behaviour of the observed individuals, the researcher opts for the covert indirect observation method, which differs from direct observation.

### Data Collection

On-site observation data was recorded using Excel to create observation sheets, capturing, and organizing course objectives and content derived from the platform. The raw data is then analysed, themed, and summarized.

The WeChat platform was accessed solely through smartphones. The content offered by the *Vocal Music Assistant* platform encompasses various aspects of music education, including music teaching, music examinations, appreciation of famous music, and popularizing music knowledge. It is structured with three main modules: Singing Demonstration, Vocal Knowledge, and Professional Services.

Within the Singing Demonstration module, users can access Italian art songs, soprano opera arias, tenor opera arias, and baritone opera arias. This module offers a total of 315 songs, presenting a diverse array of singing videos and text introductions to music works and singers. The platform provides both free courses and paid live courses to cater to different learning needs; The Vocal Knowledge module provides opera appreciation, voice categorization, introductions to famous singers, singing techniques, and daily vocal training, whereas the Professional Services section covers lyrics teaching, Solfeggio training, knowledge payment, and an examination area.

Table 1  
*Content of the Vocal Music Assistant Platform (as in October 2022)*

| Content module                              | Number of songs               |  |
|---|-------------------------------|--|
| Singing- demonstration<br>(Total 315 songs) | Soprano opera aria            | 68 songs   |
|   | Soprano opera aria            | 32 songs   |
|   | Tenor opera aria              | 40 songs   |
|   | Baritone opera aria           | 43 songs   |
|   | Art song                      | 105 songs  |
| Vocal music knowledge                       | Opera Appreciation            | 27 pieces  |
|   | Voice categorization          | 7 sopranos; 3 types of mezzo-soprano; 4 tenors; 3 Baritones                  |
|   | Introduction of famous singer | 31 famous singers introduced.  |
|   | Singing techniques            | 8  |
|   | Daily vocal training          | 30   |
| professional services                       | Knowledge payment             | Audio, video, course live broadcast, online bookstore, 4 categories in total |
|   | Lyrics teaching               | 133 songs  |
|   | Solfeggio training            | French Solfeggio 1A, Simplified Music Solfeggio Textbook                     |
|   | examination                   | Music Advanced Placement, Music Study Abroad                                 |

In order to understand the teaching method of the platform, the researcher acquired the *Vocal Music Assistant* We-media vocal teaching course and structured the research journey by meticulously noting down observations as an active complete participant in the course.

The course comprised of 9 lessons, each spanning 37 to 73 minutes that encompassed several sections, including an overview, teacher introduction, audience details, and course materials. Prior to the course commencement, all participants were briefed for comprehensive understanding of the course content, teaching methodologies, and the course's educational objectives.

The instructor utilized PowerPoint presentations during the course, incorporating images, videos, and audio materials to systematically introduce vocal singing skills to students. Throughout the live course sessions, students were encouraged to pose questions at any time, and the teacher promptly addressed these inquiries either during the class or in post-class discussions. In the event that students missed the live broadcast or had to leave during the session, they had the flexibility to access replays at their convenience.

Upcoming live courses were prominently featured on the official account's homepage, with students receiving a text message reminder two hours prior to the course's commencement. Furthermore, the live broadcast room management staff conveyed specific start times individually to students via the WeChat chat tool.

The researchers also observed that the predominant teaching format in most vocal music courses combined voice instruction with PowerPoint presentations. Additionally, supplementary materials such as images, PDF scores, and audio recordings were employed to enhance the teaching process. Depending on the course's content, the teacher occasionally leveraged WeChat's video function. To optimize the learning experience and effectiveness, it was recommended that students access the course using multiple devices, such as computers and mobile phones, simultaneously.

After each session, there was an opportunity for Q&A and interactive discussions, allowing students to ask questions and provide feedback based on the lesson's content.

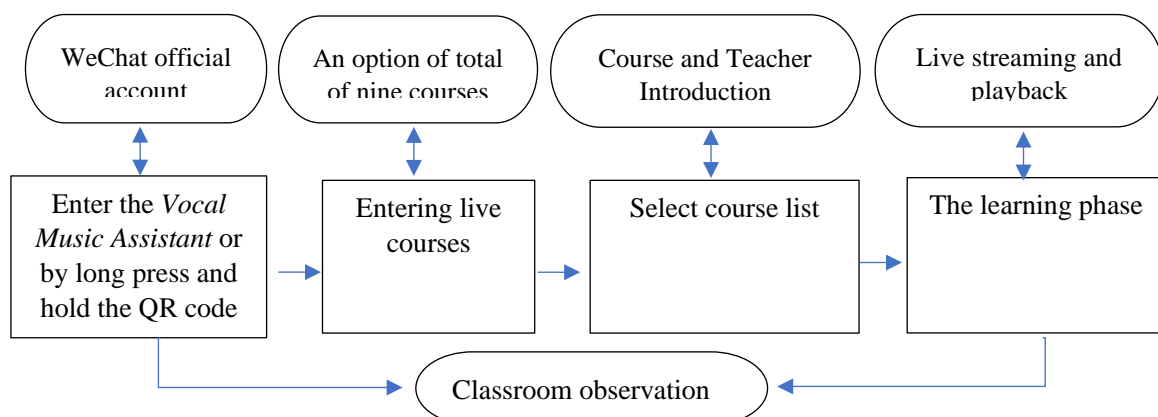


Figure 3. Teaching Process of WeChat Platform for *Vocal Music Assistant*

Regarding teaching content, the *Vocal Music Assistant* platform, operating as a We-media entity in the realm of vocal education, places a primary emphasis on the visual elements of vocal instruction. This emphasis encompasses a collection of video programs related to vocal education. Users can readily access these materials by simply opening the videos disseminated through the public account, thereby gaining access to well-prepared instructional content. Furthermore, the platform has expanded its offerings to include a more structured body of vocal theory content and establishing a comprehensive foundation in vocal theory knowledge. This expanded content encompasses various topics, including vocal techniques, stage performance, and Italian diction and pronunciation.

The teaching content is notable for its openness and diversity, and it is accessible to anyone with an internet connection, requiring minimal additional conditions. The diversity and openness in the sharing of educational resources can effectively accommodate a broad



spectrum of learners, including those who lack access to conventional learning settings, such as students in remote rural areas, busy working professionals, and middle-aged or retired individuals. In this way, it addresses, to a certain extent, the unequal distribution of educational resources.

Concerning teaching methods, conventional vocal instruction approaches tend to be somewhat rigid, often limiting students' learning activities to the confines of the classroom. These methods frequently lack tools and opportunities for pre-class preparation and post-class feedback. Such limitations can hinder active engagement and interaction between teachers and students during instruction. This can lead to a decline in teachers' enthusiasm for teaching and may impede the development of students' creative thinking.

Nevertheless, employing We-media as an educational platform presents students with more opportunities to exercise their subjective initiative. We-media allows for expression at any time, in any place, and in a variety of forms. It offers the potential to break away from conventional teaching methods. Learners have the freedom to choose the course content they require and can offer immediate feedback through various We-media platforms.

### **Discussion**

The difference between We-media and traditional media lies in the fact that We-media predominantly showcases an individual's insights and perspectives and attracting followers with the vivid personalities of We-media creators. Due to its greater degree of freedom and lack of standardization, there are some WeChat public accounts that lack content quality. Although the admission criteria for We-media are not as stringent as traditional media, relevant authorities still need to establish entry standards, content guidelines, and professional assessments for vocal music education We-media. This is because, in the early stages of vocal music learning, learners often lack the ability to judge the correctness of the information. Therefore, if the vocal music education We-media industry fails to adhere to standards, it can significantly mislead students.

Professionalism in vocal music education We-media is also necessary. Because most vocal music educators focus more on music expertise and lack an understanding of communication studies, the operators of We-media often have a relatively low level of specialization in the methods of We-media dissemination, educational models, and operational strategies. This results in a situation where educational practices are ongoing, but there is a lack of research into the competitiveness of We-media. Moving forward, there is a growing need to cultivate professional vocal music educators who possess specialized skills in We-media communication to meet the demands of the present market. This approach may help drive the professionalization of vocal music education through the usage of We-media.

With the increasing emergence of more and more We-media vocal music teaching tools, students can choose online learning techniques that best suit their interests. This type of education is highly suitable for today's students because it can enhance learners' efficiency while catering to their desire to access the internet and use electronic devices. China's traditional vocal music teaching methods, rooted in oral instruction dating back thousands of years, are now being replaced by digital technology, which also contributes to the integration of vocal music education with scientific and technological advancements.

However, due to the physical separation caused by electronic screens, students and teachers may become emotionally distant, with limited opportunities for interaction between them. If teachers spend their days teaching in front of a camera, they not only miss out on quick feedback from the classroom but also struggle to tailor their guidance to the students' proficiency levels. In such a scenario, teachers may not always be able to receive timely feedback or ensure that they provide targeted explanations. As a result, the connection between teaching and learning in online We-media teaching tools is not always as close as desired.

For this reason, the researchers do not advocate abandoning traditional music education methods; rather, they propose integrating online teaching tools to complement each other's limitations. Students can leverage these online platforms alongside traditional vocal music teaching methods, tailoring their approach to maximize the diversity of learning methods based on their individual learning situations. This integration fosters the development and evolution of various forms of music education in the future.

### **Conclusion**

This study primarily focuses on utilizing the We-media in vocal music teaching reform, delving into the value and effectiveness of We-media vocal education resources in enhancing voice training through a case study of We-media public numbers. On one hand, it serves as a case study for the practical application of We-media vocal education resources, while on the other hand, it provides learners with more comprehensive insights into these resources. The research findings offer fresh ideas and methodologies for voice training, enriching the traditional vocal teaching model with new content and possibilities.

Traditionally, vocal music education has predominantly relied on private teaching and physical classrooms. While this approach has contributed positively to vocal music development, it has also encountered certain challenges. The increasing demand for music education has led to expectations for equal resource distribution, diverse learning scenarios, flexibility in timing, and personalized teaching content.

The emergence of We-media introduces a fresh approach to vocal music teaching. Emphasizing a student-centered approach, it has, to some extent, achieved equal resource distribution and diversified educational methods. However, there is still a need to address issues related to standardization, professionalization, and the construction of a We-media vocal education platform.

This study aims to benefit music educators and learners alike. We-media's unique advantages make it an effective tool for learning and dissemination, providing vocal music enthusiasts with more opportunities to learn. Vocal music teaching through We-media presents a novel teaching mode in China. It harnesses teacher resources effectively, offering new methods and strategies to educators while expanding the possibilities for music education's application.

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