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## THE EMPLOYING OF MOBILE PHONES AND TABLETS APPLICATIONS IN PIANO TEACHING (A COMPARATIVE STUDY BETWEEN FLOWKEY AND YOUSICIAN)

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### **Abstract**

*The rapid technological development and the spread of using all kind of smart phones devices became an indispensable part of human life. And with many electronic applications in various side of important life which serve many users depending on their age, interests and specialties; employment in the educational process has become an urgent necessity to benefit from it in raising the efficiency of the educational process. This research aims to employ the available mobile and tablet applications on app stores for both Operating system (IOS and Android). As a strong motivator for learners and influential in the quality and results of the overall educational process as well as clarification positive in enhancing learning outcomes and improving the educational environment that is appropriate for modern effective education, and of course using these applications doesn't eliminate the role of teacher but helping him significantly to interact with the learner and applications to create an educational environment exceed the traditional classroom to expanding the interactive creative thinking of students. The researcher chose two application (Flowkey - Yousician) according to their ratings on (Google Play - App Store) to compare between them, as both applications can be used on both Operating system IOS and Android. They are also allow some features as (training - learning - performance assistance rehearsal - sound recording - video presentation - listening - support - organization). key words: Mobile Phones Applications, Tablets, Piano Teaching, App Stores, Google Play, Operating system, Android, IOS, Flowkey, Yousician.*

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### **Keywords**

*Mobile Apps, Tablets, Teaching Piano, App Stores, App Store, Google Play, Operating Systems, Yousician, Flowkey, IOS, Android.*

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### **Introduction:**

The rapid technological development and spread of the use of smart phone devices of various kinds, which has become an important and indispensable part of human life. With the availability of many electronic applications in various important aspects of life that serve many users of different ages, interests, and specialties; Its employment in the educational process has become an urgent necessity to take advantage of it in raising the efficiency of the educational process. The learning potential has changed constantly, technology changes creating new challenges for pedagogy, and the increasing use of mobile phone technology in colleges and universities is the latest trend that forces teachers to evaluate the advantages and disadvantages of new technology, It is a logical step in the professional development of piano teachers and motivates to bridge the gap between traditional learning and learning by technology, assisting students, assessing their needs and showing the effect of employing and applying it to them, in order to develop their technical prowess and develop their confidence with commitment to the independent training required to develop their skills in playing the piano and regularity in musical training And provide support to them within the specified curriculum. The introduction

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of an affordable and easy-to-use digital tool in the context of the training process is an influential factor in providing a greater opportunity for interaction and motivation for musical achievement in what is called the term blended learning (mobile learning + teacher), which is considered a new method for learning skills whose success depends largely on the teacher. And his ability to integrate new teaching technology into the educational process and face the challenges of formulating methods of harnessing it without the live musical experience losing its richness.

**Research Problem:**

Despite the spread of modern teaching methods based on the integration of mobile phone learning into the educational process, especially for the piano in developed countries, there is not much research in the Arab world or in musical education institutions in the Arab Republic of Egypt that deals with these non-traditional electronic methods that enhance Creativity and motivation of students to perform more effectively, which led the researcher to the need to penetrate this field to keep pace with the current climate of development so that learners of the piano instrument in Egypt have opportunities to experiment with enlightened methods of increasing value and purposeful methods that have become more common in modern musical learning contexts.

Previous studies: The first study entitled "E-learning: the future of higher education? Students' perceptions about learning through portable tablets"

The study aimed to experiment with the use of iPads tablets in classrooms at Indiana University and Purdue Indiana Police University to integrate mobile technologies into learning environments and to explore students' perceptions of learning and sharing that occurs as a result of iPad use. Two hundred and nine university students participated in the experiment in various specializations, including the specialty of music, where eight professors of music at the university participated in the application of the experiment, and the study resulted in the desire of most students in their various specializations to continue and develop permanently in the use of the iPad device as a support for cooperative learning, a saver of time and effort and an assistant In the development of their scientific skills and their efficiency, as well as changing the lecturing activities to become more enjoyable, as many faculty members have benefited through the use of applications provided by devices that support multiple learning styles that helped them in performing their work. As for the field of music, the iPad devices won the approval of all music students, as it helped them to access the music notes easily and helped them in training hearing with solfege, where the training became more efficient without committing to a specific place for that through the use of available hearing training applications

and it also allows mixing individual exercises that are appropriate With interaction within the classroom and tailored to the needs of the learning environment.

The second study entitled "Effectiveness of using an interactive application on the iPad for training in initial reading skills on the piano for preparatory troupe students, Faculty of Music Education"

The study aimed to use an interactive application on the iPad device in teaching primary reading to junior students in playing the piano. Knowing its effectiveness through an experimental program with one group (10) of the preparatory group students at the College of Music Education five males and five females for the academic year 2012 / In 2012, they had never been trained in it before, as the researcher was able to train students on virtual reading skills through an interactive application. The experiment resulted in the superiority of the experimental group in the post-achievement test as a result of training on the application of piano reading in advance. They also obtained remarkably good grades in the piano curriculum test at the end of the school year. Students also explained that the use of the application's properties helped them a lot in performing the elements of their piano curriculum. As they no longer stop playing when a mistake occurs without returning to the beginning, but they learned very well to always look forward and continue playing until the end, as some of them indicated that he felt a lot of pleasure to use the features of the application and happiness when he performed well without stopping

The third study entitled "Learning Music in the Online Convergence Space: Using the Mobile Application to Create Interactions During Free Musical Instrument Training"

The study examines the effects of implementing a mobile application designed for use during free-form music student training sessions between weekly lessons. This research was designed as a core study to examine students' interactions within a common space on the Internet facilitated by the mobile application called PracticeCactus. In the experiment, a group of committed students, ages 10 to 15, were used for a period of twenty weeks. Al-Hurra for the piano based on social and cultural theory where learners place musicians as participants in learning music through active experiences, in specific cultural contexts and in the midst of interactions conceived as a converging space where students participate in a variety of ways based on their common interests in playing, i.e. using the application To share machine training with peers and listen to their contributions as the app provided an opportunity for students to become familiar with other students' exercises. The results of the research were successful, as the use of the application changed the philosophy of the social practice of musical learning among students, the development of a participatory environment, and the participation in

focusing on listening, receiving comments, encouragement, and sharing musical achievements. Students also described how to enhance the mobile application for social communication and familiarity and fun.

The research is divided into two parts: First: The theoretical framework: In this context, the researcher presents learning by means of the mobile phone, its advantages and disadvantages, mobile phone applications for teaching music.

Second: the applied framework: where the researcher explains the features and explanations of the (Flowkey - Yousician) application, and how to employ them to teach the piano, and compare them in terms of advantages and disadvantages.

First: the theoretical framework

### **Mobile Learning:**

Learning by mobile phone is a new trend in education, with the release of the first iPad I (APPLE) in March 2010, it was used as an additional learning tool in the classroom to become the beginning of the use of mobile technology in learning through the iPad at Indiana University and Purdue University Indiana Police In the United States of America. With the rapid advancement in technology, precedent-constructed definitions are being destroyed, especially in the field of education by mobile phone in the higher education stage, as the definitions that carry technological innovation are wide-ranging, especially when trying to put fixed terms or words that clarify the concept of mobile learning, for example but not limited to When trying to collect multiple and advanced concepts that represent the key words for mobile learning, we find that we can call it: (mobile learning, hypermedia-assisted learning, mobile education technologies, e-learning). The definition of mobile learning, including: "Any type of learning that occurs in learning environments and spaces that take into account technological mobility, learners' mobility and learning mobility.

### **Advantages of Learning by Mobile Phone:**

The integration of technology in education expands the possibilities for creating educational activities that engage students' multiple learning styles and enhance their academic performance through learning styles in particular, and among the main features of mobile learning are the following:

- 1- Flexibility of students' involvement in the educational materials and process anywhere, anytime.
- 2- Supporting collaborative learning and enhancing concepts in a visual way.
- 3- Arousing students 'interest and their sense of fun while learning.
- 4- Fast access to information and knowledge.

5- Flexibility and ease of use, offering alternative ways to practice training and focus on details. Technology can offer students a sense of independence that they may not have known before.

6- Its simplicity, ability to customize, and intuition are among its most important additional advantages.

#### **Disadvantages of Learning by Mobile Phone:**

1- The occurrence of the digital divide, which is a multidimensional phenomenon related to global, social and democratic differences related to individual and family income and the individual's ability to access the Internet easily, which makes them need to support their institutions.

2- Mobile learning activities can create a feeling of isolation in non-technical students who are not tech-savvy.

3- Distraction as a result of the student focusing on other entertainment goals such as games and social networking sites instead of focusing on educational applications.

4- Time loss if the mobile device encounters a defect and frustration in the classroom.

Educators should constantly measure students' level of knowledge and comfort in new ICTs, and not assume that students are ready for new technologies. It is necessary to devote some class time to allow students to adapt to devices and applications in order to enhance students' sense that mobile technologies are easy to use and through the use of one of the active learning strategies (self-learning).

#### **Mobile Apps for Teaching Music:**

The rapid development of musical technology in the past few decades has changed the interaction of individuals with music, and the means of music consumption have changed to become digital through websites and mobile phone applications, whose material cost has become within reach of most users and made it necessary to start applying music techniques in musical education to attract interest. Learners of this generation and the development of an urgent necessity to continuously develop applications to meet the challenges of the age and the rapid technological development to give the user a momentary automatic response to evaluate his performance. Mobile phone applications for teaching music are among the modern music education tools. There are many mobile phone applications for teaching playing the piano available in application stores, most of which provide functions such as reading notes, keyboard training, and musical composition. With the market for mobile and tablet applications growing steadily and the spread of a large number of music education applications so far, maintaining a specific list of music applications has become a big sweetener. Among the companies producing music mobile applications is Yousician company, which was called the Ovelin

competition, which was initially launched. The two Wild chords and Guitar Bots applications that were targeted at novice musical users while allowing the possibility to advance in the musical level in the application. Currently, the company has focused on its latest application, which is the Yousician application (one of the applications of the research sample) and marketing it as a personal music teacher, which was launched for the first time in the year 2014, which was and supports three instruments, the guitar, electric guitar and the piano. "The bass guitar and vocals were added, and it is considered the largest music program in the world in terms of the number of application users with twenty-five million users

### **Results:**

- 1- Explain education via mobile phones, its advantages and disadvantages.
- 2- Learn about musical mobile applications, their importance and role, through the built-in learning application.
- 3- Explanation of both the Usesian and Fluke applications.
- 4- Know how to use them in teaching the piano.
- 5- Making a comparison between the advantages and disadvantages of both applications, which resulted in the excellence of the Usesian application.

### **Recommendations:**

- 1- The necessity of conducting additional research beyond the techniques of Usissian and Flocki of the piano instrument.
- 2- The necessity of conducting additional research that reviews the use of mobile phones in teaching other branches of music education such as (hearing training - music theories - singing).
- 3- The necessity for future research to include comparative analyzes of students 'work and classroom learning outcomes and outcomes.
- 4- The necessity of conducting research dealing with interactive learning in the field of music education.

### **References:**

1. Amal Mukhtar Sadiq, *Research Methods and Methods of Statistical Analysis in Psychological and Educational Sciences*, The Anglo-Egyptian Library, Cairo, 2004.
2. Birch, Heather JS. "Music Learning in an Online Affinity Space: Using a Mobile Application to Create Interactions During Independent Musical Instrument Practice." PhD diss.
3. Chen, Chi Wai Jason. "Mobile learning: Using application Auralbook to learn aural skills." *International journal of music education* 33, no. 2 (2015).
4. Dittmar, Christian, Estefanía Cano, Sascha Grollmisch, Jakob Abeßer, Andreas Männchen, and Christian Kehling. "Springer Handbook for Systematic Musicology, chapter

Music Technology and Music Education." (2014).

5. Hsu, Emile. "In Their Hands: Extra-curricular Use of Technology by High School Music Students." MME diss., The William Paterson University of New Jersey, 2018.
6. Ng, S. C., Andrew K. Lui, and W. S. Lo. "An interactive mobile application for learning music effectively." In International Conference on ICT in Teaching and Learning. Springer, Berlin, Heidelberg, 2013.
7. Riley, Patricia. "Teaching, learning, and living with iPads." *Music Educators Journal* 100, no. 1 (2013).
8. Rossing, Jonathan P., Miller, Willie M., Cecil, Amanda K., & Stamper, Suzan E. iLearning: The Future of Higher Education? Student Perceptions on Learning with Mobile Tablets. *Journal of the Scholarship of Teaching and Learning*, 12(2), (2011).
9. S.C. Ng, Andrew K.F. Lui, and Alvin C.H. Kwok, "Easy-to-Learn Piano: A Mobile Application for Learning Basic Music Theory and Piano Skill", *Technology in Education Technology-Mediated Proactive Learning Second International Conference, ICTE*, (Hong Kong, China, July 2-4, 2015).
10. Rania Hussein EL-HELOU, THE EDUCATIONAL CURRICULUM DEVELOPMENT NEEDS TO KEEP PACE WITH THE LABOR MARKET IN THE FIELD OF VISUAL ARTS, *International Journal of Education and Learning Research*, Vol. 2, No. 1, 2019, pp. 27-31.

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