A COMPARATIVE STUDY ON STUDENTS' SATISFACTION OF TEACHING METHODS FOR GENERAL INSTRUMENTAL MUSIC COURSE IN SOUTHWEST JIAOTONG UNIVERSITY, CHINA

Shan Li[1]
Yan Ye[2]

Received: *24th August 2020*
Revised: *17th December 2021*
Accepted: *10th January 2022*

Abstract: This study mainly compared the undergraduate students' satisfaction towards two different teaching methods applied in the general instrumental music courses for 104 non-music major students at Southwest Jiaotong University. The satisfaction data from undergraduate students were collected from the experimental and control groups and analyzed using an independent samples t-test. The descriptive statistics and t-test findings showed significant differences in students' satisfaction under two teaching methods in the general instrumental music course at Southwest Jiaotong University, China. Discussion on the effect of teaching methods was provided. It was expected in the future, a diversified teaching system of instrumental music courses could be built in China's Higher Education Institutions to broaden students' artistic vision and improve their learning motivation and ability.

Keywords: Instrumental Music Courses; Teaching Methods; Satisfaction; Southwest Jiaotong University

Introduction

As a material entity to carry music culture, instruments with the dual powers of vision and hearing embody massive cultural information from different regions and ethnic groups and reproduce cultural formation and change. Meanwhile, instruments serve as a vital method to explore the music system and native culture. There is a multidimensional connection between the development of instrumental music culture, which is influenced and restrained by the socio-political system, economic level, technology, and different ages, economic bases, and cultures. Humanistic spirit, advocated by general education in universities, is one kind of universal human self-care manifested

[1] Associate Professor, Ph.D., College of Humanities, Southwest Jiaotong University, China. 393528895@qq.com
[2] Assistant Professor, Graduate School of Education, Stamford International University, Thailand. yan.ye@stamford.edu

in the preservation, pursuit, and concern for human dignity, values, and destiny. To highly value various cultural phenomena leftover from mankind and affirm and shape an ideal personality development. Teaching general instrumental music courses in universities will cultivate students' humanistic quality and expand the music aesthetic vision of non-music majors, which meets general education requirements.

Charming of Instrumental Music is a general course designed especially at Southwest Jiaotong University and opened to non-music undergraduate students throughout the university in February 2019. By taking the comparative development of Chinese and Western typical instrumental music as a clue. The course outlines the vital role played by instrumental music in the vision of Chinese and Western civilization and pictures Chinese and Western instrumental music in different historical stages to display diverse instrumental music cultures due to their differences in history and culture. According to the learning characteristics of non-music undergraduate students, the course focuses on the cultural nature of Chinese and Western instrumental music. It is compatible with the appreciation, knowledge, practice, and acceptability of general major students who are inspired after class to consistently keep an eye on the common cultural heritage of instrumental music between Chinese and Western mankind. It is crucial to shaping students' ideal personalities for overall development.

Research Objectives

This study focused on the comparison of two applied teaching methods in the course of *Charming of Instrumental Music* at Southwest Jiaotong University. In the process,104 non-music major students registered for this course were divided into traditional and experimental classes with two distinct teaching methods. The two teaching methods designed for both classes continued for one semester; after that, a survey of students' satisfaction was collected and compared.

Theoretical Framework

According to Yin (2001), a *course* is defined as a purposeful and executable plan designed to cultivate the next generation according to social need, social orientation, and culture, including objectives, contents, and training methods with specific implementation strategy and appropriate evaluation ways. This is further confirmed by Professor Zhong (2004) in his book *An Introduction to Curriculum and Teaching*, who believes "teaching implementation refers to processes and methods in carrying out teaching activities" (p17). Because curriculum implementation means a series of activities to fulfill a new course plan, it involves some changes to the original course. Therefore, introducing

this change through various implementation strategies has become the direction and goal of teaching implementation. Fullan's book *New Meaning in Educational Reform* supported that change from a teacher's teaching idea is the most challenging factor in the implementation process of the new plan. But once it succeeds, profound and meaningful influence will emerge.

In 1956, Bloom, an American famous contemporary psychologist, educator and curriculum expert of the International Association for Educational Evaluation publishes an article named *Classification of Education Objectives: A Cognitive Domain* in which cognitive thinking is graded into six levels: knowledge(memory of previously-learned materials by recalling facts, terms, and answers), comprehension(demonstrative understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas), application(solving problems to new situations by applying acquired knowledge, facts, techniques, and rules in a different way), analysis(examining and breaking information into parts by identifying motives or causes), synthesis(compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions) and evaluation(presenting and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria). Since then, those six thinking levels have been widely accepted and applied.

In 1976, another two American scholars, Marton and Saljo, asserted the "level of learning" based on the experiments on students' reading activities. They find shallow learning is a lower cognitive and thinking level with difficulty to transfer. In contrast, deep learning is an advanced cognitive level concerned with high-order thinking and can be transferred. Deep learning is also a persistent and dedicated learning ability maintained by an intrinsic interest in digging into problems based on learners' intrinsic learning motivation of spontaneity and autonomy. First, from the perspective of motivational emotion, deep learning is one kind of dedicated and pleasant learning state with learners' selflessness and tirelessness. Second, from a cognitive standpoint, it is deepening thinking into a higher-order stage (analysis, evaluation, and creation). Learners can constantly self-reflect and adjust themselves. Finally, from the perspective of interpersonal relationships, learners in deep learning will solve problems in the way of effective communication and cooperation with others with complete confidence. Deep learning, like a propeller, functions as a huge power system to sustain a person's growth. In this regard, the study focused on six learning levels of classification of teaching objectives and the development of deep learning.

Literature Review

Teacher-Centered and Student-Centered Learning

The most significant differences between intuitivism and constructivism are their Pedagogical methods and the roles of teachers and learners. In intuitivism, teachers are the center of the learning process. Teachers are considered the primary resource of knowledge, and students passively receive the information transmitted by teachers through lectures. Within the teacher-centered approach to learning, curriculum design is based on low levels of students' participation. Teachers control the learning process and curriculum. Teachers decide what to learn and how to be learned. Learners are the recipient of the teacher's instruction.

The role of teachers and instructors is authoritarian in classrooms using a teacher-centered approach. The teacher becomes the "purveyor of knowledge." Application of the behaviorist theory can be seen in evidence as teachers deliver direct instruction and lectures by factual transmission (Cuban, 1993; Good & Brophy, 1997). This teaching method widely and primarily uses the Individual, criterion-referenced assessment (Porcaro, 2010).

Constructivists argued that using the traditional didactic teaching approach cannot successfully transmit knowledge in a predigested form to learners (Westwood, 2008). This new belief about how learning occurs shifted the role of teachers, students, and the teaching and learning approach. Students have greater autonomy in their study in this student-centered approach to learning. It allows the students to participate in the learning process actively. They are no passive receivers of transmitted information. Students are the center of the learning process. Teachers play a facilitator role in student-centered classrooms.

In Weimer's (2002) and Fox's (2001) point of view, teachers' most basic principles and role in constructivism help students interact with authentic problems issues that the students have some personal experience or understanding of to construct new knowledge. Kreber (2006) discussed that lectures without interaction with students might have no harm and help students master the content. Nevertheless, it is less likely to detect if learning has occurred, and unsupportive for students to engage in self-directed lifelong learning.

According to Menges and Weimer (1996) and Weimer (2002), applying learner-centered methods seems more complex and responsible for teachers and students. The respective group has shared responsibility for the course, and they must have a good understanding and collaboration. Both parties and

their expectations are essential to gaining rich educational experiences (Felder & Brent, 1996; Weimer, 2002). The teacher's role is a guide who facilitates the learner's knowledge constructing process. Teachers need to guide the students to take responsibility for their learning (Burbules and Linn, 1991).

Previous Studies on Education and Curriculum

Research on education and curriculum is conducted in China and the west context. In China, Xiong (2010) stated that teaching implementation is a reasonable sequence of teaching activities and a successful process of reaching the expected end (teaching objective) from the starting point. Zhang (2001) advocated the integrated theoretical thinking of Bloom (1976). Although there are two professionals from the curriculum research field and the teaching research field in the educational circles, he believed that curriculum is, in essence, a teaching event during curriculum development.

Allen (2002) tried to combine theory with practice and balance course basis, course principles, and problems. Meanwhile, he made efforts to integrate views on the future with traditional philosophical, historical, and sociological ideas. These studies have laid the research foundation of the course teaching method, which is a process of constantly opening and innovating in historical and philosophical backgrounds.

Previous Studies on The Teaching of Instrumental Music Course

The academia values studies on Chinese instrumental music courses; in the Chinese literature section of CNKI, there are 123 pieces of results associated with the keywords "instrumental lessons" since the year 2000. For example, Qin (2001)'s article *On Instrumental Music Teaching Method* considers instrumental music teaching as one of the organic components of music teaching content that belongs to tangible music and plays a significant role. First, stimulate students' interest in studying music; second, exploit other paths to appreciate music; third, cultivate students' abilities in all aspects. For example, in small orchestra activities the school organizes, students' rehearsals and performances can promote their playing skills and train their abilities to observe and cooperate. Therefore, to inspire students' interest in studying music, the teaching process should be given priority (Liu, 2004; Rao, 2004; Ren, 2008).

Huang (2002) found that remarkable results have been achieved in building a "diversified" curriculum system, exploring a "diversified" talent training model, and constructing a "diversified" innovation practice platform. As a critical component of college music education, He (2002) also supported that the instrumental music course should guide students to master some

professional experience instead of only clinging to skill and technique teaching. Evaluation ways of traditional college instrumental courses are too single, and course structures also are too isolated.

Fu and Lei (2013) conducted systematic research to optimize course structure and perfect evaluation. They used a survey of China's ten universities and made a series of data analyses. Their study suggested the music educators from five aspects: class teacher's basic situation and scientific research, a setting situation of the course, textbook and evaluation system to truly reflect the current situation of instrumental music teaching in Normal Universities. Their studies probe into the actuality and teaching reform of instrumental music courses in music education in colleges and primary and secondary schools and provide crucial preliminary information.

However, the fact that no matching results are found when searching for keywords "teaching methods of instrumental music course in general education "on CNKI reveals that the relative research is still blank. Therefore, it is imperative to strengthen the research on instrumental music teaching in general education, which is the research significance of this paper.

Research Methodology

This research applied qualitative and quantitative methods in the process. Qualitative parts focused on literature sources come from the books in Sichuan University and Southwest Jiaotong University libraries, articles about pedagogy and musicology from Network academic materials such as CNKI and Google, and relative documents from domestic and foreign journals. Then, the quantitative part used a survey to compare the students' satisfaction with the independent samples t-test.

One hundred four students registered for this course at Southwest Jiaotong University; they were divided into two classes, one traditional teacher-centered class and the other experimental student-centered, each class with 52 students. The traditional class used teacher-oriented, and the experimental class used student-centered, focusing more on task-guided, incentive, group cooperative, and simulation training. The two teaching methods designed for both classes continued for one semester; after that, a survey of students' satisfaction was collected and compared.

The university developed the survey used for student satisfaction; it was the university evaluation form designed to assess every student's course satisfaction. The university expert team had conducted IOC for the students' satisfaction survey, and the reliability of the total alpha value reached 0.87.

Findings

As explained above, after a semester of teaching two different methods, a student satisfaction survey was launched for more quantitative analysis. Distributing 104 questionnaires total, which are all returned validly.

Based on the demographic data collected from the students, Tables 1 and 2 showed the frequency and percentage information of the participants. As shown in Table 1, there were more male students than female students in the participants, as the ratio of boys reached 65.8%, and girls were only 34.2%. Since Southwest Jiaotong University is a comprehensive one focusing on science and engineering, the proportion of male students is higher than that of female ones in the whole university.

Table1**.** *Student Gender Information*

Gender	Number	Percentage
Male	68	65.8
Female	36	34.2
Total	104	100

Table 2*. The Proportion of The Students Selecting Instrumental Music in Their Primary and Secondary Schools.*

Students	Number	Percentage
Selected the course before	83	79.8
Never selected the course before	21	20.2
Total	104	100

Then, the researcher also surveyed the proportion of the students who had selected instrumental music courses before in primary and secondary schools and those who had never selected. The results showed that the ratio was 79.8% to 20.2%, which indicated that most of them have a particular foundation in instrumental music learning and interests.

A student satisfaction survey focused on three components to compare the students' satisfaction with teaching by different methods in two classes, including teaching activities, classroom management, and teaching effect in general, was distributed in both classes. The mean and standard deviation scores of the students' satisfaction from both classes are shown in Tables 3 and 4.

Table 3. *Students' Satisfaction Investigation in the Control Class*

Students' Satisfaction towards	Mean	SD	Interpretation
Teaching Activities	3.21	.031	Moderate
Classroom Management	3.45	.256	Moderate
Teaching Effect in General	3.38	.364	Moderate
Total	3.35	.201	Moderate

Table 4. *Students' Satisfaction Investigation in the Experimental Class*

Students' Satisfaction towards	Mean	SD	Interpretation
Teaching Activities	3.51	.031	High
Classroom Management	3.54	.256	High
Teaching Effect in General	3.48	.364	Moderate
Total	3.51	.201	High

Table 5. *Independent Samples t-test Report for The Comparison of Students' Satisfaction with Two Different Teaching Methods*

Teaching Methods	Means	t	Sig(two-tailed)
Control Class (teacher-centered)	3.35	3.055	.004*
Experimental Class (student-centered)	3.51		

* p< significant at .05 level

Table 6 shows the independent t-test comparing students' satisfaction between two teaching methods since the p-value is .004, less than .05. Therefore, there is a significant difference in students' satisfaction compared with the two teaching methods. As observed, the experimental class students had higher satisfaction than the control class, indicating that the student-centered teaching method could result in higher students' satisfaction.

Discussion

This study determined the significant differences in students' satisfaction compared with two different teaching methods. In the traditional class, a single teaching method of oral and mental instruction, a teacher-centered method with case analysis, has made a deep impact on our instrumental music course. This single mode of knowledge transmission, taking students as recipients and teachers as initiators, is rational to some extent. Still, it does not accord with the law of instrumental music teaching in general education and efficiently achieves general education goals without supplementing other teaching methods. However, the combinations of ask-guided, incentive, group

discussion, and simulation training in the experimental class are student-centered and more suitable for obtaining the teaching effects.

The study attempted to explore the reform of general instrumental music courses in colleges and universities. The Charming of Instrumental Music course at Southwest Jiaotong University integrates knowledge, aesthetics, art, and practice and creates traditional and experimental classes. The experimental class takes talent training as the core, optimizes course structure, and actively promotes four teaching methods, evaluation criteria, and course content proportion. In contrast, the traditional class should keep the teacher-oriented method with case analysis and focus on the unity of intuitiveness, inspiration, and consolidation. The application of the new teaching methods will build a diversified teaching system of instrumental music courses, set up a platform for practice and innovation, and lay the foundation for the cultivation of innovative compound talents with multiple abilities and one specialty (Cheng, 2007; Rao, 2004; Huang, 2006).

Nowadays, teaching instrumental music courses in college general education has become diversified and personalized (Wang, 2002; Yao, 2004). The above relative research findings prove that the teaching methods in the experimental class will better fit the student's needs for the general instrumental music courses in colleges and universities. It may help promote the realization of the expected goal of general education to cultivate students' humanistic spirit and shape their overall personality at the higher education level.

In the long term, general instrumental music courses in colleges and universities have followed the traditional teacher-centered teaching mode, paying too much attention to instrumental music knowledge. Ignoring the development of creative ability and collaboration ability and natural connection between students' humanistic spirit and instrumental music course. Which is not compatible with general education reform and teaching objectives (Yao,1999; Yu, 2006; Liu, 2004).

According to the reform of our general education, making instrumental music courses adapt to the development of general education in universities in China has become an essential topic for general instrumental music teaching (Cui, 2009). In recent years, in facing the 21st-century education challenges, the current teaching practice is expected to develop more new modes as a part of teaching reform and music education innovation in China's Higher Education Institutions (Zhou, 1999).

REFERENCES

Allen Ornstein. (2002). *Course: Basics, Principles, and Problems*. Nanjing: Jiangsu Education Press.

Arthur. K. Ellis. (2005). *Curriculum Theory and Its Practical Examples*. Beijing: Educational Science Press.

Bloom, B. S. (1976). *Human Characteristics and School Learning.* New York: McGraw-Hill.

Burbles, N., & Linn, M. (1991). Science education and philosophy of science: congruence or contradiction? *International Journal of Science Education, 5,*59-63

Cheng, H.Y. (2007). Music Education Reform in Normal Universities under the Reform of Basic Education. *Journal of Literature and History Expo*, 7, 21-22.

Cuban, L. (1993). *How teachers taught* (2nd ed.). New York: Teachers College Press.

Cui, Y. K. (2009). New Orientation of Curriculum Implementation: Teaching Based on Curriculum Standards. *Journal of Educational Research*, 1, 45-47.

Felder, R. M., & Brent, R. (1996). Navigating the bumpy road to student-centered instruction. *College Teaching*, 9, 43-47.

Fox, E. (2006). Constructing a pragmatic science of learning and instruction with functional contextualism. *Educational Technology Research and Development, 54*(1), 5-36.

Fu, X.Y., & Lei, H. (2013). Status Investigation and Analysis of Instrumental Music Curriculum in Normal Universities. *Journal of the Sea of Art*, 2, 45-46.

Good, T., & Brophy, J. (1997). *Looking in classrooms* (7th ed.). New York: Harper& Row.

He, W. (2017). Reform and Practice of Teaching Methods in Instrumental Music Curriculum in Normal Universities. *Journal of Popular Literature and Art*, 10, 78-80.

Hu, X.G. (2013). Diversified Reform and Practice of Professional Instrumental Music Curriculum in Normal Universities---Taking the Conservatory of Nanjing Normal University as an example. *Journal of Hundred Disciplines in Arts*, 4, 114-116.

Hu, Z. F. (2003). *Art Curriculum and Teaching Theory.* Nanjing: Zhejiang Education Publishing House.

Huang, X.H. (2006). *Curriculum Organization.* Beijing: Educational Science Press.

Kreber, C. (2006). Research-based teaching in relation to academic practice: Some insights resulting from previous chapters. In Kreber. C (Ed.),

Exploring Research-based teaching, 107, 109-114. San Francisco: Jossey-Bass.

Liu, P. (2004). *On the Practice and Theory of Music Education.* Shanghai: Shanghai Music Publishing House.

Menges, R. J., & Weimer, M. (Eds.) (1996). *Teaching on solid ground: Using scholarship to improve practice*. San Francisco: Jossey-Bass.

Porcaro, D. (2010). Applying constructivism in instructive learning cultures; Educational Psychology and Instructional Technology Department, Georgia, USA.

Qin, R.M. (2012). On Instrumental Music Teaching Method*. Dajiang Weekly and Forum*, 4, 23-25.

Rao, L. (2004). *Curriculum and Teaching Theory.* Beijing: China Times Economic Press.

Ren, X. L. (2008). On Curriculum Reform of Musicology (Teacher Education Major) in Normal Universities. *Journal of the Sound of the Yellow River*, 12, 65-68.

Sato, L. (2003). *Curriculum and Teacher.* Beijing: Educational Science Press.

Shi, L.F. (2000). *Curriculum Theory: its Foundation, Principle, and Problem.* Beijing: Educational Science Press.

Wang, Y., H. (2002). The Development of Music Education in Primary and Secondary Schools and Music Education Reform in Normal Universities*. Music Research*, 1, 23-25.

Weimer, M. (2002). *Learner-centered teaching: five key changes to practice*. San Francisco: Jossey-Bass.

Westwood, P. (2008). *"What Teachers Need to Know About Teaching Methods."* Camberwell, Vic: ACER Press.

Xiong, C.W. (2010). *The General Theory of Teaching.* Beijing: People's Education Press.

Xu, H. S. (2002). Out of the Misunderstanding of Music Education in Normal Universities. *Journal of Music Instruments*, 11, 36-38.

Yao, S. Y. (1999). *Music Education Literature on Contemporary Schools in China.* Shanghai: Shanghai Education Press.

Yao, S. Y. (2004). Research on the New Trend of Reform on Music Education in Normal Universities. *Music education in China*, 6, 12-14.

Yin, A. Q. (2001). Reform and Practice of Curriculum Structure and Teaching System of Education Specialty in Normal Universities. *Music education in China*, 8, 25-27.

Yin, A. Q. (2006). On the Training Mode of Talents in Normal Universities. *Music education in China*, 8, 91-93.

Yu, Z.Y. (2006). *Curriculum Reform and School Curriculum Guidance.* Chongqing: Chongqing University Press.

Zeng, S. J. (1997). *An Introduction to Music Sociology.* Beijing: Culture and Art Press.

Zhang, H. (2000). *Curriculum and Pedagogy.* Shanghai: Shanghai Education Press.

Zhong, Q. (2004). *An Introduction to Curriculum and Teaching.* Shanghai: East China Normal University Press.

Zhou, S. B. (1999). Training Mode of Talents of Music Education and Teaching reform in Normal Universities as Facing the 21st Century. *Music education in China*, 5, 77-79.