Advances in Social Science, Education and Humanities Research, volume 488
Proceedings of the 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020)

The Effectiveness of PSPEA Learning Models in West Vocal Techniques in Music Education

Lamhot Basani Sihombing[1*], Efendi Napitupulu[2], Abdul Hamid[3]

[1,2,3]*Educational Technology - Postgraduate Program, Universitas Negeri Medan, Medan, Indonesia*
[*]*Corresponding author. Email: lamhotsihombing01@yahoo.com*

ABSTRACT
This study aims to develop a PSPEA (Planning, Song, Performance, Expression, Appreciation) learning model that is appropriate for learning in music education. This development research uses the Dick and carey model. The research subjects were students of Medan state university music education, which consisted of 6 students for limited trials and 40 students for field trials. The results showed that the geometry learning model on the feasibility aspect of the content was categorized as good, on the aspect of language feasibility and the image was very good category, the presentation aspect was very good category, and the graphic aspect was good category and the western vocal technique learning using PSPEA learning model was better than classes that do not use the PSPEA learning model.

Keywords: *Learning Model, Vocal Technique*

1. INTRODUCTION

The learning process is a system because it can be ascertained that the source of the success of the learning process in tertiary institutions / educational institutions is related to the number of components involved in it. The components in question are curriculum, lecturers, models, strategies, models, students as well as those that cover the learning and education process itself. The learning model that is appropriate and in accordance with the western vocal course is expected to be improved because in fact, so far, lecturers have made learning models that have not been optimal and have made students not creative so that the material taught is less meaningful.

Vocals in the art of music are the strains of notes that come out of the human voice. Vocals are the most popular type of music, because they can be performed anywhere without any additional tools. Every human being has a different vowel. This is influenced by differences in the shape and ability of the human voice-forming tools to one another. The limit of the tone area that can be voiced by a person is called sound ambitus. Basically, not all classical Western vocal techniques can be used in all types of music.

The singer's Western vocal technique must be applied according to the style of his music. Classical vocal technique is a means of displaying / communicating the music that is in a singer's mind. The task of a singer is not only to master vocal techniques, but also to be able to place each vocal technique in a song according to the type of music being sung. Singing skills have the function of developing student sensitivity, creativity and aesthetic taste in art, developing ethics, social awareness, and cultural awareness of students in social life, as well as a love of Indonesian culture [1].

A music learning process, each music medium has its features that are important to be studied in the context of the processing process to produce certain types of musical works, as well as vocal musical instruments. Vocal work, which is commonly referred to as the art of singing or singing. These activities have played an important role in every culture of society and at every time [2].

Western Vocal Courses are an art form that is continuously evolving. Vocals reflect the experiences of the creator, the performer, the listeners and the soul of the culture in which the music is created. Western Vocal Subjects in the Music Education Study Program include aspects of appreciation of the art of music, making music, and performing music. Appreciation of the art of music means knowing, understanding, and giving appreciation or an aesthetic response to a musical work of art, making music is basically forming ideas and performances or performances, namely bringing music works in front of the audience [3]. Presentation of music

can be in the form of singing activities, playing instruments, or using electronic instruments and so on.

The Western Vocal Course in the Music Education Study Program is felt to be necessary to implement a new Learning Model that seeks lecturers to encourage students to make connections between their knowledge and its application in everyday life.

The problems above can be identified precisely and accurately without having to eliminate the existing constraints, research is needed as an effort to improve the learning model in Western Vocal Courses in the Music Education Study Program at the State University of Medan.

Apart from lecturers, there are several components that greatly influence the success of learning, namely: (1) student components include interests, talents, intelligence, motivation, attitudes, feelings, psychological and physical conditions, (2) curriculum use, (3) models or props appropriate, (4) facilities and infrastructure. The achievement of the objectives of the lesson will be determined by the various elements that support it.

Dick and carey learning products state that an educator should be able to recognize and know the characteristics of students, because a good understanding of the characteristics of students will greatly affect the success of the learning process of students. If educators already know the characteristics of their students, then then educators can adjust the learning model according to the characteristics of these students. So it can be concluded that the elements contained in the learning process are students with all their characteristics who try to develop themselves optimally through learning activities because they greatly affect the success of the learning process of students.

Students must be given an comprehension that they actually have the ability to learn and can do well. The message conveyed by an educator must reach students so that students get the knowledge and knowledge given by the lecturer, students should understand what message the lecturer conveyed to them. Lecturers in tertiary institutions who are responsible for learning in higher education institutions must design teaching to help solve student learning problems.

The characteristics of students with prominent musical intelligence, among others, are sensitive and able to perceive the beauty of the surrounding sounds such as birds, wind, gurgling, people singing, people singing and people speaking, happy and easy to remember by listening to tones and rhythms beautiful. Music has an important role in a person's life, besides being able to develop creativity, music can also help individual development, develop sensitivity, build a sense of beauty, express expressions, provide challenges, train discipline and introduce the nation's cultural history.

Creativity is a potential that every human being has and not one that is received from outside the individual. Human creativity is born with the birth of humans [4]. Since birth, the individual has shown a tendency to actualize himself. This life, creativity is very important, because creativity is an ability that is very meaningful in the process of human life.

rnya everyone has the potential for musical intelligence. The skill of playing music is a result that is more and has been achieved from the learning process that has been carried out, so that to find out whether a job is successful or not a measurement is needed. Measurement is the process of determining the area / quantity of something in the activity of measuring the results of skills, students are expected to assign assignments, questions or problems to be solved / answered.

The measurement results are still in the form of a raw score that cannot provide information on student abilities. In order to provide the expected information about students' abilities, an assessment of the entire teaching and learning process is conducted so that it will show many things achieved during the teaching and learning process, for example the achievement of learning outcomes according to Bloom, namely cognitive aspects, affective aspects and psychomotor aspects.

The psychological condition of the students also causes the optimal absorption of students because the teaching model and atmosphere are not properly used. This problem can be done by creating an appropriate learning model [5]. One learning model that can be used is a learning model that has planning, song, performance, expression, appreciation that can bring students to a more varied learning atmosphere when learning is taking place, which is interesting or fun, involves students so that it will increase their activities and responsibilities. , because the teaching and learning process is oriented towards the success of goals, student activity is needed because students as students are the ones who plan and carry out learning with guidance [8].

Through the development of the PSPEA learning model, students are expected to be able to carry out a learning process that makes it easier for students to understand western vocal techniques conveyed by the lecturers and it is hoped that the use of this learning model can make the learning process more meaningful for students.

2. METHOD

This research was conducted at music education at the State University of Medan, North Sumatra, Indonesia. The implementation of this research was

adjusted to the educational calendar and for the implementation of product trials carried out in the form of learning activities for 3 meetings, each 2 x 45 minutes per meeting. This product testing activity was carried out in a classroom. Testing and testing of the effectiveness of this product was carried out at the music education of State University of Medan, North Sumatra, Indonesia. This research is a research on the development of the PSPEA learning model.

This research and development includes the process of developing and testing the effectiveness of the product. Research and development is a research method used to produce certain products and test the effectiveness of these products [9]. The design of the research and development model used in this study is the Dick & Carrey development model [10]. The steps in this study use 2 stages, namely the first stage is to develop a model by producing a product and the second stage is to determine the effectiveness of the product. To produce PSPEA learning model products that are suitable for use and in accordance with needs, it is necessary to take a research approach. In general, the research and development model is a suitable method for developing and testing a product.

The steps from the development stage are as follows:

1) Conducting preliminary research which includes:
   - Identify learning needs and determine subject competency standards
   - Perform learning analysis
   - Identify the characteristics and initial behavior of students
   - Write down the basic competencies and indicators
   - Write a benchmark reference test
   - Develop a learning strategy that is realized in the form of a syllabus and learning units
   - Develop learning materials

2) Making a model design, which includes:
   - Manuscript making
   - Making a storyboard
   - Making flowchartview

3) The collection of materials which includes:
   - Making and collecting images (images) and animation
   - Audio recording and gathering

4) The development of learning teaching materials is divided into 2 types, namely:
   - Module development
   - Development of learning models which include: making designs, collecting materials or teaching materials and making learning models and their development

5) Review and revision of learning models

6) Initial product trial of the learning model.)

3. RESULT AND DISCUSSION

The search results from distributed questionnaires found that 75% (percent) of the lecturers stated that they needed a learning model in the learning process so that the learning process was more effective, and 100% of students said they needed individual learning tools. Based on product validation through a series of trials and revisions that have been carried out, the learning model in western vocal technique has a valid status. The trial was carried out in 4 stages, namely: (1) evaluation of material experts, learning design experts, and software engineering experts, (2) individual trials, (3) small group trials, and (4) field trials [11].

The material expert assessed the PSPEA learning model in the western vocal technique based on three aspects, namely the quality of the learning material and the quality of the learning delivery system which showed the average percentage of assessment was 96.25% each on the quality aspects of the learning material, 94.00% on the quality aspects of the strategy. learning, and 95.00% in the aspect of the delivery system of learning is in the very good category as a whole, which means that the PSPEA learning model in western vocal techniques can meet the demands of learning needs. The learning design expert's assessment of the quality aspects of the learning design shows that the percentage of 95% is in the very good category, which means that the physical appearance of the PSPEA learning model in western vocal techniques functions in increasing the learning motivation of students. The learning design expert's assessment of the quality aspects of information design shows an average percentage of 92.50% is in the very good category, which means that the PSPEA learning model information on western vocal techniques can make it easy for students to obtain the desired information. Assessment scores of PSPEA learning models on western vocal techniques on aspects of the quality of learning materials can be seen in Table 1.

Table 1. Assessment scores of pspea learning models on western vocal techniques on aspects of the quality of learning materials.

No	Rating Indicators	Score					Average	Criteria
		1	2	3	4	5		
1	Material suitability				10	20	93,33%	Very good
2	Ease of understanding sentences in the text				9	21	94,00%	Very good
3	Ease of understanding sentences in the text				19	11	87,33%	Very good

4	Ease of understanding learning				14	16	90,67%	Very good
5	Serving order accuracy				17	13	88,67%	Very good
6	Exercise adequacy				15	15	90,00%	Very good
7	Clarity of feedback				9	21	94,00%	Very good
8	Learning assistance with the program				6	24	96,00%	Very good
Average							97,84%	Very good

The learning design expert's assessment of the quality aspects of interactive design shows an average percentage of 90.00% is in the very good category, which means that the arrangement of learning content pays attention to aspects of the interaction between students and learning so as to create a condition that is able to facilitate learning. While the average percentage in the presentation design aspect is 98.33% which is in the very good category which means that the presentation of the learning model developed has an attractive appearance so that it can generate student interest in learning. Based on the assessment of the PSPEA learning model on western vocal techniques on an individual trial, there are no suggestions for improvement. Assessment scores of PSPEA learning models on western vocal techniques on aspects of technical quality or appearance can be seen Table 2.

Table 2. Assessment scores of pspea learning models on western vocal techniques on aspects of technical quality or appearance

No	Rating Indicator	Skor					Score	Criteria
		1	2	3	4	5		
1	The beauty of the screen display				13	17	91,33 %	Very good
2	Text readability				15	15	90,00 %	Very good
3	Image and animation quality				18	12	88,00 %	Very good
4	Color composition				18	12	88,00 %	Very good
5	Navigation				13	17	91,33 %	Very good
6	Carrying capacity				13	17	91,33 %	Very good
7	Average				12	18	92,00 %	Very good
Average							97,84 %	Very good

The results of research on the PSPEA learning model in western vocal techniques in small group trials in Music Education on the quality aspects of learning material amounted to 91.39% and aspects of technical quality or appearance of 95.87% and each of them was included in the very good category. Thus the results of the assessment carried out on the PSPEA learning model on western vocal techniques in small group trials as a whole are very good and after being analyzed there are no problems that need to be fixed. Tendency Levels of Assessment of Aspects of Material Quality can be seen in Table 3.

Table 3. Tendency levels of assessment of aspects of material quality

No	Catagorization	Percentage	Frequency	Percentage
1	Very Good	81% ≤ X ≤ 100%	60	100,00 %
2	Good	61% ≤X< 80%	0	0,00
3	Fairly Good	41%≤X< 60%	0	0,00
4	Poor	21%≤X< 40%	0	0,00
5	Very poor	0%≤X< 20%	0	0,00
Total			60	100,00 %

The results of the assessment of the PSPEA learning model in the western vocal technique in the field trial showed that the product developed was very good or suitable for use and no suggestions for improvement were conveyed in this field trial so there was no revision.

Field trials were also carried out in Music Education which consisted of 60 students, namely class A with 30 students and class B with 30 students. Field trials produce data that will later measure the feasibility of the product being developed, as well as to find out how the benefits of the product are for its users. The results of the evaluation of the learning model on the quality aspects of the learning material can be seen in table 1.

The results of field trial research on aspects of the quality of learning material in the PSPEA learning model in western vocal techniques have been summarized in table 3.

Based on an assessment of the PSPEA learning model on western vocal techniques in a field trial with 60 music education students for aspects of the quality of learning materials and aspects of technical quality / appearance it shows that the product developed is very good or suitable for use.

The hypothesis proposed in this study is to determine the effectiveness of the PSPEA learning model in western vocal techniques on improving student learning outcomes in western vocal techniques. So then

in testing the hypothesis can use the Pre-test t test and Post-test t test.

1) Pre-Test Test. After the data feasibility test has been completed, then the t test pre-test research is carried out. This is done to determine whether there is a difference in the initial ability of the control class and the experimental class using the pre-test t test.

Based on the results of the calculations that have been done, the results obtained with t count of -2.31 and t table of 1.67 at the 95% confidence level. Then it is found that tcount <ttable or -2.31 <1.67 or in other words Ha ditoloak. This shows that the students' initial abilities in the control class and the experimental class tend to be the same and there is no significant difference

2) Post-Test t test. After the pre-test t test has been completed, then the research hypothesis is tested using the post-test t test. This is done to determine whether there are differences in student learning outcomes after being taught using different models. The research hypothesis is as follows:

Ha : Student learning outcomes using the PSPEA learning model on western vocal techniques

Ho : Student learning outcomes using conventional learning models

Based on the research that has been done on the learning outcomes of students who are given learning using the PSPEA learning model in western vocal techniques, it was found that the student learning outcomes scores of 40 respondents were spread over the range of 50-100. The calculation results show that the lowest score is 50 and the highest score is 100, the mean is 72.50 and the model is 70 and the standard deviation is 9.45. Based on the calculation results, the data obtained is that tcount> ttable or 4.51> 1.67 or in other words Ho is rejected and Ha is accepted, it can be concluded that the learning outcomes of students who are given learning using the PSPEA learning model in western vocal techniques are higher. of the students' learning outcomes using conventional learning models with the effectiveness of the interaction amounted to 73.67%.

The product of PSPEA learning model development in western vocal technique is a learning material that has been developed by paying attention to the learning aspects and the model as the principle of learning message design. The product development research carried out is directed to produce a product in the form of a PSPEA learning model in western vocal techniques for Music Education students at the State University of Medan which is used to improve the learning process and student competence. Therefore the research process was carried out and started with (1) preliminary studies, (2) then designing the learning model, (3) validating the product, and (4) making revisions and improvements based on validation data analysis from material experts, learning design experts , and software engineering experts who carried out individual tests, small group tests, and field trials so that a suitable learning model was produced in accordance with the characteristics of the field of study and students as users [12].

The revised and refined aspects are based on data analysis and trials as well as input from material experts, learning design experts, and students as users of this learning model, aiming to explore some common aspects in the product development process. Learning model variables have a very good average value. The learning model variables assessed include presentation, content feasibility, language, and graphics.

The benefits of using the PSPEA learning model in western vocal techniques are as follows:

- The material is easy to understand because the concepts presented are planned to facilitate students and deliver the material systematically.
- PSPEA learning model in western vocal technique provides the opportunity for students to learn at their own pace
- Learning is faster and more interesting so that it does not cause boredom because it is equipped with pictures and animations as well as various practice questions
- PSPEA learning model in western vocal technique can also be used as an alternative learning model individually.

From the results of the research data processing, there are differences in the learning outcomes of students who are taught using the PSPEA learning model higher than the learning outcomes of students taught with conventional learning models. Then the model that has been produced is feasible and effective for use in learning. This is in accordance with the opinions of several experts and relevant research as follows:

- The use of a learning model has the potential to improve learning outcomes [13]
- Teaching should start from direct experience towards iconic representations and only then towards symbolic representations.
- The use of models in foreign language learning really helps students, makes them feel happy and makes them more active and reduces the time for lecturers to explain a lot.

4. CONCLUSION

Based on the quality and results of using the PSPEA learning model on western vocal techniques that have been tested in music education, it can be concluded that:

(1) The results of the validation from material experts, learning design experts state that the PSPEA learning model in the resulting western vocal technique is suitable for use in learning. (2) The learning outcomes of students taught using the PSPEA learning model in western vocal techniques are higher than the learning outcomes of students taught using conventional learning models. Considering that so far the learning process still uses conventional learning models, it is suggested that this learning model be added as one of the learning models used for the learning process, so that learning activities are more varied, interesting and interactive. To the next researchers, it is hoped that learning using the PSPEA learning model in western vocal techniques requires lecturers to adjust the content of the material and use of lesson time, so that it can affect student learning outcomes, especially on learning outcomes of vocal techniques in music education.

REFERENCES

[1] MWood, J, can software support childern's vocabulary development? (versi elektronik). Journal of language learning & technology, (2001), pp. 166-265

[2] Gulo,W, Strategi Belajar Mengajar. Jakarta: PT. Grasindo, (2008), pp. 84-85

[3] Fathani, A. M. Seni musik, Jakarta: Ar-Ruzz, (2009), pp. 53

[4] Iswadi, D, Pengembangan Model/Alat peraga Seni musik, Depdikas. Yogyakarta. (2003), pp. 1

[5] Degeng, N.S. (1999). Paradigma Baru Pendidikan Memasuki Era Desentralisasi dan Demokrasi. Edisi 6 Tahun III 1999/2000, pp. 19

[6] Ulfah, M., Harahap, M. B., & Rajagukguk, J. (2018, December). The Effect of Scientific Inquiry Learning Model for Student's Science Process Skill and Self Efficacy in The Static Fluid Subject. In 3rd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2018). Atlantis Press.

[7] Kartika, Y., Wahyuni, R., Sinaga, B., & Rajagukguk, J. (2019, July). Improving Math Creative Thinking Ability by using Math Adventure Educational Game as an Interactive Media. In Journal of Physics: Conference Series (Vol. 1179, No. 1, p. 012078). IOP Publishing.

[8] Yohana, P. S. R., dkk. Pengembangan Model Pembelajaran Seni musik Berbantuan Komputer. Makalah. Disampaikan dalam pekan ilmiah Mahasiswa Nasional: UMM, (2016). Pp 5 and 13

[9] Sugiyono, Statistika Untuk Penelitian. Bandung. Penerbit: CV. Alfabeta, (2009). Pp. 407

[10] Dick, W and L. Carey, J. O. Carey. (2005). The systematic Design of Instruction. New York: Logman

[11] Sudjana, Metoda Statistika. Bandung: Tarsito, (2005), pp. 12

[12] Hamdani, Strategi Belajar Mengajar.Bandung: CV Pustaka Setia, (2011), pp. 42

[13] Sanjaya, Strategi Pembelajaran Berorientasi Standar Proses Pendidikan, edisi I, cetakan ke-1, kencana prenada model, (2007), pp. 196