

Feasibility Of TST Learning Model Development On Piano Subjects

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Abstract

The purpose of this study was to produce a TST learning model on piano subjects as well as their supporting devices, and also to find out the feasibility of learning models developed to improve students' piano learning outcomes. This type of research is research and development. The TST learning model development procedure refers to the Borg and Gall learning model adapted from the Dick&Carey model. The development phase includes a trial and evaluation phase consisting of a feasibility test, one-on-one trial, small class trials and large class trials. In the final product stage, it produces a TST learning model that is worth using.

Keywords: Learning outcomes, Model, Development, Piano

Introduction

Universities are the vanguard against the development of the quality of education in Indonesia. Universities are fully responsible in printing professional human resources to have the skills that are needed in the current technological era. College is also at the same time as an agent of change. Universities and governments synergize to advance professional human resources.

The government explained the steps that will be taken in order to improve the quality of education in Indonesia, among others: increasing access to the community to be able to enjoy education in Indonesia. The benchmark of participation figures, the next step eliminates inequality in access to education such as inequality in villages and in cities, as well as gender, the last step to improve the quality of education by improving the qualifications of teachers and lecturers and increasing the average score of graduation in national exams.

Along with technological advances, it requires that each individual has the skills (skills) needed in the era of technological learning, among others: complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgement and decision making and service orientation. If all that has been fulfilled will be able to give birth to professional human resources and of course ready to use in accordance with the goals of the college and government expectations.

In the current era of technological disruption, it is needed that productive and skilled human resources that cover all aspects of the field of education, able to produce competent human resources, also supported by critical and creative human resources and have high skills. For this reason, an implementation of a learning system focuses on high creativity and critical thinking for learners, or commonly referred to as high order thinking skills (HOTS).

Effective learning in the era of technology no longer requires learners to memorize the understanding of concepts and applications, but must be higher than that, learners must be able to think critically and creatively and be able to cultivate high reasoning power. The role of educators must be able to create creative and innovative learning strategies and models to design learning as an instructional designer. In addition, effective learning in the era of technology requires educators to be able to recognize the character of their students, educators must be able to investigate learning situations and conditions in the classroom, must also be able to implement the right methods, models, learning strategies, and learning plans and also programs that vary in the learning process in the classroom. Learners are not only used as learning objects but also as learning subjects so that the learning process will become more involving to learners (student centered learning) instead of focusing on educators (teacher centered learning), and finally what is the hope is that the substance of learning can really be achieved.

Quality learning planning will have an impact on quality learning outcomes. "Design is not just what it looks like and feel, but design is how it works" (M. Rusdi, 2018). In other words, educators must have the ability to provide the presentation of learning materials in the classroom through methods, as well as interesting and even interactive models, so that it will be able to improve learners' learning outcomes. Quality learning design can be used with the help of interactive media. Jurnal Article, Adang (2016) says learning with the help of interactive I planning, implementation and evaluation are important to be applied first.

There are many kinds of techniques for presenting learning materials in the classroom including: discussion techniques, group work, simulation, demonstrations, tourist works, fieldwork, drills, Q&A, assignments, lectures, and so on. Jurnal article, Syabiq (2017) said the use of music tutorial media (piano) is able to improve the learning outcomes of music (piano) learners. Jurnal article, Agus (2020) said the use of learning videos strongly supports the success of learners, especially in practical learning and the use of learning videos.

The development of the world of technology is increasingly rapid, has great potential for the advancement of the world of education, and should be able to be implemented in the world of education. The development of the world of technology in Indonesia can be a very good potential in an effort to improve the quality of human resources (HR). Along with the progress of the times followed by technological advances that also affect the progress of the world of education, so inevitably demanding educators to be able to use variety and able to combine and collaborate techniques of presenting learning materials in the classroom that are mutually appropriate and mutually supportive combined with the use of learning media, such as computers, videos, radio, learning CDs, tutorials and various other technological tools. Journal article, Gandiwiria (2015) said the use of android-based applications (music) can facilitate the process of understanding, introduction, and memorising, so that the use of android-based applications is considered quite effective, fast, easy to understand is also educative and interesting and able to improve learning outcomes.

UNESCO (2002) states that the integration of ICT (information and communication technology) into the learning process has three main objectives, among others: (1) to build knowledge based society habits such as problem solving skills, communication skills, the ability to search, manage information and turn it into new knowledge, and communicate it to others, (2) to develop skills using information and computer technology (ICT). Literacy), and (3) to improve the effectiveness and efficiency of the learning process. Theoretically, ICT (information and communication technology) plays a very remarkable role in supporting

the occurrence of active, constructive, collaborative, intentional, conventional, contextual, and reflective learning processes.

The integration of ICT (information and communication technology) in the learning process occurs in all aspects of education, one of which is music education. Journal article, Rahendra (2014) said tutorial learning can be an interactive learning and can understand new science in terms of flash-based multimedia supported by action scrip and can meet the standard music playing material (piano) that is expected for music lovers. Journal article, Irvan (2013) said the development of interactive learning applications of multimedia-based piano game techniques can be used as a medium of music learning (piano). The research proves that the use of technology for learning is very beneficial.

The process of learning music is certainly very different from the learning process of other fields of study such as Mathematics, Chemistry, Physics, Religion, Indonesian, English, Sports and others. The process of learning music is more likely to practice skills or practice musical instruments (skills), psychomotor aspects are very instrumental. Journal article, Wilfrigus (2016) said the design of video-assisted quatum learning can improve psychomotor learning outcomes, because the audio and video elements presented simultaneously are able to provide a quick understanding of the material presented.

Cognitive aspects require learners to master the basic theoretical knowledge of music, so that it will facilitate learners in the process of practicing musical instruments (psychomotor). In addition to psychomotor aspects and cognitive aspects, music learning also requires learners to have a good level of musicality, able to hear sounds, able to feel sounds, able to sing sounds, even able to distinguish sounds, all of which complement each other, followed by affective aspects.

Affective aspects in art learning are able to provide opportunities for learners to develop more creative and creational thought processes. Learners are free to pour their thoughts in drawing paper (fine art), able to overflow their hearts (literary arts), free expression through movement (dance arts), and able to imagine and create (music art). So that unconsciously formed the character of the personality of positive learners. But the positive character can be hampered if the teacher provides learning instruction in accordance with the curriculum. So that the formation of character and personality of learners is not in accordance with internal factors, namely innate factors from within the child, but develops in accordance with the existing system.

Character values (moral) contained in the learning of art (music) include 1) the value of gotong royong, by playing music together children must pay attention to each other so that the music runs harmoniously, 2) the value of responsibility, when playing musical instruments ansamble (together) children must be responsible for the number of tones that must be played should not be more and should not be less, 3) The value of appreciating others, being able to regulate the volume of each musical instrument so that it sounds harmonious, so that people are comfortable, 4) the value of discipline, when playing music ansamble (together) each child must play according to their respective notation.

Universities in Indonesia are here to print educators in the field of music. The problems that arise so far when the admission of new students to music study programs and music education study programs in various universities in Indonesia still do not have the right and uniform assessment standards, so that students who are accepted into college have different levels of musical knowledge (cognitive) and musical skills (psychomotor), some prospective new students already have musical skills at a high level. Still at a low level, coupled with curriculum problems that are always changing. (Diah, 2013).

Music is one of the complex disciplines, encompassing theory and practice (performance) for it takes a professional educator to teach it. The values contained in music education in the implementation of the curriculum that color the process of education and learning of music education is the education of music teachers. In connection with this, music education graduates are expected to master the science of language and arts, able to develop science and technology and continue to a higher level, master the arts and additional skills to create jobs in the field of arts and relevant skills, master the approaches, methods and techniques of learning art, able as linguists because music uses a universal language, Arts education (music) also equips students with skills as art experts and art educators. (Diah Latifah, UPI curriculum document 2009:95).

Based on the symptoms and impiric facts that occur, it is analyzed how the process of learning music (piano) is carried out, is music (piano) supplied only as an introductory aspect of music aesthetically only or is music (piano) as a medium and introduction to music learning in school?

Medan State University (Unimed) has a Music Education Study Program (PSPM). The admission system of new students at Unimed through three selection pathways, among others, through the Invitation selection path, through the National selection path, and through the Mandiri selection path. At the PSPM Faculty of Language and Arts Unimed, prospective new students who are accepted have the initial ability of musical knowledge and different musical experiences. According to the data obtained, 40% of prospective students received came from SMK Negeri 11 Medan (music school), where the prospective students had already three years earlier studied music before entering the PSPM, of course their initial musical ability is much better than those from public schools.

Then 60% of prospective students come from public schools, where their initial musical ability is obtained self-taught, have derivative talents from parents, have taken music lessons and various others, of course their initial musical ability can not be said to be optimal. The initial ability of different students has an effect on determinants of success in the process of learning music, it happens because there is no standardization in the admission of new students. Research, I gusti Ayu 2016 said the admission of new students of church music study program in Ukrim does not have standards so that students who are accepted have different musical playing skills, some already have high musical skills even low, so that when lecturers' exams give different music practice questions, and they are declared graduated even though actually some students can not be said to continue piano lessons in the semester. Next. This happens because there is no standardization of graduation for piano subjects.

The Music Education Study Program (PSPM) has a vision, mission and goal that is to excel in the field of music education and music development, organize creative and innovative music learning and teaching, quality and character and produce qualified and professional graduates, so that Unimed as LPTK (educational institution of teacher training) is able to print prospective professional educators. To realize the vision of the mission is certainly not easy, it takes the creativity of lecturers in the learning process in the classroom, so that the vision and mission can be realized, one of which is in the form of learning model development.

Based on the aspect of empirical phenomena (gap phenomena), along with the advancement of science and technology modren at this time, that music science has affected almost most aspects of human life. Almost all sides of human life are always side by side with music, even music is believed to be a cure for disease, as a relaxation, as a therapy, as a lullaby, as entertainment, as a life encouragement, even the fetus that is guided by the mother can understand the language of music so as to make the fetus comfortable and so forth. All these things from ancient times until modern times are still done by humans to seek happiness and tranquility of life. By listening to music and playing music can bring about a happy effect. Music has the power to reduce the hardness of the heart and eliminate the grip of unfamiliar emotions and anger. (Djohan: 222, 2005).

How important music science is and its benefits in everyday human life. Based on this phenomenon, almost every public and private university with various majors and study programs recommends music (piano) as a compulsory subject for students to study. Even music tutoring places in Indonesia to the regions grow like mushrooms in the rainy season.

Based on various studies on piano learning in Indoensia it was found that piano research is still limited to piano learning strategies, piano learning methods, piano learning applications, piano learning media, piano learning process, piano learning application development, piano learning evaluation, efforts to improve piano learning outcomes, influence of piano learning models, piano learning design, piano learning tutorials and others and not yet. Some touch on the development of a real piano learning model.

There have been several studies on previous piano learning models but the research has not touched on the development of actual models that contain elements including: the use of learning theory, social systems, reaction principles, support systems, instructional impacts, and the impact of accompaniment. Based on the gap of phenomena outlined above, it is necessary to find a way out to overcome the problem of how to develop a real piano learning model.

Based on the research gap from the results of previous research found the problem that research on piano learning so far is still limited to the level of methods, strategies, media, applications, processes, efforts, influence, improvement, tutorials, design and others and has not touched on the actual model of piano learning. Agus Research, journal (2020) with the title "Designing video tutorials for keyboard instrument learning for beginners using the MDLC method". This research resulted in the design and development of keyboard-specific learning videos with an approach to implementing the MDLC method and the use of Adobe Premiere Pro CC 2019 development tools. The conclusion is that this study still uses methods that have not developed models.

Research Syabiq, journal (2017) with the title "Video Development Tutorial Learning Piano Music Instruments For Children with Special Needs". Learning media in the form of video learning tutorials intended for children with special needs to learn piano. The use of piano tutorial media is able to improve the learning outcomes of piano learners and has been tested by media experts and material experts and has passed several tests. This research is still researching how the making of piano tutorial videos has not examined the development of the real model.

Silvia research, journal (2015) with the title "Model of piano learning grade 1 in Adis musik Yogakarta". The results of research related to the learning model turned out that researchers only wanted to know the teaching books used in piano learning and the teaching book was used as a learning model. This research has not touched on the development of a real piano model.

Bay Ye research, journal Vol. 49 No. 1 (2018) under the title "conceptual models of Chinese Piano Music Integration into the Space of Modren Music". The study is limited to analyzing the global influence on modern Chinese piano art and examining the philosophical-aesthetic basis of the chinese composer's piano work, not yet into the development of the piano model. Ryan Daniel's research, journal (Taylor and Francis 2007) titled "Innovation in Piano Teaching: a Small Group Model For The Tertiary Level". This research explains the development of small group piano teaching approaches in college, not yet to the development of the piano model.

Many obstacles and obstacles in the process of piano learning in the classroom, the initial findings data in PSPM obtained, among others, are still not optimal mastery of basic music theory (TDM) students.

So important is this piano subject, so it is expected that when students have plunged into society, the ability of student piano practice is needed in the implementation of various music activities in school and outside school. To overcome the problems that occur in piano courses at PSPM, researchers try to collaborate between peer tutor learning and tutorial learning so as to give birth to the latest model, the TST model.

Material and Methods

This research uses the approach of research and development methods (Research and Development) which is a process used to develop and validate an educational product. The results of research and development in the form of new products learning models. The data used in the research development of the TST learning model is primary data obtained directly from the research subject and secondary data. This type of data is quantitative data in the form of questionnaires then analyzed by looking at the percentage difference in learning outcomes and using statistical tests. Product testing is a very important part of research and development (R&D) that aims to find out a product that has been made whether it is worth it or not. This trial was conducted three times: (1) trial I, (2) trial II, (3) trial III. With trials, the product will be tested empirically.

Results and Disccusion

Peer Tutor (TS)

Peer tutoring is a way of learning together with the help of peers, where friends who have high learning skills teach and help friends who have low learning skills (slow learners), with the understanding of friends who one teaches other friends, peer tutors can be from classmates or it can be from upperclassmen. Peer Tutor learning is able to improve the learning outcomes of music practice subjects. Irawan's research 2020 said the application of ICT-based peer tutor methods (information technology and comunication) is able to improve music learning outcomes. Peer tutor learning model can also be said to be active learning, because educators and learners are both involved in the learning process.

The learning process of peer tutors (theory classes) aims to master the basic theory of piano music that has been a problem so far. Classes will be divided into small groups of three or four people. Lecturers and peer tutors synergize to play an active role in guiding, guiding, directing and practicing (performance) in the learning process of peer tutors which includes Q&A, explanation of teaching materials, oral and written exercises, practices, and evaluations that are carried out repeatedly until students really understand. The presence of peer tutors is expected to be a problem solver faced by students, students can ask freely, not hesitate, not afraid, and not ashamed.

Tutorial (T)

Tutorial learning models are used to help and facilitate students to practice the basic theory components of piano music that have been given to previous peer tutor classes. The tutorial learning model designed can be easily accessed by students through internet media (online), it can also be in the form of off line, the researcher himself who acts as a tutorial model in the video. The use of tutorial learning media is quite

practical because the use can be done repeatedly until students understand, thus it is expected that the learning outcomes of student piano practices will increase. Ghandiwiria et al 2015 journal article said the use of applications facilitates the process of introduction, understanding, and memorization of musical notation forms and tone stairs so that it becomes more efficient, fast, easy to understand and educative and interesting.

Tutorial learning through e-learning can be said as a remedial learning program, this program is punished to learners who have difficulty in understanding and mastering teaching materials provided by teachers face-to-face in class. For learners who are classified as slow learners it is highly recommended to take advantage of e-learning, especially tutorials, which aim to make it easier for learners to understand teaching materials". (Dedi Darmawan, 2014:30).

Stages of Tutorial learning (T)

- 1. Planning steps include:
 - a. Study teaching materials and identify teaching materials that are difficult to understand
 - b.Develop guidance strategies with the help of tutorials
- 2. Preparatory steps include:
 - c. Prepare learning facilities and infrastructure
 - d. Prepare simple practice questions to find out the initial ability
- 3. Implementation steps include:
 - e. Identify learners who have difficulty with the teaching materials that have been given.
 - f. Carry out tutorials using steps that have been prepared in advance.
- 4. Evaluation and Closing Steps include:
 - g. Do a Q&A to ensure that learners have successfully overcome their learning difficulties.

h. Provide independent tasks that aim to strengthen and expand the insight of learners' knowledge of the teaching materials that have been given.

Stages of Peer Tutor Learning (TS)

A. Preparatory Stages Include:

a. Lecturers design a subject of teaching along with instructions for the implementation of tasks that must be completed.

b. Lecturers choose some outstanding students to be peer tutors.

c. Lecturers hold peer tutor training for tutors, where students who become tutors act as lecturers.

d. Lecturers divide students into small groups.

B. Implementation Stages Include:

- a. Lecturers first explain the subject matter to students.
- b. Peer tutors help students by asking about material that is not yet understood.
- c. Lecturers keep an eye on the learning process with peer tutors in the classroom.

- d. Lecturers move groups to help students' learning difficulties.
- C. Evaluation stages include:

a. Before the learning process ends, lecturers give final tests to find out the extent of students' mastery of the subject that has been given before.

b. Lecturer Q&A to students, lecturer Q&A to peer tutors.

From the stages of peer tutor and the tutorial stages above, it can be formed the stages of TST model development, among others:

A. Preparatory stages include:

- 1. Lecturers divide into small study groups based on low, medium, and high learning abilities.
- 2. Lecturers share teaching materials that are difficult for learners to understand.
- 3. Lecturers explain teaching materials to students.

B. Implementation Stages Include:

- 1. Lecturers guide the use of tutorial media to help students' learning difficulties.
- 2. Peer tutors help guide the use of tutorial media while asking students about the difficulties faced.

C. Evaluation stages include:

- 1. Q&A and feedback
- 2. Guidance and direction and motivation.

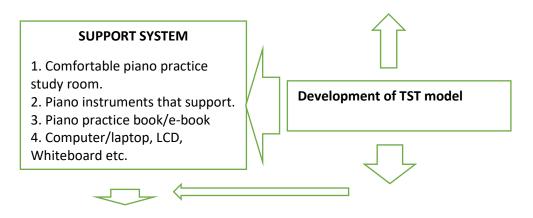
3. Before the learning process ends, lecturers give final tests to find out the extent of students' mastery of the subject that has been given before.

Here's The TST Model Concept Outline Chart

PRINCIPLE OF REACTION

1. Lecturers and peer tutors act as facilitators and motivators. (Eggen&Kaucak 1996, Stahl 1999 2. Students act as objects (student centered learning not teacher centered learning) (Makarao 2009, Vigotsky).

3. Results of student piano practice in the form of performance (Ahmadi&Supriyono, 2004, Vigotsky)



INSTRUCTIONAL EFFECT

 Ability to solve problems.
 Ability to work together in a team.
 The ability to communicate.
 Ability to build your own knowledge.
 Ability to master ICT (Unesco 2002)

NURTURANT EFFECT

 Ability to use time effectively.
 Responsible.
 Good skills / skills
 Discipline.
 High Skill.

SOCIAL SYSTEM

1.Active interaction of the learning process between lecturers, peer tutors, and students.
2.Active communication interaction between lecturers, peer tutors and students.
3.Results of student piano practice in the form of performance.
4.Lectures as
Facilitator(Egen&Kaucak, 1996, Stahl, 1999, Jean Piaget, 1989)
5.Lecture as Motivator
(Egen&Kaucak, 1996, Stahl, 1999, Jean Piaget, 1989)
6.Lecture as guide

SINTAKS MODEL TST

1.	STAGES OF PREPARATION OF TST MODEL		4. TST MODEL
2.	STAGES OF IMPLEMENTATION OF THE TST MO	DEL	LEARNING FINDINGS
3.	STAGES OF EVALUATION OF TST MODEL		

Table 1. Product Trial Samples by Experts

Test Stages	Sum	Sample	Process and Results
Try	Sample	Characteristics	Trial
Expert Test	3 People	Materials expert Media expert Design expert, Lecturer (Criticism,and suggestions)	*Qualitative (expert judgment), kuesoner and quantitative feasibility percentage *Initial draft of teaching material products, Feasibility of teaching material content, and Feasibility of teaching material presentation structure. *Product repair draft teaching materials (product

	revision I)

Table 2. Sample Product Trials by Students

Test Stages	Sum	Sample Characteristics	Process and Results
Try	Sampel		Trial
User Trial (Student)	24 people	Product Users: Lecturers and Students (Criticism and suggestions)	*Qualitative (expert judgment), kuesoner and quantitative feasibility percentage *Initial draft of teaching material products, Feasibility of teaching material content, and Feasibility of teaching material presentation structure. *Product repair draft teaching materials (product revision I)

Table 3.Grid of research instruments for material experts:

Criteria	Research Variables	Respondent	Indicator	Number of items
	Quality of Learning Process	Materials Expert	 Quality of material presentation techniques Quality of opening words SCL or TCL class activities Time required Quality of theory/practice 	5
Quality of content	Quality of	Materials	1. The purpose of learning	5

eligibility	learning materials	expert	is clear or not 2.Proper material coverage or not 3. Material or not 4. Depth of matter 5.According to the curriculum or not	
Grammar	Quality of defense material	Materials expert	 Accuracy of grammar use Ease grammar comprehension Grammar is easy to digest 	3
Picture	Image quality	Materials expert	1. Full Coloured 2.Pictures are interrelated	2

Tabel 4.Research Instrument Grid For Learning Design For Design Experts

Criteria	Research Variables	Respondent	Indicator	Number of items
Picture	Image delivery quality	Design Experts	 Color accuracy Accuracy of font type/size 	2
Presentation Technique	Design quality	Design Experts	 Introduction Description of the material is clear or not Give clear examples or not Learning time Q&A/discussion 	5

Quality of	Design quality	Design Experts	1. Accuracy of topic	3
content eligibility			2. Consistency of matter	(Number of
engionity			3. Consistency of practice	items 10)

Table 5. Piano practice performance instrument grid for students

Skill	Form of assessment	Assessment Goals	Task Description
Piano practice	Performance (individual piano practice)	The process of individual piano practice	 Practice the piano by reading the notes on the two key marks correctly (key G and key F) Practice piano by reading ritem patterns correctly Practice the piano by reading the chromatic mark correctly

The type of data obtained from the results of feasibility tests (validation) by experts and trials by students and lecturers is quantitative and qualitative data. Qualitative data consists of comments and suggestions on the test questionnaire sheet, while quantitative data consists of a number / score of 1,2,3,4 which is then averaged and percentageed. Then the final product results in the trial are wider to lecturers and students with data processed in the form of percentage results. The data analysis technique used to analyze the data of feasibility assessment results is with descriptive analysis techniques. As for the percentage descriptive techniques to be used, are as follows:

Percentage = Σ (answer x weight of each option)

x 100

(n x weight of each option)

Information:

∑: Number

n : The total number of items

Table 6. Results of Assessment of Student Needs Analysis

No	Assessment Aspects	Average	Category
1	Pedagogical Competence of Lecturers	90,46	Very worthy
2	Learning Materials	90,70	Very worthy
3	Student ability	90,54	Very worthy

NO	Validator	Suggestions/Input etc
1	Media Members	It is necessary to make piano mastery measurement techniques to be more valid.
2	Design Expert/Model Expert	To be clear about the learning process in the classroom with the TST model.
3	Materials Expert	The appearance of teaching books to be made attractive and full coloured / colored so that students can easily understand the material.

 Table 7. Results summary of Expert Advice for Research Products

Table 8. Percentage of Results from One-On-One Trial

NO	Component	Average	Persentage	Result
1	Design (display quality) Learning Model (Model book)	4,11	82,22%	Very worthy
2	Implementation (quality of material) Learning Model (Teaching book)	4,00	80,00%	Very worthy
3	Evaluation (quality of learning) Learning Model(Guidebook)	3,83	76,67%	Proper
	Average		79,63%	Proper

Table 9. Small Group Trial Results

No	Component	Average	/Presentage	Result
1	Design (display quality) Learning Model. (Model Book)	37,2	5(8,35%)	Very worthy
2	Implementation (material quality) of the Learning Model. (Teaching Book)	3,8	(8,50%)	Very worthy
3	Evaluation (quality of learning) Learning Model (Guidebook)Continued Revision	3,96	(8,90%)	Very worthy
	Average	3,82	(8,53%)	Very worthy

Tabel 10. Large Group Trial Results

NO	Component	Presentage	Result	
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1	Design (display quality) Learning Model. (Model Book)	3,73	Very worthy
2	Implementation (material quality) of the Learning Model. (Teaching Book)	3,75	Very worthy
3	Evaluation (quality of learning) Learning Model (Guidebook) Continued Revision	3,70	Very worthy
	Average	3,72 (8,28%)	Very worthy

Tabel 11. Summary of eligibility validation results from experts:

Expert Member	Value	Percent	Category
1.Teach Books	3,44	85,94%	Very worthy
2. Model Book	3,36	84%	Very worthy
3.Guidebook	3,11	77,78%	Proper

Tabel 12. Summary of eligibility validation results from students

One-on-One Trial	Percent	Category
	79,63%	Proper
Small Class Trials	Percent	Categori
	8,53%	Very worthy
Large Class Trials	Percent	Category
	8,28%	Very worthy

Tabel 13.Summary of eligibility validation results from small class lecturers

Teach Book	Average	Category

	87	Very worthy
Model Book	Average	Category
	87	Very worthy
Lecturer's Guidebook	Average	Category
	90	Very worthy
Student Guidebook	Average	Category
Average	86,6	Very worthy

Tabel 14. Summary of eligibility validation results from small class students.

Teach Book	Average	Category
	86	Very worthy
Model Book	Average	Category
	86,2	Very worthy
Lecturer's Guidebook	Average	Category
	90	Very worthy
Student Guidebook	Average	Kategori
	86,6	SangatLayak

Tabel 15. Summary of eligibility validation results from large class lecturers

Model Book	Average	Category
	87	Very worthy
Teach Book	Average	Category
	87	Very worthy
Lecturer's Guidebook	Average	Category
	88	Very worthy
Student Guidebook	Average	Category
	90,54	Very worthy

Tabel 16. Summary of eligibility validation results from large class students

Model Book	Average	Category
	90,46	Very worthy
Teach Book	Average	Category
	90,70	Very worthy
Lecturer's Guidebook	Average	Category
	88	Very worthy
Student Guidebook	Average	Category
	90,54	Very worthy

Conclusion

Based on the expert tests of one-time trials, small group trials, large group trials of research products namely model books, teaching books, lecturer manuals, and student guidebooks on students and lecturers, it can be concluded that the TST model is said to be feasible to improve student piano learning outcomes in PSPM.

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