# ART AND PROBLEM BASED LEARNING MODEL AS LEARNING INNOVATION AT FTI PERBANAS

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## ABSTRACT

*The learning process that is currently delivered still makes students complacent with their inactivity, many students are still reluctant or embarrassed to ask about learning materials that have not worked, are still working together between friends in learning groups on problems, students are more waiting for answers from active friends, and also students still think that lecturers are the only source of learning. The learning process above can lead to low student scores because students do not master the course. To solve this problem, we need an innovative and fun learning model, namely problem-based learning models and art. In this problem-based learning, the lecturer links the learning material with cases in the real world so that students can be more excited and interested in the course. And so that what attracts students more interest in learning, art will also be included in this learning, in the form of song lyrics. The song lyrics are used and are invincible with the theme of the learning material. Utilization of the use of song lyrics which are rich in content that affect student interaction in learning. With this learning innovation, it can improve student learning outcomes.*

**Keywords:** Problem Based Learning, Learning Model, Art

## INTRODUCTION

The quality of education in a good tertiary institution will certainly produce good quality graduates who are ready to compete in the international world. Especially now that the world of work really needs college graduates who have the ability to think highly, who can solve problems and also work collaboratively.

Each graduate must have adequate abilities or competencies, as well as graduates from the Asian Banking and Informatics Institute of Finance (IKPIA) Perbanas. Graduates of the Information Technology Faculty (FTI) IKPIA Perbanas are expected to have competence among other institutions and integrate data to produce good quality information, be able to solve/solve problems, this is in line with previous research (Olsen & Dupin-bryant, 2016).

Based on the results of observations on the modules made by the lecturers, it was found that the modules were arranged very simply. The learning method currently applied is by lecturing, discussing and submitting assignments both individually and in groups. The problem that solves student problems in some subjects is that they have difficulty solving or solving the problems given. One of the reasons is that many students are less active and Christian, besides that students are also less creative in finding and reading other reading sources to broaden their insights. Another related problem is that there are still many students who ask about learning materials that have not worked, they are still working together between friends in the learning group in solving problems, they are more waiting for answers from the only learning source. The learning process above can lead to low student scores because students do not master the course.

Therefore, to overcome the above problems, lecturers can teach information literacy, collaboration, communication, problems, and creativity (de Bruijn, 2014), lecturers can also carry out innovative and fun learning practices, namely by problem-based learning and art. Problem-based learning is a learning approach that helps students to find problems from real events, information collected through self-determined strategies to make a problem decision which will then be presented in the form of performance.

In this problem-based learning, the lecturer links learning material with problems or cases that develop in the real world so that students can be more excited, excited, interested in the courses given, thereby stimulating students to be more active. This is because in learning students are required to be able to solve problems by conducting and investigating. The application of problem-based learning trains students, analyzes and solves problems (Chou & Chin, 2009), can work collaboratively in groups, communicate effectively. Problem Based Learning makes learning more effective and long-term knowledge retention (Yew & Goh, 2016), and learning becomes more learner centered (Marra et al., 2014), a paradigm that is more suitable for preparation. Students in the 21st century (Gwee, 2009), with a prepared learning model, students can be more competent in their fields.

In order for learning to increasingly attract students' interest, art is also included in this learning, in the form of songs, where the song lyrics used are adjusted to the material theme of the course. The use of songs that are rich in content that can affect the interaction of students in learning, students' understanding of the concept of learning increases (Crowther, 2012; Governor et al., 2012), besides songs, poetry and other arts can also hone critical skills and clear communication, this is very useful in understanding, solving problems (Brown, 2015).

## LITERATURE REVIEW

The model is a reflection of reality, a temporary substitute for something more specific, real and very helpful in explaining things that may be difficult to explain (Brown & Green, 2016). The model represents the reality presented in a tiered and ordered structure, the model is usually a simplified and idealized view of reality (Richey et al., 2011). Conceptual models are general and abstract theoretical descriptions in describing views of reality, synthesis and research with the support of limited experience or data (Suparman, 2014). While the procedural model shows a series of steps to do a job.

The definition of learning is anything that is done on purpose to facilitate learning (Reigeluth, 2009). Another opinion states that learning is a series of activities planned in advance by the education provider or by the teacher and directed at certain learning outcomes (Suparman, 2014). Learning is a systematic process in which learning components (such as teachers, students, teaching activity materials, delivery systems, learning environments) are interconnected and interact to determine the success of learning (Dick et al., 2015).

Some of the learning models include: Direct Instruction Model, Concept Achievement Model, Concept Development Model, Inductive Model, Question Model, Problem Based Learning Model, Cooperative Learning Model (Kilbane&Milman, 2014). Problem Based Learning Model is an effective model for teaching students how to solve authentic problems; develop critical, cooperative, and social thinking skills; and encouraging independent learning (Kilbane & Milman, 2014).

The steps in the Problem Based Learning Model to be developed in this study are the Problem Based Learning Model consisting of seven steps:

    (1) Clarifying problems and concepts
    (2) Formulating problems
    (3) Analyzing problems
    (4) Organizing ideas systematic
    (5) Determining Learning Objectives
    (6) Looking for additional information from various sources
    (7) Thesising and testing new information (Amir, 2016).

In a broad sense, art is all efforts to give inner form to life and the universe, various ways to breed inner aspirations through the creation of objects and events. Art is also an experience of intense immersion between the subject and the world outside it, such experiences actually occur in everyday life (Sugiharso, 2020), Bambang's statement is also strengthened by (Coutts & De Eca, 2019) that art is part of human life and can be found or created through our daily activities.

The art that will be used in this research is the art of music, namely song lyrics. With music, students are expected to be more active in expressing their opinions or ideas, as stated by (Sugiharso, 2020) that music can represent certain ideas, stories, behaviors or atmosphere, can function education, can ignite aggressive instincts. Next to that song, Use the Music, paintings, poetry, poetry, games and dances are part of daily routines such as praying and telling stories (Samuelsson et al., 2009). Apart from the things that have been discussed above, it turns out that music has a strong influence on the learning environment. Research shows that learning is easier and faster if students are relaxed and receptive (Supradewi, 2010), learning with songs improves students' understanding (Subali&Handayani, 2012).

## METHODOLOGY/MATERIALS

This type of research is literature review, this study uses literature review sources. The journals selected in this study are journals related to problem-based learning models and learning using art which are intended to improve student abilities. The journals selected are in the range of 2016-2018.

| No | Author | Objective | Method | Result |
|---|---|---|---|---|
| | | **Table 1** | | |
| | | **RELATED RESEARCH** | | |
| No | Author | Objective | Method | Result |
| 1 | (Phungsuk et al., 2017) | The results of the application of PBL were analyzed using a virtual learning environment model | Test model efficiency | There is an increase in students' learning abilities and problem-solving skills after PBL is carried out in a virtual learning environment. |
| 2 | (Assegaff & Sontani, 2016) | With the PBL model there is an increase in students' analytical thinking | quasi experimental method | Has a significant effect on improving students' analytical thinking skills in the Basic Competence of Making Meeting Plans or Meetings in Class XI SMK. |
| 3 | (Aidoo et al., 2016) | investigated the effect of problem-based learning on student achievement in chemistry. | Quasi experimental design | PBL as a student-centered approach is effective in teaching and learning Chemistry to improve student achievement |
| 4 | (Satwika et al., 2018) | The PBL model is applied to the social psychology course in the psychology department of the UNESA Faculty of | Classroom Action Research | It can be seen that there is an increase in the student's ability to think critically after using the PBL model |

| | | Education. | | |
|---|---|---|---|---|
| 5 | (Argaw et al., 2017) | See how PBL strategies affect students' problem-solving skills and also increase student motivation in learning. | pseudo experiment | PBL as a teaching method that is more effective for selected physics topics compared to conventional teaching methods. |
| 6 | (Yew & Goh, 2016) | discusses a number of naturalistic and empirical studies that have examined the PBL process and how its various components impact student learning. | comparing the relative effectiveness of PBL | PBL is the right model to use, and the knowledge gained from learning is not easily lost |
| 7 | (Radia, 2018) | To improve the learning outcomes of 4th grade students by using songs as a learning medium. | Classroom Action Research using Kemmis and Taggart's Model | Songs are an effective learning medium to use in social studies learning because they can help students memorize learning material and carry out active and fun learning |
| 8 | (Azimah & Utomo, 2018) | Knowing and describing the teacher's creativity in using songs in thematic learning. | Qualitative research methods. | Teacher Creativity in Using Songs in Thematic Learning in Elementary Schools |
| 9 | (Yoon & Kim, 2017) | See how prospective teachers understand science processing skills and their attitudes towards science after being given a science song project. | using two instruments, namely the pre-and post-self-efficacy test. | while developing the song, participating teacher candidates experience the practice of science processes, understand science concepts and facts, and promote positive attitudes towards science. |

## RESULTS AND FINDINGS

In the conceptual model design, determining the roles of students and lecturers is important to maximize the effectiveness of the model. Students and lecturers have their respective roles. Students play a role in finding information that they do not know, receiving information from various parties and also sharing the information they have. Students have the task of deciding what and how they want to learn following the concept of 'self-study'. This means students must manage their own time efficiently and be invested in every step of the learning process.

The role of a lecturer in this model is to plan and implement the program and also as a facilitator in the learning of a course so that learning runs smoothly.

In order for students to easily remember and understand the theoretical material, an approach was made using songs, some researchers as discussed above stated that songs can improve understanding in learning. The song used is a song that is popular among students, then in groups of students are asked to change the song's lyrics with learning material and sing it in front of the class. By understanding the concept of a subject properly and correctly, it will greatly support students in completing exercises and solving problems given. The giving of problem-based exercises and assignments is intended so that students can have the ability to apply, analyze, evaluate and create.

Problem-based learning that is applied is to use 7 steps, consisting of:

1. Students in groups must actively seek explanations of unclear terms and concepts of subject matter, so that each member in the group really understands the various terms and concepts that exist in the problem.
2. Students in groups conduct active discussions in formulating problems, the phenomena that are in the problem with respect to the subject matter which demands an explanation of the relationships that occur between these phenomena.
3. Students in groups analyze existing problems, all members express their opinions regarding the knowledge they already have regarding the problems given. With the sharing of opinions, all group members have

extensive knowledge. This is where group members train their courage in explaining, asking questions related to the problems given.

4. Organize ideas and systematically analyze them deeply. The parts that have been analyzed are related to one another, grouped; which ones support each other, which ones are contradictory, and so on. Analysis is an attempt to sort something into the parts that make up it.

5. The group formulates learning objectives because the group already knows which knowledge is still lacking, and which is still unclear. Learning objectives will be linked to the problem analysis made. This learning objective is made for the basis of individual assignments in each group.

6. Seek additional information from other sources (outside of group discussions). In this step, the group already knows what information it doesn't have, and already has a learning objective. They should look for that additional information, and decide where to look. They have to set a schedule, determine the source of information. Each member must be able to learn on their own effectively, in order to obtain relevant information. Learners must choose, summarize learning resources in their own sentences. The activeness of members is evidenced by reports that must be submitted by each individual/sub-group who is responsible for each learning objective.

7. The final step is to synthesize (combine) and test new information, and make reports for lecturers/class, individual/sub-group reports presented in front of other group members. Members who hear the report must be critical about the report presented, and to increase the interest and enthusiasm of students in joining this class, besides making the final report.
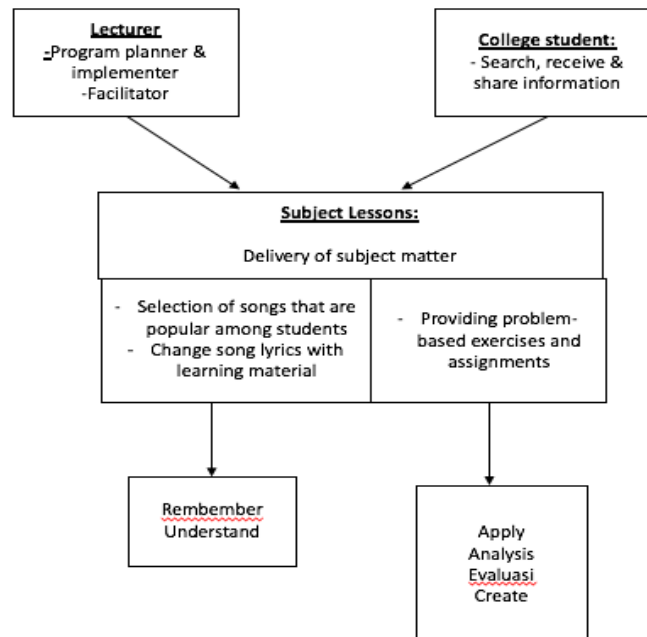


**FIGURE 1**
**PBL & ART PROCEDURAL MODELS**

**CONCLUSION**

The problem-based and art-based learning model at FTI Perbanas makes learning more fun and interesting for students in attending lectures, students are required to be more active in the lecture process, they are no longer shy to ask questions or express their opinions in public. With this learning model students are also more independent, and their abilities increase in analyzing and solving problems.

# REFERENCES

Aidoo, B., Boateng, S.K., Kissi, P.S., & Ofori, I. (2016). Effect of problem-based learning on students' achievement in chemistry. *Journal of Education and Practice, 7*(33), 103–108.

Amir, M.T. (2016). *Educational innovation through problem based learning: How educators empower students in the age of knowledge.* Dating.

Argaw, A.S., Haile, B.B., Ayalew, B.T., &Kuma, S.G. (2017).The effect of Problem Based Learning (PBL) instruction on students' motivation and problem solving skills of physics. *Eurasia Journal of Mathematics, Science and Technology Education, 13*(3), 857–871.

Assegaff, A., & Sontani, U.T. (2016). Efforts to improve analytical thinking ability through model Problem Based Learning (PBL). *Journal of Office Management Education, 1*(1), 38.

Azimah, N., & Utomo, U. (2018). Teacher creativity in using songs in thematic learning in elementary schools. *Journal of Music, 7*(1), 25–33.

Brown, A., & Green, T.D. (2016). *The essentials of instructional design: Connecting fundamental principles with process and practice.* Routledge.

Brown, S.A. (2015). Creative expression of science through poetry and other media can enrich medical and science education. *Frontiers in Neurology.*

Chou, F., & Chin, C. (2009). Experience of problem-Based learning in nursing education at kaohsiung medical university. *The Kaohsiung Journal of Medical Sciences, 25*(5), 258–263.

Coutts, G., & De Eca, T. (2019). *Learning through art : Lessons for the 21st century ?* INSEA Publication.

Crowther, G. (2012). Using science songs to enhance learning: An interdisciplinary approach. *CBE Life Sciences Education, 11*(1), 26–30.

deBruijn, S.M. (2014). Challenge for 21$^{st}$ century educators : Build a 1$^{st}$ century attitude. *Proceedings of the Third International Conference on Argumentation and Rhetoric,* 1–9.

Dick, W., Carey, L., & Carey, J. (2015). The *systematic design of instruction (8$^{th}$ edition).* Pearson.

Governor, D., Hall, J., & Jackson, D. (2012). Teaching and learning science through song: Exploring the experiences of students and teachers. *International Journal of Science Education, 35*(18), 3117–3140.

Gwee, M. (2009). Problem-Based learning : A strategic learning system design for the education of healthcare professionals in the 21$^{st}$ century. *The Kaohsiung Journal of Medical Sciences, 25*(5), 231–239.

Kilbane, C., & Milman, N.B. (2014). *Teaching models : Designing instruction for 21$^{st}$ century learners.* Pearson.

Marra, R., Jonassen, D., Palmer, B., & Luft, S. (2014). Why problem-based learning works: Theoretical foundations. *Journal on Excellence in College Teaching, 25,* 221–238.

Olsen, D.H., & Dupin-bryant, P.A. (2016). With popular culture. *Review of Business Information Systems, 20*(1), 13–28.

Phungsuk, R., Viriyavejakul, C., & Ratanaolarn, T. (2017). Development of a problem-based learning model *via* a virtual learning environment. *Kasetsart Journal of Social Sciences, 38*(3), 297–306.

Radia, E.H. (2018). Efforts to improve social studies learning outcomes by using songs as learning media. Trihayu: *An Elementary School Education Journal, 4*(2), 314–326.

Reigeluth, C.M. (2009). *Building a common knowledge base.* Routledge.

Richey, R.C., Klein, J.D., & Tracey, M. (2011). *The instructional design knowledge base: Theory, research, and practice.* Routledge.

Samuelsson, I.P., Carlsson, M.A., Olsson, B., Pramling, N., & Wallerstedt, C. (2009). The art of teaching children the arts: Music, dance and poetry with children aged 2–8 years old. *International Journal of Early Years Education, 17*(2), 119–135.

Satwika, Y.W., Laksmiwati, H., & Khoirunnisa, R.N. (2018). Application of the problem based learning model to improve critical thinking ability of students. *Journal of Education, 3*(7), 7–12.

Subali, B., & Handayani, L. (2012). Development of children's song learning cd to grow science understanding of elementary school students. *Indonesian Journal of Physics Education, 8*(1), 26–32.

Sugiharso, B. (2020). *What is art for? UNPAR Humanities Book Series.* Matahari Library.

Suparman, A. (2014). *Modern instructional design a guide for educators and educational innovators.* Erlangga.

Supradewi, R. (2010). Brain, Music, and Learning Process. *Bulletin Psychology, 18*(2), 58–68.

Yew, E.H.J., & Goh, K. (2016). Problem-Based learning: An overview of its process and impact on learning. *Health Professions Education, 2*(2), 75–79.

Yoon, J., & Kim, K.J. (2017). Science song project: Integration of science, technology and music to learn science and process skills. *K-12 STEM Education, 3*(3), 235–250.