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Research Article

Implementation of Problem-Based Learning Model with Animated Video Media to Improve Motivation, Creativity, and Economics Learning Outcomes at MA Salafiyah

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Abstract: This study investigates the implementation of the Problem-Based Learning (PBL) model integrated with animated video media to enhance student motivation, creativity, and learning outcomes in economics at MA Salafiyah. Employing a classroom action research approach with a pretest-posttest design, the research involved 35 grade XI students. Data were collected through observation sheets, motivation and creativity questionnaires, and learning outcome tests. The Shapiro-Wilk test was used to assess data normality, while the Wilcoxon Signed Rank Test evaluated the significance of differences between pretest and posttest scores. The findings reveal that the application of PBL with animated video media significantly improves student motivation, creativity, and learning outcomes. Students demonstrated increased engagement, generated more creative ideas, and showed deeper understanding of economic concepts. Motivation was reflected in higher posttest scores and active participation, while creativity was evident in the ability to propose innovative solutions and think critically. Learning outcomes improved substantially, with average scores rising from 46.142 (pretest) to 83.571 (posttest). The integration of animated video media in PBL created a dynamic and interactive learning environment that facilitated comprehension, stimulated interest, and encouraged practical application of knowledge. This study concludes that PBL supported by animated video media is an effective pedagogical strategy for improving educational quality in economics learning.

Keywords: Animated Videos; Learning Creativity; Learning Motivation; Learning Outcomes; Problem-Based Learning

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1. Introduction

Ministry of Education and Culture Regulation No. 103 of 2014 emphasizes that students are active subjects in the learning process who are required to be able to seek, process, and create knowledge (Rosana, 2021). However, the reality of learning is still dominated by conventional teacher-centered models, so that students tend to be passive and unmotivated. One learner-centered learning model is Problem-Based Learning (PBL), which has been proven effective in increasing motivation, creativity, and learning outcomes (Darwati, 2021; Isnawati & Samian, 2015). PBL is relevant to be applied at the high school/MA level because it trains critical thinking, analytical, and real problem-solving skills (Ariyani & Kristin, 2021).

Observations and interviews at MA Salafiyah Cirebon show that student motivation, creativity, and learning outcomes are still low. Only 49% of students meet the learning outcome achievement criteria (KKTP). This is due to the dominance of lecture methods and the lack of use of learning media. Previous studies have confirmed that the use of animated

video media can increase motivation and creativity, as well as facilitate the understanding of abstract concepts (Agustia et al., 2025; Fitriani et al., 2024; Sunami & Aslam, 2021). Therefore, the application of the PBL model assisted by animated videos is seen as an innovative solution to increase student motivation, creativity, and learning outcomes, especially in economics learning at MA Salafiyah Cirebon.

Ministry of Education and Culture Regulation No. 103 of 2014 emphasizes that students are active subjects in the learning process. This paradigm requires students to not only be recipients of information, but also to play an active role in seeking, processing, and creating new knowledge (Rosana, 2021). This principle is in line with the goals of 21st-century education, which emphasizes the mastery of critical thinking, creativity, collaboration, and communication skills. However, the reality of learning in the field often shows practices that are not in line with this policy, so that learning transformation needs to be continuously encouraged in order to achieve a balance between theory and implementation.

In reality, learning in various educational units is still dominated by conventional methods that focus on educators. Learning models such as lectures and question and answer sessions still dominate classrooms, so that students tend to be passive, less actively involved, and have low motivation to learn. This condition has implications for students' limitations in developing their potential, especially in terms of creativity and critical thinking skills. Thus, an innovative learning approach is needed that can shift the dominance of educators towards the role of facilitators, while students take the position as the main subjects of learning.

One learning model that is in line with this paradigm is Problem Based Learning (PBL). PBL emphasizes the provision of contextual problems as triggers for the learning process, so that students are trained to think critically, analyze information, and develop creative solutions (Darwati, 2021; Isnawati & Samian, 2015). Various studies have shown that PBL can significantly increase student motivation, creativity, and learning outcomes. The relevance of applying PBL at the high school/MA level is also very high, considering that this level is a period for forming the higher-order thinking skills needed to face global challenges (Ariyani & Kristin, 2021).

Based on observations and interviews at MA Salafiyah Cirebon, it was found that the motivation, creativity, and learning outcomes of students were still relatively low. The data shows that only 49% of students have achieved the learning outcome criteria (KKTP). This condition is caused by the dominant use of lecture methods, which make the learning atmosphere monotonous and less challenging. In addition, the limited use of learning media reinforces the tendency for low student engagement in the learning process, so that learning has not been able to optimally foster intrinsic motivation and creativity.

In line with this, previous studies have confirmed that the use of animated video media can be an effective solution to overcome the limitations of conventional learning. This media is capable of presenting abstract concepts in a more concrete, interesting, and easy-to-understand manner (Agustia et al., 2025; Fitriani et al., 2024; Sunami & Aslam, 2021). Animated videos not only increase student attention, but also facilitate diverse learning styles and foster interest in learning through the visualization of interesting material. Therefore, the integration of animated video media into active learning models, such as PBL, is believed to strengthen the effectiveness of learning.

Thus, the application of the Problem-Based Learning model assisted by animated video media is considered a relevant innovation to improve the quality of learning, especially in economics subjects at MA Salafiyah Cirebon. The collaboration between PBL, which focuses on student engagement, and interactive animation media will create more meaningful, challenging, and enjoyable learning. This effort is expected to not only increase motivation and creativity, but also have a positive impact on the overall learning outcomes of students. Therefore, research on the implementation of PBL assisted by animated videos has theoretical

and practical significance in the development of innovative learning strategies in the era of modern education.

2. Preliminaries or Related Work or Literature Review

Learning Motivation

Learning motivation is an internal or external drive that fosters enthusiasm, persistence, and direction in students' behavior to achieve learning goals (Harbeng Masni, n.d.; Sobri, 2020; Indayani, 2023). Motivation, whether intrinsic or extrinsic, plays an important role in learning success because it influences student participation, focus, and achievement (Efni, 2024).

Learning Creativity

Creativity is the ability to generate new and original ideas or works through creation, combination, or modification of ideas (Hasanah et al., 2023). In learning, creativity includes divergent thinking, curiosity, and exploration so that students are able to understand abstract concepts and solve problems innovatively and adaptively (Chrismastianto, 2015; Ramadhan & Hindun, 2023; Fitri et al., 2025).

Learning Outcomes

Learning outcomes are the achievements of students after the learning process, which include cognitive, affective, and psychomotor aspects, reflected in changes in knowledge, attitudes, skills, and behavior (Nurrita, 2018; Nurbudiyani, 2013). Learning outcomes serve as a benchmark for mastery of competencies through systematic evaluation (Baktiningsih et al., 2021).

Learning Models

Learning models are conceptual guidelines for educators in designing systematic learning processes, including steps, interactions, and support systems to achieve learning objectives. Their application helps create effective learning environments and improve learning outcomes (Joyce & Weil, 1992; Norsandi & Sentosa, 2022).

Problem-Based Learning Model

Problem-Based Learning (PBL) is a learning model that confronts students with real-world problems as learning stimuli to develop understanding, motivation, creativity, and problem-solving skills (Sipayung et al., 2024; Darwati, 2021). PBL emphasizes student activity in finding solutions, thereby not only improving mastery of the material but also equipping students with practical skills (Fonna & Nufus, 2024).

Learning Media

Learning media is an intermediary tool that helps educators convey material so that it is easier for students to understand (Indriyani, 2019). The use of appropriate media can increase motivation, creativity, and learning outcomes (Putri et al., 2022; Khasanah & Rigianti, 2023).

Animated Video Media in Learning

Animated videos are audio-visual learning media that present material with moving images and sound in an interesting way (Sukmana, 2018; Wihartono, 2022). Their use effectively increases motivation, creativity, and learning outcomes of students (Pasampuri et al., 2024).

Framework

Low motivation, creativity, and learning outcomes in economics are caused by uninteresting learning models and media. The application of PBL combined with animated videos is expected to engage students, facilitate conceptual understanding, and increase motivation, creativity, and learning outcomes.

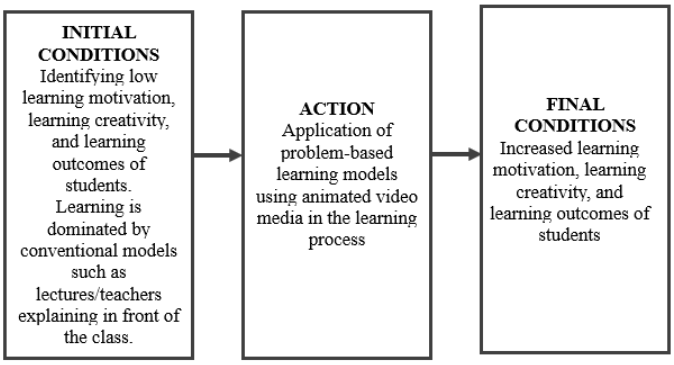

Figure 1. Conceptual Framework.

3. Materials and Method

Research Design

This study uses Kemmis and McTaggart's Classroom Action Research (CAR) model, which is a continuous cycle through the stages of planning, action, observation, and reflection (Kemmis & McTaggart, 1988). This model was chosen because it emphasizes the reflective process to increase motivation, creativity, and learning outcomes of students in economics learning. This classroom action research design takes the form of a repeating cycle, in which the results of each cycle's reflection form the basis for the next planning cycle for continuous improvement of the learning process.

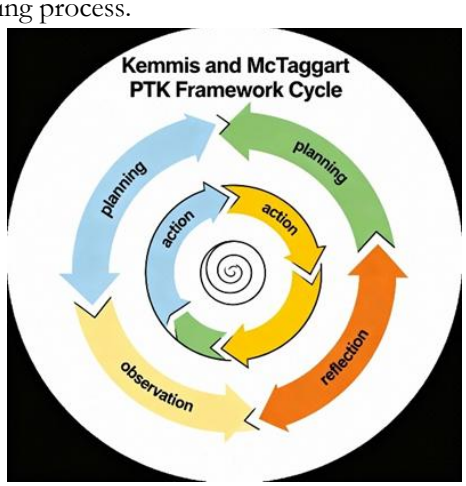

Figure 2. Classroom Action Research (CAR) Design.
Source: https://www.academia.edu.

Research Period

The research was conducted in the even semester of the 2025/2026 academic year in class XI of MA Salafiyah Plumbon, Cirebon, through the stages of preparation, action, observation, evaluation, and repeated reflection in accordance with the PTK cycle.

Research Location

The research location was MA Salafiyah Plumbon, a senior high school Islamic educational institution with adequate facilities and an active learning approach. The research subjects were 35 grade XI students, with a learning environment that supported the use of animated video media in a problem-based learning model.

Subject and Characteristics

The subjects of this study were 35 students in grade XI at MA Salafiyah Cirebon who were at an important stage of cognitive development and faced challenges in understanding economic material. The study was collaborative between educators and students, reflective through continuous evaluation, and cyclical with stages of planning, action, observation, and reflection. The research focuses on improving student motivation, creativity, and learning outcomes through the application of innovative learning models.

Data Collection Techniques and Instruments

This study uses qualitative and quantitative data analysis. Qualitative data was obtained through observation, questionnaires, and documentation to assess the motivation and creativity of students. Quantitative data was obtained from written tests (pre-test and post-test) and questionnaires, then analyzed statistically to measure the improvement in learning outcomes.

4. Results and Discussion

Shapiro-Wilk Normality Test

Table 1. Shapiro-Wilk Normality Test.

No.	Identity	Sig.	Description
1	Posttest Result	0.175	Normally distributed
2	Pretest Result	0.155	Normally distributed

Source: SPSS Data Processing, 2025.

Based on the results of the normality test using Shapiro-Wilk, the results of the pretest and posttest data in economics at MA Salafiyah showed significance values of 0.155 and 0.175, respectively. Both values are greater than the significance level of 0.05, which indicates that the distribution of data from both measurements is normal. This means that the data is normally distributed, thus fulfilling the assumptions of parametric analysis. Therefore, the data can be used to assess the effectiveness of problem-based learning models using animated video media in increasing student motivation, creativity, and learning outcomes.

Wilcoxon Signed Rank Test

Table 2. Wilcoxon Signed Rank Test.

Identity		Sum Of Ranks	Sig.	Description
Posttest Results – Pretest Results	Negative Ranks	0,00	0,000	Hypothesis accepted
	Positive Ranks	325,00		

Source: SPSS Data Processing, 2025.

Based on the results of the Wilcoxon Signed Rank Test, Negative Ranks of 0.00, Positive Ranks of 325.00, and Sig. (2-tailed) of 0.000 were obtained. This shows that no students experienced a decrease in posttest scores compared to pretest scores, while all participants showed an increase in scores after the implementation of the animation video-based Problem Based Learning model. This means that there was a significant difference between the pretest and posttest. All students experienced an increase in scores, proving that the implementation of Problem Based Learning using animated videos was effective in increasing motivation, creativity, and learning outcomes in economics at MA Salafiyah.

Students' Learning Outcomes in Economics

The average pretest score of students was 46.14, increasing to 83.57 on the posttest, with a difference of 37.43 points. This significant increase shows that the application of video animation-based Problem Based Learning is effective in improving students' understanding, motivation, and critical thinking skills in economics learning at MA Salafiyah.

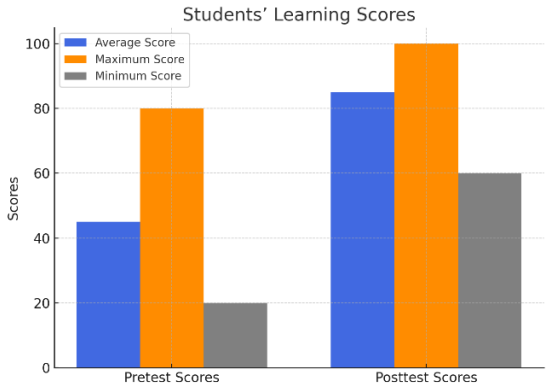

Figure 3. Students' Learning Outcomes in Economics.

The results of the normality test using Shapiro-Wilk showed that the pretest and posttest data had significance values of 0.155 and 0.175, respectively. These values are greater than the significance level of 0.05, so it can be concluded that the data are normally distributed. This condition is important because normal data distribution is a key requirement for conducting parametric tests, although in this study, non-parametric tests were also used to anticipate limitations in the sample size. Thus, the normality test results provide a strong basis for further analysis of the data to assess the effectiveness of implementing the Problem-Based Learning (PBL) model assisted by animated video media.

Furthermore, the results of the Wilcoxon Signed Rank Test provide a clearer picture of the difference in scores between the pretest and posttest. The analysis results show a Negative Ranks value of 0.00, which means that there was no decrease in student scores after the treatment, while the Positive Ranks value of 325.00 confirms that all participants experienced an increase in scores. The significance value (2-tailed) of 0.000 is smaller than the significance level of 0.05, so the hypothesis is accepted. Thus, there is a significant difference between the pretest and posttest scores, which shows the effectiveness of applying PBL assisted by animated videos.

These findings are consistent with constructivist learning theory, which emphasizes that knowledge is actively constructed by learners through direct involvement in problem solving. PBL allows learners to relate abstract concepts to real-life experiences, thereby strengthening their understanding and retention of knowledge. The integration of animated video media in this model further enriches the learning experience by presenting the material in a visual, engaging, and interactive manner. Thus, the significant increase in posttest scores can be understood as the result of learners' active engagement in a meaningful learning process.

The results of the study also showed an increase in the average score of students from 46.14 on the pretest to 83.57 on the posttest, with a difference of 37.43 points. This increase not only demonstrates the success of the learning intervention, but also reflects that animated video media can facilitate the understanding of concepts that were previously considered difficult. In the context of economics learning, this media is able to illustrate abstract concepts, such as market mechanisms or supply and demand theory, in a more concrete and understandable way. This motivates students to learn and enables them to develop critical and analytical thinking skills.

The effectiveness of video animation-assisted PBL in this study is also in line with the findings of previous studies. Agustia et al. (2025), Fitriani et al. (2024), and Sunami and Aslam (2021) confirm that animated media has been proven to increase motivation, creativity, and learning outcomes. The results of this study reinforce empirical evidence that combining problem-based learning models with animated media can be an innovative strategy in 21st-century education. Furthermore, this also supports national education policies that require students to be active subjects in constructing knowledge.

Thus, the application of Problem Based Learning assisted by animated video media can be said to have successfully increased the motivation, creativity, and learning outcomes of students at MA Salafiyah Cirebon. This improvement is not only a numerical achievement but also reflects a paradigm shift in learning from teacher-centered to student-centered. The results of this study are expected to serve as a practical reference for educators in developing innovative learning strategies that are relevant to the needs of students, as well as providing a theoretical contribution to the development of educational science, particularly in the use of problem-based learning models integrated with digital media technology.

5. Conclusion

Based on the results of the study described above, the following conclusions can be drawn. (1) Problem-based learning models using animated videos can increase student motivation, from 85.7% in cycle I to 95.5% in cycle II (very high category). (2) Student creativity increased from 75.7% (high category) in cycle I to 85.7% (very high category) in cycle II. (3) Student learning outcomes showed a significant increase, with the average pretest score of 46.142 rising to 83.571 on the posttest, a difference of 37.429 points. (4) The combination of PBL and animated video media proved effective in creating active, engaging, and contextual learning, thereby simultaneously increasing student motivation, creativity, and learning outcomes.

Based on the above explanation, several suggestions related to this study are as follows. (1) For educators, it is recommended to apply a problem-based learning model supported by animated video media, especially for abstract material, in order to optimize student motivation, creativity, and learning outcomes. (2) For schools, it is necessary to provide supporting facilities such as technological devices, internet access, and training for teachers in the use of digital media so that the implementation of this strategy is effective. (3) For future researchers, it is recommended to conduct research with a broader sample coverage, longer duration, and on other subjects to obtain more comprehensive results. The development of more varied and interactive animated video media is also important to suit the diverse learning styles of students.

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