Vol. 4, No. 4, December 2026, pp. 3948-3958
INTERNATIONAL JOURNAL OF
POST AXIAL
https://journal.amorfati.id/index.php/postaxial | | ISSN 3025-7549

Public Policy Understanding and Civic Performance through Digital Posters and Real-Action Videos: A Behaviorist Analysis

Sarwiningsih[1a*], Harmanto[2b*], Raden Roro Nanik Setyowati[3c*]
[1,2,3] Master's Program in Pancasila and Civic Education, Universitas Negeri Surabaya, Indonesia

[a,*]26041965009@mhs.unesa.ac.id, [b]harmanto@unesa.ac.id, [c]naniksetyowati@unesa.ac.id

Article History:
Received:
12-09-2026
Revised:
10-10-2026
Accepted:
17-11-2026

Keywords:
Behaviorist theory; Digital poster; Local regulation; Pancasila education; Public policy portfolio; QRIS parking

***Correspondence Address:**
26041965009@mhs.unesa.ac.id

Abstract:
Pancasila Education lessons on the hierarchy of laws and public policy are often abstract and learned by rote, so students' understanding and civic behavior rarely develop together. This study examines changes in cognitive understanding and civic performance after project-based learning (PjBL) built around a local public-policy portfolio, digital posters, and a real-action video, interpreted through behaviorist learning theory. A one-cycle classroom action research with a one-group pretest–posttest design involved 32 eighth-grade students at SMP Negeri 19 Surabaya over four meetings (12 lesson periods) in the 2026/2027 odd semester. Data were collected with a 10-item higher-order thinking skills (HOTS) test (C3–C5), a 1–4 performance rubric, and written reflections, and were analyzed descriptively. Classical mastery (criterion 82) rose from 25.0% (8 students) to 87.5% (28 students), exceeding the 75% success criterion. In the performance assessment, 87.5%–93.8% of students were rated Excellent in discussion and portfolio work, presentation, and creative products (mean scores 3.88–3.94 out of 4). These patterns are consistent with behaviorist principles: clear discriminative stimuli, stepwise tasks, repeated practice with feedback, positive reinforcement, and an observed model. Because there was no comparison group, the findings are preliminary and call for quasi-experimental testing.

This is an open-access article under the CC–BY-SA license.

Introduction (مقدمة)

Pancasila Education at the junior secondary level plays a strategic role in shaping students' character and legal awareness as young citizens. In the Merdeka Curriculum, the Learning Outcomes for Phase D require students not only to memorize the hierarchy of laws and regulations, but also to examine it and to carry out citizens' rights and obligations in responding to social problems around them (Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi,

2022). This demand is in line with the idea that good civic education develops civic knowledge, skills, and dispositions simultaneously (Center for Civic Education, 1994; Winataputra & Budimansyah, 2012).

In practice, material on law and legislation often feels abstract, rigid, and monotonous when it is delivered only through lectures. This condition reduces students' critical engagement and their memory of why a rule matters for the common good. Westheimer and Kahne (2004) caution that civic education that stops at obedience is inadequate: students also need to be trained to participate in public affairs and to weigh the fairness of a policy. Yet students encounter public policy every day, for example when parents pay for parking or when the school distributes uniforms to students from low-income families. These experiences are rarely connected to the legal concepts studied in class.

Quality learning experiences have proved important, but the evidence has limits. An open classroom climate for discussing social and political issues is associated with higher civic knowledge and engagement (Torney-Purta et al., 2001), and opportunities at school, such as discussing current issues and working on community problems, predict students' commitment to civic participation (Kahne & Sporte, 2008). These findings come from survey-based studies and show association, not the effect of a specific instructional design. For project-based learning (PjBL), a meta-analysis of 66 experimental and quasi-experimental studies found an advantage over traditional instruction, strongest for academic achievement (Zhang & Ma, 2023), in line with earlier syntheses (Chen & Yang, 2019; Kokotsaki et al., 2016). However, the effects vary with context, group size, and duration (Zhang & Ma, 2023), and the results depend heavily on the quality of project design, mentoring, and assessment, so the evidence remains "promising but not proven" because many studies cannot rule out alternative explanations (Condliffe et al., 2017; Kokotsaki et al., 2016).

This study uses behaviorist learning theory as a lens for reading this project design. Behavior change is viewed as the result of the relationship among stimulus, response, and consequence (Thorndike, 1911; Skinner, 1953). Habituation to rules requires clear stimuli, repeated practice, and immediate and consistent reinforcement (Schunk, 2012). Behaviorism has been criticized for neglecting students' internal thinking, so it is used here as one analytical lens, complemented by observational learning (Bandura, 1977), and not as a complete explanation of learning. In the learning design examined here, students analyzed real policies in the city of Surabaya, namely cashless parking payment based on QRIS (Surabaya Mayor's Regulation Number 26 of 2024; Pemerintah Kota Surabaya, 2024), the free-uniform policy for students from Low-Income Communities (Masyarakat Berpenghasilan Rendah, MBR), and environmental governance through waste banks. They built a portfolio step by step, created digital posters, and recorded a real-action video.

Taken together, the existing literature leaves three gaps. First, PjBL evidence is mostly reported as overall effects and largely comes from higher education and from subjects other than civic education, whereas empirical reports on junior secondary students' ability to examine real regulations and propose alternatives remain limited. Second, evidence on civic learning opportunities is largely correlational, and few studies explain the components of a civic project-based lesson through an explicit learning theory such as behaviorism. Third, few reports present, within a single intervention, both higher-order cognitive outcomes (C3–C5) and observable civic performance grounded in local regulations that students actually experience.

Derived from these gaps, this study addresses three research questions (RQ): (RQ1) To what extent does students' cognitive understanding of legislation and public policy (C3–C5), measured as classical mastery, improve after this project-based learning? (RQ2) What is the level of students' civic performance in discussion and portfolio work, presentation, and creative

products? (RQ3) How can behaviorist principles interpret these outcomes? RQ1 and RQ2 respond to the first and third gaps, and RQ3 responds to the second gap. Accordingly, the study aims to (1) analyze the improvement in cognitive understanding, (2) describe civic performance, and (3) explain how behaviorist principles can interpret these outcomes. The contribution is twofold: an empirical estimate of change in an ordinary, ongoing Pancasila Education classroom, and a concrete model (Table 1) that aligns project stages, behaviorist principles, and portfolio components meeting by meeting.

Literature Review: Behaviorist Learning Theory

Behaviorism views learning as an observable change in behavior resulting from an individual's interaction with the environment (Schunk, 2012). Thorndike (1911) formulated the *law of effect*: a stimulus–response connection is strengthened when the response is followed by satisfaction and weakened when it is followed by discomfort. He also formulated the *law of exercise*: the connection is strengthened through repeated practice. Skinner (1953) developed operant conditioning, in which behavior is shaped by its consequences. The commonly used sequence is antecedent–behavior–consequence (ABC). The antecedent takes the form of a *discriminative stimulus* that signals that a particular response will be reinforced. The consequence takes the form of positive reinforcement that increases the likelihood that the response will recur. Skinner (1968) applied these principles to teaching through small steps, immediate feedback, and gradual reinforcement (*shaping*).

In Pancasila Education, these principles are relevant to the domain of civic behavior. Expected behavior is not sufficiently explained; it needs to be broken down into small steps that can be practiced, given feedback, and reinforced (Budimansyah, 2010).

Observational Learning as a Complement

Learning by observing and imitating a model originates from Bandura's (1977) social learning theory, which goes beyond classical behaviorism by including the processes of attention, retention, reproduction, and motivation. This article uses it as a complement, not as part of pure behaviorism, to explain the role of the real-action video and group presentations as models of citizen participation.

Visual and Audio-Visual Media

Learning media are means that carry messages and stimulate students' attention, thoughts, and feelings (Arsyad, 2017). Within a behaviorist framework, a displayed poster functions as a persistent discriminative stimulus that marks the expected response. A poster does not function as a reinforcer, because a reinforcer is a consequence that follows behavior. When students make a poster, the activity becomes a practiced response because they must restate the content of a rule in visual form. The principle of multimedia learning holds that a well-aligned combination of pictures and words supports understanding better than words alone (Mayer, 2009).

Public Policy Literacy and Civic Skills

The national standards for civic education in the United States set out three components: knowledge, skills, and dispositions (Center for Civic Education, 1994). Civic skills include intellectual skills (identifying, explaining, and evaluating public issues) and participatory skills (interacting, monitoring, and influencing the policy process). In this study, public policy literacy is defined as the ability to understand the legal basis of a policy, identify the problem it is meant to address, assess the strengths and weaknesses of the existing policy, and formulate alternatives argumentatively. This ability lies in the cognitive domain from C3 (applying) to C5 (evaluating) in the revised Bloom's taxonomy (Anderson & Krathwohl, 2001). In this study, civic performance is observed through a rubric applied to discussion and portfolio preparation, presentation, and

creative products. The rubric measures behavior that is visible in learning tasks, not lasting legal compliance outside the classroom.

Public Policy Portfolio as a Project Vehicle

The four portfolio documents in this study, namely problem identification, evaluation of the existing policy, an alternative policy proposal, and an action plan, follow the logic of the Center for Civic Education's *Project Citizen* class portfolio. Through a behaviorist lens, the four documents break a large task into small, sequential steps. Each step yields an intermediate product that can be assessed and given feedback, and the whole sequence culminates in real action. PjBL provides the structure: a driving question, investigation, products, and presentation (Thomas, 2000; Krajcik & Blumenfeld, 2006). Table 1 maps the alignment of PjBL stages, behaviorist principles, and portfolio activities at each meeting.

Table 1. Alignment of PjBL Stages, Behaviorist Principles, and Portfolio Components

Meeting	PjBL stage	Behaviorist principle	Portfolio activities and products
1	Driving question; project determination	Antecedent and discriminative stimulus: trigger questions and real policy cases	Reflection on rules at home and at school; pre-test; selection of the priority issue (illegal parking vs. QRIS parking); formation of 4 groups
2	Investigation; scheduling and documents	Stepwise tasks (*shaping*); practice with feedback	Data collection with mobile phones; 4 portfolio documents; initial *showcase*
3	Product making	Practiced response; poster as a visual stimulus	Educational poster on local legal compliance and digital QRIS parking
4	Presentation, evaluation, reflection	Positive reinforcement; observed behavioral model	Presentation of the real-action video; post-test; Wall of Reflection (sticky notes)

Source: authors' analysis.

Method (منهج)

Approach and Design

This study used a descriptive mixed quantitative and qualitative approach in the form of classroom action research (CAR) with the stages of planning, action, observation, and reflection (Kemmis & McTaggart, 1988), in one cycle, with a one-group pretest–posttest design. CAR was chosen because the researcher is also the teacher and aims to improve practice in a real classroom while examining its results. The one-group design is a pre-experimental design that permits only limited causal inference (Campbell & Stanley, 1963). It was used to estimate change in an ordinary classroom as a first step before controlled studies, and this limitation is taken into account in the interpretation.

Each research question was linked to its data source and analysis. RQ1 (cognitive understanding) was answered with pre-test and post-test scores analyzed as classical mastery against the 75% success criterion. RQ2 (civic performance) was answered with the performance rubric through frequencies, percentages, and mean scores. RQ3 (behaviorist explanation) was answered interpretively by mapping the intervention components onto behaviorist principles (Table 1) and comparing them with students' written reflections as triangulation. RQ3 was not tested statistically, so it is treated as an interpretive explanation, not a causal estimate.

Subjects, Place, and Time

The study was conducted at SMP Negeri 19 Surabaya in the odd semester of the 2026/2027 academic year. The subjects were 32 eighth-grade students who were heterogeneous in academic and socioeconomic background. The researcher acted as the teacher implementing the lessons.

Research Ethics

The study was carried out within regular Pancasila Education lessons, and the activities were part of the planned learning. Students and parents were informed about the purpose of the study and how the data would be used. Student data are presented in aggregate without identifying individuals, and reflection notes are used only as general supporting descriptions, without individual quotations. The teacher-researcher's dual role as implementer and assessor is a potential source of bias and is acknowledged in the limitations.

Research and Treatment Procedure

The classroom action research followed one cycle. In the planning stage, the teacher-researcher designed the lessons on the PjBL syntax and behaviorist principles (Table 1), selected the local policy cases, and prepared the HOTS test and the performance rubric. In the action stage, the four meetings described below were carried out. In the observation stage, the pre-test was administered at meeting 1, the performance rubric was applied to the discussion and portfolio work, the showcase presentation, and the creative products, and the post-test and reflection notes were collected at meeting 4. In the reflection stage, the results were compared with the 75% success criterion and interpreted against Table 1. Because the study was limited to one cycle, no second cycle followed.

The treatment was carried out over four meetings (a total of 12 lesson periods of 40 minutes each) based on the PjBL syntax and designed with behaviorist principles as shown in Table 1.

- **Meeting 1.** Initial reflection on rules at home and at school; a pre-test based on a case study of public policy in Surabaya; formulation of the driving question; determination of the class's priority issue (illegal parking vs. QRIS parking); division into four portfolio groups.
- **Meeting 2.** Data collection and digital literacy using mobile phones; preparation of four portfolio documents (Problem Identification, Evaluation of the Existing Policy, Alternative Policy Proposal, and Action Plan); presentation of the initial portfolio (*showcase*).
- **Meeting 3.** Group production of an educational poster on local legal compliance and digital QRIS parking.
- **Meeting 4.** Presentation of a real-action video on community participation in supporting public policy; a summative post-test; reflection on the learning experience (sticky notes on the Wall of Reflection).

Instruments

Two main instruments were used. First, a written test of 10 multiple-choice HOTS items at levels C3–C5, based on public policy case studies, administered as the pre-test and post-test with equivalent items arranged by cognitive level (Anderson & Krathwohl, 2001). Second, a performance assessment rubric for three aspects, namely discussion and portfolio preparation, *showcase* presentation and media, and the quality of creative products (poster and video), on a scale of 1–4. As supporting data, students' written reflections were collected on sticky notes at the end of meeting 4. Reports on the validity and reliability of the test items are not available, and this is noted as a limitation.

Data Analysis

Data were analyzed descriptively in three parts. Cognitive data: pre-test and post-test scores were classified against the Learning Objective Achievement Criteria (*Kriteria Ketercapaian Tujuan Pembelajaran*, KKTP) of 82. Classical mastery was calculated as the number of students

who reached the KKTP divided by all students (N = 32) and multiplied by 100%, with an action success criterion of ≥ 75% of students reaching the KKTP. Improvement was calculated as the difference between post-test and pre-test mastery, in the number of students and in percentage points.

Performance data: for each rubric aspect, the number and percentage of students in each category (Excellent = score 4, Good = score 3, Fair/Poor = score 1–2) were counted, and the mean score was calculated as the sum of scores divided by the number of students and expressed as a percentage of the maximum score of 4.

Reflection notes: the notes were analyzed descriptively and qualitatively through data reduction (selecting and grouping the notes by content), data display (summarizing the grouped notes), and conclusion drawing and verification (Miles et al., 2014), and were then compared with the quantitative data for triangulation. Because this article does not analyze individual-level data, no inferential test or effect size was computed, and the results are reported as descriptive evidence; this is acknowledged as a limitation.

Result (نتائج)

RQ1: Cognitive Understanding of Public Policy

Project-based learning designed with behaviorist principles was followed by an improvement in students' cognitive understanding of legislation and public policy in the city of Surabaya. The results are organized by research question: RQ1 (cognitive understanding) and RQ2 (civic performance) are answered in this section, supported by student reflections, and RQ3 (behaviorist interpretation) is answered in the Discussion. The pre-test and post-test results are presented in Table 2 and Figure 1.

Table 2. Comparison of Cognitive Mastery on the Pre-test and Post-test (N = 32)

Evaluation	Number of students	Mastered (≥ 82)	Not yet mastered (< 82)	Classical mastery
Pre-test	32	8	24	25.0%
Post-test	32	28	4	87.5%
Improvement	–	+20 students	−20 students	+62.5 percentage points

Source: research data, SMP Negeri 19 Surabaya (2026).

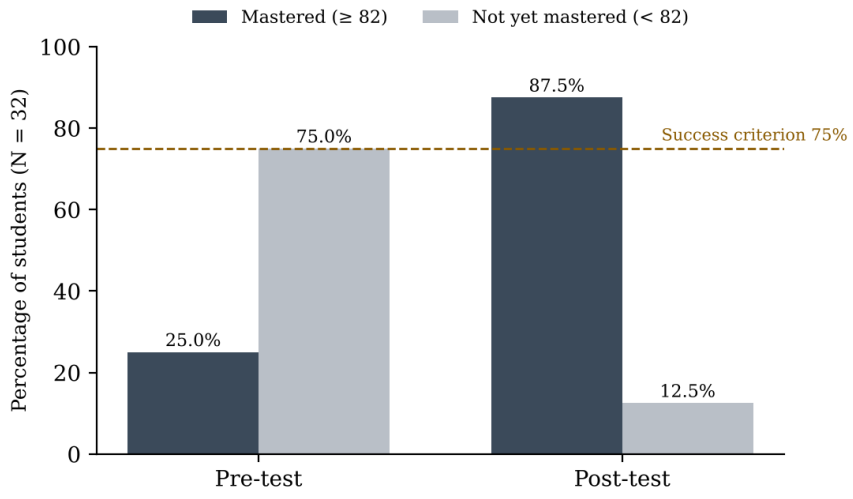

Figure 1. Classical mastery on the pre-test and post-test against the 75% success criterion

Table 2 and Figure 1 show that classical mastery rose from 25.0% to 87.5%, which exceeds the 75% success criterion by 12.5 percentage points, so the action criterion was met in one cycle. On the pre-test, most students found it difficult to answer HOTS items that connect regional policies (such as the mayor's regulation on QRIS parking and uniforms for MBR students) with the hierarchy of laws and regulations and the 1945 Constitution of the Republic of Indonesia. The net movement of 20 students from not mastered to mastered is reported in net terms because individual data are not reported. The four students (12.5%) who had still not mastered the material show that the improvement was uneven and that individual assistance remains necessary.

RQ2: Civic Performance

In addition to cognitive outcomes, the performance assessment showed high civic skill outcomes (Table 3).

Table 3. Summary of Students' Skills and Performance Assessment (N = 32)

Assessment aspect	Excellent (score 4)	Good (score 3)	Fair/Poor (score 1–2)	Mean score	% of max. score
Discussion and portfolio	28 (87.5%)	4 (12.5%)	0 (0%)	3.88	96.9%
Showcase presentation and media	30 (93.8%)	2 (6.2%)	0 (0%)	3.94	98.4%
Creative products (poster and video)	28 (87.5%)	4 (12.5%)	0 (0%)	3.88	96.9%

Source: performance rubric, SMP Negeri 19 Surabaya (2026).

No student was in the Fair/Poor category on any aspect. The showcase presentation was the aspect with the highest result. This is plausible because students presented their portfolios twice, namely the initial showcase at meeting 2 and the real-action presentation at meeting 4, so they received feedback and an opportunity to improve. The similar results for discussion and creative products suggest that group work based on the four portfolio documents gave a clear structure for reasoning, sharing roles, and producing assessable products.

The differences between aspects were small. This pattern indicates both high achievement and a ceiling effect: the rubric discriminates poorly among students in the upper range, so the data describe how well the class worked better than who needs further support. The assessment was carried out by the teacher who also designed the lessons, so the possibility of rater bias must be considered, and further research should involve a second rater. Whether these skills persist beyond the classroom project cannot be determined from the available data.

Supporting Data for RQ3: Student Reflections

At the end of meeting 4, students wrote their feelings about the lessons on sticky notes on the Wall of Reflection. These notes were used as supporting data and were not converted into scores. They describe an enjoyable learning experience and, in the discussion, are used only to illustrate students' experience, not as evidence of effect.

Discussion (مناقشة)

RQ3: Discussion from a Behaviorist Perspective

Discriminative stimuli and antecedents. The trigger questions about compliance with rules at home and at school, the QRIS parking and MBR uniform policy cases, and the displayed posters marked the expected behavior and the steps for carrying it out. In Skinner's (1953) terms, all of these functioned as discriminative stimuli that guided students' responses, not as reinforcers. A message design that combines pictures and short text is in line with the multimedia

principle (Mayer, 2009). The large increase in mastery on the C3–C5 HOTS items is consistent with this function, because students answered questions such as "why should parking be paid cashlessly?" and "which policy is fairer for MBR students?", which require them to connect norms, policy objectives, and impacts. Stimulus control, however, explains why students knew which response was expected, not why they were able to evaluate a policy; that also required the higher-order reasoning practiced in the portfolio, which behaviorism describes only through its observable steps.

Stepwise tasks and response shaping. The four portfolio documents broke the task of examining a policy into a sequence of small steps, namely identifying (C3), comparing and judging (C4–C5), and formulating a proposal (C5–C6). Task decomposition of this kind is in line with the principles of *shaping* and small-step teaching (Skinner, 1968). Students did not merely know the policy but practiced weighing it, and then turned their proposals into posters and videos for the public.

Repeated practice and feedback. Students presented their portfolios twice, at meeting 2 and meeting 4, and received feedback in between. This is in line with the law of exercise (Thorndike, 1911): a response that is practiced repeatedly becomes stronger. The highest presentation result can be read as an effect of repeated practice with feedback. Recent evidence refines this reading. A meta-analysis of 435 studies found a medium overall effect of feedback on learning (d = 0.48) and showed that the effect depends on the information the feedback carries: high-information feedback was far more effective than reinforcement or punishment alone (Wisniewski et al., 2020). Whether the feedback in this study was informative or merely evaluative was not coded, so the two cannot be separated here; future studies should record the type of feedback given between stages.

Positive reinforcement. Grades, appreciation, and feedback at the portfolio showcase functioned as pleasant consequences after students showed the expected behavior. According to the law of effect, such consequences increase the likelihood that the behavior will be repeated (Thorndike, 1911; Skinner, 1953). Because reinforcement alone showed a much smaller average effect than informative feedback (Wisniewski et al., 2020), the pleasant consequences here are better read together with feedback than as a separate cause. Students' reflections describing an enjoyable learning atmosphere are consistent with this interpretation, but they cannot be used to prove the effect of reinforcement.

Observational learning. Group presentations and the real-action video presented observable models of citizen participation that classmates could imitate. This explanation comes from social learning theory (Bandura, 1977), not classical behaviorism, so it is treated as a complement.

Relation to the PjBL and civic education literature. The increase in mastery is in the same direction as meta-analytic evidence that PjBL improves academic achievement (Chen & Yang, 2019; Zhang & Ma, 2023) and the benefits reported in the literature review (Kokotsaki et al., 2016). Two features of this study differ from the conditions found most effective in the recent meta-analysis, namely group size (four groups for 32 students, an average of eight per group, compared with 4–5 students per group) and duration (four meetings, compared with 9–18 weeks) (Zhang & Ma, 2023). The large gain after such a short intervention should therefore be read cautiously and may partly reflect test familiarity, as discussed below. The high skill outcomes can be linked to civic learning opportunities such as discussing, presenting proposals, and working on community problems, which in earlier survey-based studies were associated with stronger civic engagement (Kahne & Sporte, 2008; Torney-Purta et al., 2001). The four students who had not yet mastered the material are in line with the warning in the literature that project outcomes depend on mentoring and project quality (Condliffe et al., 2017): group work alone does not guarantee

individual mastery.

Alternative explanations. Because the design has no comparison group, the improvement cannot be fully attributed to the intervention. Familiarity with the test items, maturation, and enthusiasm for novelty cannot be ruled out (Campbell & Stanley, 1963), and the equivalence of the pre-test and post-test items was not verified statistically. The poster, portfolio, video, and reinforcement components were delivered together, so the contribution of each cannot be separated. The pattern of results is therefore read as consistent with a behaviorist explanation, not as evidence that the theory accounts for the whole improvement.

Implications and Limitations

Practically, teachers can begin public policy learning from issues familiar to students, such as cashless parking and free uniforms for students from low-income families, and use the portfolio as a project framework that is assessed in stages. Four design features can be adapted: clear stimuli (trigger questions, real policy cases, and posters), small steps (the four portfolio documents, each with a rubric), opportunities to practice (an initial showcase and a final presentation), and feedback between stages. Because four students did not reach mastery even in a structured project, teachers also need to plan individual assistance and not rely on group work alone.

For civic education scholarship, Table 1 offers a design framework that links PjBL stages with learning-theory principles and can be examined, modified, or compared with other explanations, such as constructivist or social learning accounts. The study also shows that civic outcomes can be reported at two levels within one classroom study: higher-order cognition (C3–C5) and observable performance.

In terms of policy, school partnerships with regional agencies, such as the Transportation Agency, can enrich learning resources and open opportunities for students' proposals to be heard, which gives the real-action stage a real audience.

This study has several limitations, each of which also points to a direction for further research:

- The one-group design without a comparison group limits causal claims (Campbell & Stanley, 1963).
- The number of subjects is small (N = 32) in a single school, so generalization is limited.
- The intervention was short (4 meetings), and the durability of the results has not been tested through a delayed test.
- The analysis is descriptive, without statistical tests or effect sizes.
- The teacher acted as both implementer and assessor, so rater bias may exist.
- Validity and reliability reports for the test instrument have not been presented, so the results need to be interpreted with caution.
- The performance rubric shows a ceiling effect (no students below the Good category) and measures performance in classroom tasks, not lasting legal compliance outside the classroom.

Directions for further research follow from these limitations. Quasi-experimental or randomized designs with comparison groups, more schools, and longer instruction would test whether the gains are attributable to the intervention and whether they last, including through a delayed test. Individual-level data would allow N-gain (Hake, 1998), effect sizes (Cohen, 1988), and paired tests such as the Wilcoxon test. Studies should report test validity and reliability, use a second rater and a rubric that discriminates better in the upper range, and observe civic

behavior outside the classroom. Component-level designs could compare informative feedback with reinforcement alone to examine which behaviorist elements matter most, and could vary group size and project duration.

Conclusion (خاتمة)

This study examined project-based learning with a local public-policy portfolio, digital posters, and a real-action video among eighth-grade students at SMP Negeri 19 Surabaya, analyzed with behaviorist learning theory. First, cognitive understanding improved: classical mastery rose from 25.0% to 87.5% (+62.5 percentage points) and exceeded the 75% success criterion. Second, civic performance was high: 87.5%–93.8% of students were in the Excellent category in discussion and portfolio work, presentation, and creative products, and none were below the Good category. Third, behaviorist principles, namely clear discriminative stimuli, stepwise tasks, repeated practice with feedback, positive reinforcement, and an observed model as a complement, provide a plausible explanation of these outcomes, although the contribution of each was not tested. Given the one-group design, these results are better regarded as promising preliminary evidence than as evidence of effectiveness, and they justify further controlled studies.

For Pancasila Education teachers, it is recommended to adapt the public-policy portfolio model by raising contextual issues from their own region, providing a clear rubric for each portfolio document, and scheduling feedback between project stages. For schools and education offices, it is recommended to provide digital facilities and partnerships with regional agencies, such as the Transportation Agency or the City Government. For future researchers, it is recommended to test the model with a quasi-experimental design with a control group and individual-level data, following the directions outlined in the section on implications and limitations.

The authors thank the students of SMP Negeri 19 Surabaya who took part in this study, and the Master's Program in Pancasila and Civic Education, Universitas Negeri Surabaya, for its academic support.

Bibliography ((مراجع

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

Arsyad, A. (2017). *Media pembelajaran* [Learning media]. Jakarta: Rajawali Pers.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Budimansyah, D. (2010). *Penguatan pendidikan kewarganegaraan untuk membangun karakter bangsa* [Strengthening citizenship education to build national character]. Bandung: Widya Aksara Press.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Rand McNally.

Center for Civic Education. (1994). *National standards for civics and government*. Center for Civic Education.

Chen, C.-H., & Yang, Y.-C. (2019). Revisiting the effects of project-based learning on students' academic achievement: A meta-analysis investigating moderators. *Educational Research Review, 26*, 71–81.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, E. (2017). *Project-based learning: A literature review*. MDRC.

Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics, 66*(1), 64–74. https://doi.org/10.1119/1.18809

Kahne, J., & Sporte, S. E. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. *American Educational Research Journal, 45*(3), 738–766. https://doi.org/10.3102/0002831208316951

Kemmis, S., & McTaggart, R. (1988). *The action research planner* (3rd ed.). Deakin University.

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2022). *Capaian pembelajaran mata pelajaran Pendidikan Pancasila fase D* [Learning outcomes of Pancasila Education, Phase D]. Badan Standar, Kurikulum, dan Asesmen Pendidikan.

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving Schools, 19*(3), 267–277. https://doi.org/10.1177/1365480216659733

Krajcik, J. S., & Blumenfeld, P. C. (2006). Project-based learning. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 317–334). Cambridge University Press.

Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). New York: Cambridge University Press.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.

Pemerintah Kota Surabaya. (2024). *Peraturan Wali Kota Surabaya Nomor 26 Tahun 2024 tentang Pelaksanaan Peraturan Daerah Nomor 7 Tahun 2023 tentang Pajak Daerah dan Retribusi Daerah pada Retribusi Jasa Umum* [Surabaya Mayor's Regulation Number 26 of 2024 on the implementation of Regional Regulation Number 7 of 2023 on regional taxes and levies for general service levies]. https://peraturan.bpk.go.id/Details/295894/perwali-kota-surabaya-no-26-tahun-2024

Schunk, D. H. (2012). *Learning theories: An educational perspective* (6th ed.). Boston: Pearson Education.

Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.

Skinner, B. F. (1968). *The technology of teaching*. New York: Appleton-Century-Crofts.

Thomas, J. W. (2000). *A review of research on project-based learning*. Autodesk Foundation.

Thorndike, E. L. (1911). *Animal intelligence: Experimental studies*. New York: The Macmillan Company.

Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. International Association for the Evaluation of Educational Achievement.

Westheimer, J., & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal, 41*(2), 237–269. https://doi.org/10.3102/00028312041002237

Winataputra, U. S., & Budimansyah, D. (2012). *Pendidikan kewarganegaraan dalam perspektif internasional* [Citizenship education in international perspective]. Bandung: Widya Aksara Press.

Wisniewski, B., Zierer, K., & Hattie, J. (2020). The power of feedback revisited: A meta-analysis of educational feedback research. *Frontiers in Psychology, 10*, 3087. https://doi.org/10.3389/fpsyg.2019.03087

Zhang, L., & Ma, Y. (2023). A study of the impact of project-based learning on student learning effects: A meta-analysis study. *Frontiers in Psychology, 14*, 1202728. https://doi.org/10.3389/fpsyg.2023.1202728