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Integrating Character and Learning Outcomes Through the Archerys ID Model in Elementary IPAS Learning: Supporting SDG 4

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Abstract: This study aims to examine the effect of the Archerys Instructional Design (ID) Model on students' moral understanding, academic ethics, and IPAS learning outcomes among sixth-grade students at SDN 04 Korong Kota Solok. This study employed a quantitative approach using a quasi-experimental method with a Nonequivalent Control Group Design. The sample consisted of 40 students divided into two intact classes, namely an experimental class receiving instruction through the Archerys ID Model and a control class receiving conventional learning instruction. Data were collected using questionnaires to measure moral understanding and academic ethics, essay tests to measure IPAS learning outcomes, observation sheets, and interviews as supporting qualitative data. Quantitative data were analyzed using descriptive statistics, normality tests, homogeneity tests, Multivariate Analysis of Variance (MANOVA), and Independent Sample *t*-tests. The results indicated significant differences between the experimental and control groups across all dependent variables ($p < 0.05$). Students in the experimental class achieved higher average scores in moral understanding (84.20) compared to the control class (74.10), academic ethics (84.50 compared to 73.20), and learning outcomes (87.80 compared to 77.40). In addition, correlation analysis demonstrated a positive trend in the relationship between moral understanding, academic ethics, and learning outcomes following the implementation of the Archerys ID Model, although the correlation strength remained statistically weak. These findings indicate that the Archerys ID Model effectively supports the integration of affective and cognitive learning dimensions through meaningful and value-oriented instructional activities in elementary school IPAS learning contexts.

Keywords: Academic ethics; Archerys ID model; Elementary education; Learning outcomes; Moral understanding

Introduction

Education plays a fundamental and strategic role in shaping the quality of human resources in the modern era. The function of education is not limited merely to the transfer of knowledge and academic competencies, but also encompasses the development of moral values, ethics, character, and social responsibility among students (Rahminda et al., 2023). Through education, students are expected to develop not only intellectual intelligence but also integrity, empathy, discipline, honesty, and responsibility in their daily lives (Jai et al., 2020; Mulyadi et al., 2019). Therefore, educational success should not be measured solely by students' cognitive achievement but also by the formation of character and ethical awareness, which can support students in becoming responsible members of society (Ansari et al., 2025).

The urgency of strengthening moral and ethical values in education has become increasingly important

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in the era of globalization and rapid technological advancement (Khare, 2025). The development of digital technology and unrestricted access to information provide students with broad opportunities to learn and interact; however, these developments also create various moral and ethical challenges within educational environments. Students are increasingly exposed to pragmatic orientations that emphasize competition and academic achievement without balanced reinforcement of integrity and ethical values (Lopez & Perez, 2025). Consequently, educational institutions frequently encounter issues such as indiscipline, irresponsibility toward academic tasks, cheating during examinations, plagiarism, weakening empathy, and declining social awareness among students (Sucitra & Friyatmi, 2025). These conditions indicate that many students may understand moral concepts theoretically but still experience difficulties implementing those values consistently in everyday behavior.

This phenomenon is also evident in elementary school contexts, particularly among students who are in critical stages of character formation and social development (Prasetya et al., 2025). Based on preliminary observations conducted in Grade VI at SDN 04 Korong Kota Solok, several behavioral issues reflecting weak internalization of moral and ethical values were identified. Students demonstrated tendencies toward indiscipline, low responsibility in completing assignments, limited participation during collaborative activities, and dishonest behavior during academic evaluations. Such conditions indicate that classroom learning has not yet fully integrated values of honesty, responsibility, and academic integrity into meaningful learning experiences. Excessive orientation toward final outcomes and high grades may gradually erode students' ethical awareness and academic honesty, especially when learning processes prioritize achievement over character formation (Collins, 2020).

In response to these educational challenges, schools are increasingly required to implement learning approaches that not only improve academic achievement but also strengthen students' moral awareness and ethical behavior (Khan, 2025). This educational orientation aligns with Sustainable Development Goal 4 (Quality Education), which emphasizes inclusive and equitable quality education while supporting holistic student development. Educational institutions are therefore expected to develop learning environments capable of balancing cognitive competence with affective and social development (Ramaswamy et al., 2025). Through such approaches, students are expected to become individuals who possess not only academic competence but also integrity, responsibility, empathy, and social awareness as part of their character development (Ramadhani et al., 2024).

One subject area that possesses significant potential for integrating moral and ethical values into classroom instruction is Natural and Social Sciences (IPAS) at the elementary school level. IPAS learning combines scientific understanding with social realities, enabling students to connect academic concepts with contextual situations encountered in daily life (Meylovia & Julianto, 2023). Topics related to environmental preservation, social interaction, responsibility, and community awareness provide opportunities for students to reflect on moral values and ethical decision-making processes (Hapsari et al., 2023; Hasya & Purwowidodo, 2024). Through contextual and interdisciplinary learning experiences, students may develop greater awareness regarding responsibility, cooperation, empathy, and environmental sustainability. Therefore, IPAS learning should ideally function not only as a medium for cognitive development but also as a platform for cultivating ethical understanding and character formation among students.

However, despite its considerable potential, the implementation of IPAS learning in many elementary schools remains predominantly teacher-centered and cognitively oriented. Learning activities frequently emphasize memorization, task completion, and examination performance rather than meaningful exploration and reflective understanding (Wahyuni et al., 2025). Students are often positioned as passive recipients of information rather than active participants in constructing knowledge and values through authentic experiences. Such instructional practices may cause students to perceive learning merely as an obligation aimed at achieving academic scores instead of understanding the relevance of knowledge to real-life situations. Farahian et al. (2021), argued that learning environments lacking contextual relevance and ethical integration may indirectly contribute to academic dishonesty because students become more focused on outcomes than on the learning process itself.

Addressing these educational problems requires instructional innovations capable of integrating cognitive and affective learning dimensions simultaneously (Roper, 2014). One instructional innovation considered relevant to these needs is the Archerys Instructional Design (ID) Model. This model has been shown to improve motivation, learning engagement, academic performance, and ethical awareness through meaningful and value-oriented learning experiences (Darmansyah, 2023; Farisa et al., 2023). The Archerys ID Model emphasizes active student participation, contextual learning activities, reflection, collaboration, and constructive feedback throughout instructional processes. These characteristics are closely

aligned with constructivist learning theory, which emphasizes students' active involvement in constructing understanding and meaning through authentic experiences (Siregar et al., 2025). Through this approach, students are encouraged not only to master academic concepts but also to internalize values such as honesty, fairness, responsibility, and integrity during the learning process.

Another important characteristic of the Archerys ID Model lies in its emphasis on meaningful and authentic learning experiences connected to students' real-world situations. In the context of IPAS learning, students are encouraged to analyze environmental problems, discuss social issues, evaluate ethical dilemmas, and collaborate in solving contextual challenges encountered within their communities. Such learning experiences enable students to develop higher-order thinking skills while simultaneously strengthening moral reasoning and ethical decision-making abilities. In this study, the term "academic ethics" refers to students' ethical behavior in learning activities, including honesty in completing assignments, responsibility toward academic obligations, respect for classroom rules, fairness during collaborative activities, and appreciation for others' opinions and work (Putri & Indriani, 2026). Consequently, the Archerys ID Model is expected to create learning experiences that are not only cognitively meaningful but also capable of strengthening students' character development.

Previous studies concerning instructional design models have generally focused on improving cognitive achievement, motivation, or learning engagement separately (Tampubolon et al., 2025). Similarly, research regarding moral education and academic ethics has often been conducted independently from academic learning outcomes (Barak & Green, 2020). Although several studies have investigated the implementation of the Archerys ID Model in educational settings, most were conducted at secondary school and higher education levels, while its implementation in elementary education remains relatively underexplored (Trisdianti & Anggoro, 2021). Furthermore, limited studies have simultaneously examined the integration of moral understanding, academic ethics, and learning outcomes within a unified instructional framework in elementary school IPAS learning. Therefore, this study offers novelty by examining the effectiveness of the Archerys ID Model in integrating affective and cognitive learning dimensions simultaneously within elementary education contexts. The findings of this study are expected to contribute theoretically to the development of instructional design research integrating moral understanding, academic ethics, and cognitive achievement, while practically providing guidance for teachers and educational practitioners in designing more holistic and value-integrated learning strategies. Based on this background, this study aims to examine the effect of implementing the Archerys ID Model on students' moral understanding, academic ethics, and learning outcomes in Grade VI IPAS learning at SDN 04 Korong Kota Solok.

Method

Research Design and Procedures

This study employed a quantitative approach using a quasi-experimental research method to examine the effect of the Archerys Instructional Design (ID) Model on students' moral understanding, academic ethics, and IPAS learning outcomes. The quasi-experimental approach was selected because the research was conducted within naturally existing classroom settings where random assignment of individual students was not feasible (Jacob, 2025). The research design applied in this study was the Nonequivalent Control Group Design, involving two intact Grade VI classes at SDN 04 Korong Kota Solok. This design enabled the researcher to compare differences in learning outcomes, moral understanding, and academic ethics between students who received the Archerys ID Model treatment and those who participated in conventional learning activities (Barak & Green, 2021).

The implementation of the research was conducted systematically through several stages. Initially, both the experimental and control groups were administered a pretest to identify students' initial abilities regarding moral understanding, academic ethics, and IPAS learning outcomes. The pretest results were used to ensure that both groups possessed relatively similar initial characteristics before the implementation of instructional treatment (Hong, 2010). Following the pretest stage, the experimental class received learning instruction using the Archerys ID Model, which emphasizes contextual learning experiences, student engagement, reflection, collaboration, and integration of moral and ethical values throughout the instructional process (Astawa & Widiana, 2025). Meanwhile, the control class received conventional TPACK-based instruction emphasizing teacher-centered learning activities and media integration without specific emphasis on moral and ethical value internalization. At the conclusion of the treatment sessions, a posttest was administered to both groups to measure changes in students' moral understanding, academic ethics, and IPAS learning outcomes after participating in different instructional approaches.

The population of this study consisted of all Grade VI students at SDN 04 Korong Kota Solok during the academic year in which the study was conducted. The total sample comprised 40 students divided equally into

two intact classes, namely Class VI A and Class VI B, with each class consisting of 20 students. The sampling procedure employed purposive sampling to select two classes possessing relatively similar academic characteristics and learning abilities based on preliminary observations and teacher recommendations (Zumitzavan, 2025). Since this study utilized a quasi-experimental design involving naturally existing classrooms, no random sampling of individual students was conducted. Instead, class-level assignment was applied to determine the experimental and control groups while maintaining the original classroom structure within the school environment. This procedure was intended to minimize selection bias while preserving the ecological validity of classroom learning conditions (Kanbir et al., 2018).

To obtain comprehensive and accurate data, this study employed several research instruments adjusted to the variables investigated. Questionnaires were used to measure students' moral understanding and academic ethics. The moral understanding instrument focused on students' comprehension of moral values, empathy, responsibility, care, and decision-making abilities related to ethical situations (R & Prem, 2025). Meanwhile, the academic ethics instrument examined students' honesty in completing assignments and examinations, responsibility toward academic obligations, fairness during classroom interactions, respect for school regulations, and appreciation for classmates' opinions and property (Zega, 2025). Essay-based learning outcome tests were also administered to assess students' cognitive achievement in IPAS learning, particularly on the topic "Our Earth is in Danger." The use of essay tests enabled the researcher to evaluate students' depth of understanding, analytical thinking skills, and ability to solve contextual problems related to environmental and social issues discussed during the instructional process.

In addition to questionnaires and cognitive tests, observation sheets were utilized to monitor the consistency of the Archerys ID Model implementation during classroom learning activities. The observation process focused on identifying teacher adherence to the instructional stages of the model, students' active participation, collaborative learning activities, and the integration of moral and ethical values throughout instruction. Furthermore, interviews and documentation were employed as supporting qualitative instruments to strengthen and validate the quantitative findings. Interviews were conducted with teachers and selected students to explore perceptions regarding learning experiences, classroom interactions, and value integration during instructional activities. Documentation techniques were used to collect supporting materials such as lesson plans, teaching modules, learning media, classroom photographs, and other instructional documents related to the implementation of the Archerys ID Model.

Table 1. Instrument indicators for moral understanding and academic ethics

Variable	Aspect	Indicator
Moral Understanding	Moral Knowing	Understanding values of goodness and social norms
	Moral Feeling	Demonstrating empathy, responsibility, and care based on conscience
	Moral Decision	Ability to determine attitudes and solutions during moral dilemmas
Academic Ethics	Integrity and Honesty	Acting honestly in assignments and examinations
	Responsibility	Fulfilling learning obligations and maintaining school facilities
	Fairness and Respect	Respecting classmates' opinions and property
	Compliance with Norms	Adhering to school rules and maintaining politeness

Data Analysis Techniques

All quantitative data obtained in this study were processed using SPSS version 27.00 through several systematic stages of statistical analysis. Prior to the primary analysis, the quality of the research instruments was examined through validity and reliability testing procedures. Instrument validity was measured using the Pearson Product Moment correlation formula to determine the extent to which each instrument item accurately represented the intended construct (Perera, 2022). The Pearson Product Moment correlation formula used in this study is presented as follows:

$$r_{xy} = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{[n\sum X^2 - (\sum X)^2][n\sum Y^2 - (\sum Y)^2]}} \quad (1)$$

Instrument reliability was assessed using Cronbach's Alpha coefficient to determine the internal consistency of the research instruments. Instruments were considered reliable when the reliability coefficient exceeded 0.70. The Cronbach's Alpha formula used in this study is presented below (Basu, 2021):

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum S_i^2}{S_t^2}\right) \quad (2)$$

Following the validity and reliability testing stages, prerequisite tests for parametric statistical analysis were conducted, namely the normality test and homogeneity test (Siregar, 2026). The normality test was performed using the Kolmogorov–Smirnov test to determine

whether the data were normally distributed, while homogeneity of variance was examined using Levene's Test to determine whether the variances between groups were homogeneous (Rueda, 2023). Data were considered normally distributed and homogeneous when the significance value exceeded 0.05 (Guptha, 2024). These prerequisite tests were necessary to ensure that the data fulfilled the assumptions required for subsequent inferential statistical analyses.

The primary stage of hypothesis testing in this study employed Multivariate Analysis of Variance (MANOVA) to examine the simultaneous effect of the Archerys ID Model on the three dependent variables collectively, namely moral understanding, academic ethics, and IPAS learning outcomes. MANOVA was selected because this study involved multiple dependent variables measured simultaneously within the same experimental framework. Through MANOVA analysis, the researcher was able to determine whether the instructional treatment exerted a statistically significant multivariate effect on the combined dependent variables (Akbar, 2023).

After obtaining significant MANOVA results, follow-up analyses were conducted using the Independent Sample t-test to examine partial differences between the experimental and control groups for each dependent variable individually (Barrett et al., 2026). The Independent Sample t-test was used to determine whether significant differences existed in moral understanding, academic ethics, and learning outcomes between students who participated in learning using the Archerys ID Model and those who participated in conventional learning. The formula applied for the Independent Sample t-test is presented below (Pallant, 2026):

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} \quad (3)$$

In addition to quantitative statistical analysis, qualitative data obtained from observations and interviews were analyzed descriptively through stages of data reduction, data presentation, and conclusion drawing (Ranjan & Singh, 2025). The qualitative analysis was conducted to provide deeper insights regarding students' learning experiences, teacher instructional practices, classroom interactions, and the integration of moral and ethical values during the implementation of the Archerys ID Model. The integration of quantitative and qualitative analyses enabled this study to obtain more comprehensive findings regarding the effectiveness of the instructional model in improving students' moral understanding, academic ethics, and IPAS learning outcomes at the elementary school level.

Result and Discussion

Research Results

This study was conducted at SDN 04 Korong Kota Solok and involved two learning groups, namely an experimental class and a control class. The research subjects consisted of 40 Grade VI students selected using a purposive sampling technique based on relatively similar academic characteristics and learning abilities. Class VI A, consisting of 20 students, was assigned as the experimental group receiving instruction using the Archerys ID Model, while Class VI B, also consisting of 20 students, served as the control group receiving conventional learning instruction. The implementation of the study focused on examining differences in students' moral understanding, academic ethics, and IPAS learning outcomes following the application of different instructional approaches.

Description of Research Data

The research data consisted of three primary variables, namely moral understanding, academic ethics, and IPAS learning outcomes on the topic "*Our Earth is in Danger.*" Data were obtained through pretests and posttests for cognitive learning outcomes as well as questionnaires measuring students' moral understanding and academic ethics. Descriptive statistical analysis was conducted to identify the differences in students' scores before and after the implementation of the Archerys ID Model in the experimental class and conventional learning in the control class.

Experimental Class Data

Table 2. Descriptive statistics of pretest and posttest scores in the experimental class

Variable	Pretest Mean	SD	Posttest Mean	SD
Moral Understanding	74.80	4.12	84.20	4.89
Academic Ethics	72.90	4.35	84.50	4.21
Learning Outcomes	52.40	4.28	87.80	4.32

Based on Table 2, all variables in the experimental class experienced improvement following the implementation of the Archerys ID Model. The average score of moral understanding increased from 74.80 to 84.20, while academic ethics improved from 72.90 to 84.50. The highest increase occurred in IPAS learning outcomes, which rose from 52.40 during the pretest to 87.80 during the posttest, indicating an improvement of 35.40 points. These findings indicate that the implementation of the Archerys ID Model contributed positively not only to students' cognitive achievement

but also to the development of moral understanding and academic ethics during the learning process.

Table 3. Posttest frequency distribution in the experimental class

Category	Moral Understanding (f/%)	Academic Ethics (f/%)	Learning Outcomes (f/%)
Very High	9 (45.00%)	6 (30.00%)	14 (70.00%)
High	8 (40.00%)	10 (50.00%)	6 (30.00%)
Moderate	3 (15.00%)	4 (20.00%)	0 (0.00%)
Low	0 (0.00%)	0 (0.00%)	0 (0.00%)

The frequency distribution presented in Table 3 indicates that students in the experimental class predominantly achieved high and very high categories across all variables. In the learning outcomes variable, 70.00% of students achieved the "Very High" category, while no students were categorized as "Low." Similar tendencies were also observed in moral understanding and academic ethics, where most students achieved high levels after participating in learning activities using the Archerys ID Model. These results suggest that the instructional model created meaningful learning experiences capable of improving both cognitive and affective aspects simultaneously.

Control Class Data

Table 4. Descriptive statistics of pretest and posttest scores in the control class

Variable	Pretest Mean	SD	Posttest Mean	SD
Moral Understanding	64.20	2.34	74.10	2.45
Academic Ethics	62.10	2.15	73.20	2.38
Learning Outcomes	44.20	2.08	77.40	2.52

Based on Table 4, the control class also experienced improvement in all variables following conventional learning instruction. Moral understanding increased from 64.20 to 74.10, academic ethics improved from 62.10 to 73.20, and learning outcomes increased from 44.20 to 77.40. However, the increases observed in the control class were lower than those achieved in the experimental class. These findings indicate that although conventional learning contributed to student improvement, the implementation of the Archerys ID Model demonstrated greater effectiveness in improving students' moral understanding, academic ethics, and IPAS learning outcomes simultaneously.

Prerequisite Analysis Tests

Normality Test

The normality test was conducted using the Kolmogorov–Smirnov test to determine whether the data were normally distributed prior to inferential statistical analysis. Data were considered normally distributed when the significance value exceeded 0.05.

Table 5. Results of the normality test

Variable	Class	Sig.	Result
Moral Understanding Posttest	Experimental	0.20	Normal
	Control	0.20	Normal
Academic Ethics Posttest	Experimental	0.20	Normal
	Control	0.20	Normal
Learning Outcomes Posttest	Experimental	0.16	Normal
	Control	0.20	Normal

The results presented in Table 5 demonstrate that all variables possessed significance values greater than 0.05. Therefore, all datasets were considered normally distributed and suitable for subsequent parametric statistical analyses.

Homogeneity Test

The homogeneity test was conducted using Levene's Test to determine whether the variances between the experimental and control groups were homogeneous. Data were considered homogeneous when the significance value exceeded 0.05.

Table 6. Results of the homogeneity test

Variable	Levene Statistic	Sig.	Result
Moral Understanding	1.23	0.27	Homogeneous
Academic Ethics	1.89	0.18	Homogeneous
Learning Outcomes	1.46	0.23	Homogeneous

Based on Table 6, all variables demonstrated significance values greater than 0.05, indicating that the data variances between the experimental and control groups were homogeneous. Consequently, the data fulfilled the prerequisite assumptions for further inferential statistical analysis.

Hypothesis Testing

Prior to conducting partial hypothesis testing using the Independent Sample *t*-test, Multivariate Analysis of Variance (MANOVA) was performed to determine the simultaneous effect of the Archerys ID Model on the dependent variables collectively, namely moral understanding, academic ethics, and learning outcomes.

Table 7. MANOVA results

Multivariate Test	Value	F	Sig.
Wilks' Lambda	0.42	8.23	0.00

The MANOVA analysis revealed a significance value below 0.05, indicating that the Archerys ID Model exerted a statistically significant simultaneous effect on students' moral understanding, academic ethics, and

learning outcomes. Following the significant MANOVA result, further analyses were conducted using the Independent Sample *t*-test to examine differences in each dependent variable individually.

Differences in Moral Understanding

Table 8. Independent sample t-test results for moral understanding

Class	N	Mean	t	Sig. (2-tailed)
Experimental	20	84.20	4.22	0.00
Control	20	74.10		

The analysis demonstrated a significance value below 0.05, indicating that the null hypothesis was rejected and the alternative hypothesis was accepted. Therefore, students who participated in learning using the Archerys ID Model possessed significantly higher moral understanding than students who participated in conventional learning instruction.

Differences in Academic Ethics

The Independent Sample *t*-test results indicated a significance value below 0.05. Consequently, the null hypothesis was rejected, confirming that students who learned using the Archerys ID Model demonstrated significantly higher academic ethics compared to students who participated in conventional learning.

Table 9. Independent sample t-test results for academic ethics

Class	N	Mean	t	Sig. (2-tailed)
Experimental	20	84.50	5.34	0.00
Control	20	73.20		

Differences in Learning Outcomes

Table 10. Independent sample t-test results for learning outcomes

Class	N	Mean	t	Sig. (2-tailed)
Experimental	20	87.80	6.89	0.00
Control	20	77.40		

The analysis results indicated a statistically significant difference in learning outcomes between the experimental and control groups. Students who participated in learning activities using the Archerys ID Model achieved significantly higher IPAS learning outcomes compared to students receiving conventional instruction.

Correlation between Variables

Table 11. Product moment correlation results

Variable	Experimental (Pretest)	Control (Pretest)	Experimental (Posttest)	Control (Posttest)
Moral Understanding and Learning Outcomes	-0.29	-0.17	0.14	0.23
Academic Ethics and Learning Outcomes	-0.06	0.05	0.24	0.13

The correlation analysis demonstrated that the relationships between moral understanding, academic ethics, and learning outcomes shifted from negative to positive following the implementation of the Archerys ID Model in the experimental class. Although the resulting correlation coefficients remained within the weak category statistically, the findings indicate a positive trend toward aligning character development with academic achievement. In contrast, the correlation changes observed in the control class remained relatively weak. These findings suggest that the Archerys ID Model contributed to creating learning experiences in which moral understanding and academic ethics began to support students' academic performance rather than functioning independently from cognitive achievement.

Discussion

The Effect of Archerys ID Model on Moral Understanding

The Archerys Instructional Design (ID) model significantly improves elementary students' moral understanding. Experimental class achieved an average moral score of 84.2, higher than control class (74.1) (Hermuttaqien, 2021; Maharani et al., 2024). The model integrates moral values through three phases. The introduction phase uses prayer and discipline to foster religiosity and responsibility (Bulkoini, 2022). The core activity phase uses contextual themes like "Our Earth is in Danger," connecting abstract morals to real-life situations, aligning with CTL principles that link material to students' contexts (Ernawati, 2021; Fajriah, 2016; Langi, 2024). The closing phase uses appreciation and reflection to reinforce positive behavior and intrinsic motivation, allowing internalization of values (Marzuki, 2012; Muthmainnah et al., 2022). This three-phase design effectively develops ethical awareness and personal-social responsibility.

Beyond moral understanding, the Archerys ID model also positively affects academic ethics and learning outcomes. It shifts student orientation from grade-seeking to valuing integrity through value-based strategies, cooperative learning, and reflective

evaluation (Alfian, 2014; Ardika et al., 2020; Febriani et al., 2023; Purnamasari et al., 2020). Before implementation, negative correlations existed between moral understanding and learning outcomes (-0.293) and between academic ethics and learning outcomes (-0.056), indicating traditional systems penalized ethical students. After implementation, both correlations turned positive (0.136 and 0.240 respectively), proving that integrating moral and ethical values enhances academic achievement (Langi, 2024; Maharani et al., 2024; Purnamasari et al., 2020). The model suits elementary students' concrete operational stage, emphasizing real, interactive experiences. Teachers play a key role in designing learning with ethical dilemmas and constructive feedback (Ihwan, 2020; Muthmainnah et al., 2022; Rahmawati et al., 2016). Thus, the model builds holistic learning, preparing knowledgeable and ethically responsible students.

The Effect of Archerys ID Model on Academic Ethics

The Archerys ID Model has been shown to positively influence students' academic ethics through several integrated learning strategies. The first strategy is inquiry-based learning, active participation, independent research, and critical analysis. This approach effectively fosters honesty, responsibility, and respect for others' perspectives. As explained by Kreber (2025), the pedagogy of inquiry encourages students to internalize academic community values such as integrity and social responsibility. Additionally, Walton (2013), adds that online discussions based on information literacy can build ethical awareness through peer interaction. Inquiry strategies also reduce dishonest behavior because students come to value meaningful learning processes over merely chasing grades (Kreber, 2025). Thus, the core activity phase of the Archerys ID Model, which emphasizes independent exploration and critical analysis, directly supports the development of academic ethics.

The second strategy is emphasizing cooperative learning and mutual respect, which plays a key role in reducing academic dishonesty such as cheating and lagiarism. Lowe (2022) argues that unsupervised collaboration may actually trigger unethical behavior, but when cooperative learning is designed with individual accountability and shared goals, it can promote honesty. Arevalillo-Herráez & Claver (2011), show that assessment techniques encouraging cooperation in computer programming can improve learning while minimizing plagiarism. Furthermore, Berrezueta-Guzman et al. (2024) found in a study of programming student team dynamics that well-structured collaboration builds shared responsibility and reduces cheating. In the Archerys ID Model, cooperative learning accompanied by mutual respect and appropriate supervision creates an environment where students feel safe sharing ideas without fear of being considered dishonest, thereby significantly reducing academic misconduct. The third strategy is shifting students' orientation from merely pursuing grades to understanding integrity in learning. Brooks (2024), asserts that experiential learning approaches that emphasize direct experience can build a sustainable culture of academic integrity. Kldiashvili et al. (2025), in a quasi-experimental study of medical students, proved that a project-based approach improves originality and academic performance while reducing plagiarism rates. Creighton et al. (2025) also show that serious games co-designed with nursing students can integrate academic and professional integrity, enhancing ethical awareness, critical thinking, and self-regulation. Moreover, teachers' ethical leadership plays a crucial role; Arain et al. (2017) found that when teachers demonstrate ethical behavior, students tend to imitate it and develop responsible academic conduct. By adopting the Archerys ID Model that combines inquiry, collaboration, and a focus on learning processes, students' orientation shifts from grade-chasing to a deep understanding of integrity. As a result, academic ethics improve, cheating decreases, and students grow into honest, responsible learners who value others' perspectives.

The Effect of Archerys ID Model on Learning Outcomes

The Archerys ID Model has been shown to significantly improve student learning outcomes, with an average difference of 35.4 points between the experimental and control classes (Gani et al., 2022; Maharani et al., 2024). This improvement is driven by three key strategies embedded in the model's instructional design, namely creative stimuli to capture students' attention, relevance to everyday life, and constructive feedback provided continuously (Isni et al., 2024; Maharani et al., 2024; Purnamasari et al., 2020). Creative stimuli, such as challenging questions, interactive media, or short stories, successfully increase students' focus and curiosity. Relevance of material to real world contexts makes learning more meaningful, helping students understand complex concepts more easily (Dewi & Hidayah, 2022; Febriani et al., 2023). Constructive feedback, whether from teachers or peers, helps students recognize their strengths and weaknesses while building self confidence to continue learning (Maharani et al., 2024; Marzuki et al., 2023).

These three strategies form a positive learning cycle where increased attention leads to improved understanding, which then leads to increased confidence and motivation, and finally to sustained attention (Langi, 2024; Maharani et al., 2024). This cycle aligns with the ARCS framework, which includes Attention, Relevance, Confidence, and Satisfaction, that

underpins the Archerys ID Model. When students experience success in understanding material, their intrinsic motivation grows, and they tend to repeat productive learning behaviors (Ardika et al., 2020; Dewi & Hidayah, 2022). Furthermore, the model balances cognitive goals, such as concept mastery and problem solving, and affective goals, such as attitudes, motivation, and ethical values, making it suitable for various educational contexts, especially elementary schools that emphasize holistic learning (Fajriah, 2016; Marzuki, 2012; Muthmainnah et al., 2022; Rahmawati et al., 2016). By integrating creative stimuli, real life relevance, and constructive feedback, the Archerys ID Model not only quantitatively improves learning outcomes but also builds a foundation for lifelong learning oriented toward integrity and responsibility (Gani et al., 2022; Maharani et al., 2024; Purnamasari et al., 2020).

Correlation between Moral Understanding, Academic Ethics, and Learning Outcomes

Before the Archerys ID Model was applied, the correlation between moral understanding and learning outcomes was negative at 0.293, and the correlation between academic ethics and learning outcomes was also negative at 0.056 (Agustin & Anita, 2018; Fachruddin, 2017; Maharani et al., 2024). A negative correlation of 0.293 between moral understanding and learning outcomes means that students with higher moral integrity often achieved lower academic results in traditional classrooms. This happened because conventional educational systems sometimes rewarded dishonest practices such as cheating while penalizing students who refused to engage in such behaviors (Fachruddin, 2017). Similarly, the very weak negative correlation of 0.056 between academic ethics and learning outcomes indicates that ethical behavior did not automatically lead to better grades. In other words, being honest, citing sources properly, and respecting others' work were not strongly linked to academic success in the pre intervention context (Agustin & Anita, 2018). These findings confirm that in traditional learning environments, moral understanding and academic ethics were disconnected from performance outcomes, and students with integrity were often disadvantaged.

After the implementation of the Archerys ID Model, both correlations turned positive. The correlation between moral understanding and learning outcomes became 0.136, and the correlation between academic ethics and learning outcomes increased to 0.240 (Langi, 2024; Maharani et al., 2024). A positive correlation of 0.136, although small, shows that students' moral understanding started to contribute positively to their academic achievement. The stronger positive correlation of 0.240 between academic ethics and learning outcomes demonstrates that ethical behavior such as honesty, responsibility, and respect for others became a meaningful predictor of better grades after the intervention (Alfian, 2014; Purnamasari et al., 2020). This shift from negative to positive correlations proves that integrating moral and ethical values into instructional design actually enhances academic performance. The Archerys ID Model creates synergy between character development and academic achievement by using contextual themes, constructive feedback, cooperative learning, and reflective evaluation (Fajriah, 2016; Langi, 2024; Maharani et al., 2024). In conclusion, when values are systematically embedded in learning activities, students do not have to choose between being ethical and being successful. Instead, their integrity and their academic performance reinforce each other, producing a holistic learning outcome that benefits both the individual and the learning community.

Contribution of Archerys ID Model to Holistic Learning

The Archerys ID Model is highly suitable for elementary school students because it aligns with the concrete operational stage of development, where children learn best through real and interactive experiences. By using contextual themes such as "Our Earth is in Danger," the model connects abstract moral values to everyday situations, making learning more relevant and meaningful for young learners (Fajriah, 2016). Furthermore, the Archerys ID Model balances cognitive achievement with affective development, focusing equally on moral understanding, academic ethics, and value-oriented learning attitudes. This balance ensures that students do not only pursue high scores but also develop integrity, responsibility, and ethical awareness as part of their learning process (Fajriah, 2016; Marzuki, 2012; Rahmawati et al., 2016). The model's three-phase design, consisting of introduction, core activities, and closing, systematically integrates ethical dilemmas and reflective practices into daily lessons, which supports the formation of an ethical learning culture and enhances both motivation and self-confidence through continuous positive feedback.

Teachers play a central role in the Archerys ID Model as designers of learning experiences that combine real-world ethical dilemmas with academic content. They use local contexts and relevant issues to spark ethical discussions, raise students' moral awareness, and facilitate character-oriented learning (Dimyati, 2010; Muthmainnah et al., 2022; Rahman, 2016; Salam & Ilham, 2024; Saputra et al., 2023). Constructive feedback is another key component. Specific, relevant, and improvement-oriented feedback helps students explore their own values, build metacognitive skills, and strengthen intrinsic motivation (Dewi & Hidayah, 2022;

Hanaris, 2023; Hasanah et al., 2023; Jabri & Ismail, 2021; Sukriani, 2023). Through this combination of contextual learning, teacher guidance, and constructive feedback, the Archerys ID Model prepares elementary school students for a future that values both knowledge and ethical responsibility. It builds a foundation for holistic learning by integrating character development, moral values, academic ethics, and cognitive competencies. Therefore, the model offers a practical and effective framework for implementing holistic education in elementary schools, where the integration of moral, ethical, and academic goals is essential for producing well‑rounded individuals (Dimyati, 2010; Muthmainnah et al., 2022).

Conclusion

This study concludes that the implementation of the Archerys Instructional Design (ID) Model significantly improves students' moral understanding, academic ethics, and IPAS learning outcomes among Grade VI students at SDN 04 Korong Kota Solok on the topic "Our Earth is in Danger." The findings demonstrated that students in the experimental class consistently achieved higher results than students in the control class across all measured variables. The average score of moral understanding in the experimental class reached 84.20 compared to 74.10 in the control class, while academic ethics reached 84.50 compared to 73.20. Similarly, students' learning outcomes in the experimental class reached an average score of 87.80, which was higher than the control class average score of 77.40. Statistical analysis through MANOVA and Independent Sample t-tests indicated significant differences between the experimental and control groups with significance values of $p < 0.05$. In addition, the correlation analysis demonstrated a positive trend in the relationship between moral understanding, academic ethics, and learning outcomes following the implementation of the Archerys ID Model. Although the correlation coefficients remained within the weak category statistically, the direction of the relationship shifted from negative to positive in the experimental class. This finding indicates that the integration of moral and ethical values within instructional activities has begun to align character development with academic achievement. Therefore, the Archerys ID Model can be considered an effective instructional alternative for integrating affective and cognitive learning dimensions simultaneously within elementary school learning contexts. This study also contributes theoretically to the development of instructional design research integrating moral understanding, academic ethics, and cognitive achievement within a unified learning framework. Practically, the findings may serve as a reference for teachers and educational practitioners in designing more contextual, meaningful, and value-integrated learning activities at the elementary school level. Future studies are recommended to involve larger sample sizes, broader educational levels, and longer implementation periods to examine the long-term effectiveness of the Archerys ID Model in strengthening students' character development and academic achievement.

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Author Contributions

Conceptualization, formal analysis, funding acquisition, D.E. and D.; methodology, resources, D.E., D., Z.Z., and R.; investigation, D.E., Z.Z., and R.; writing—original draft preparation, visualization, project administration, D.E.; writing—review and editing, D., Z.Z., and R.; supervision, D. All authors have read and approved the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

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