

PANCASILA-INTEGRATED ENTREPRENEURSHIP LEARNING AND UNIVERSITY STUDENTS' ENTREPRENEURIAL INTENTION

Nur Hidayat Cahyono^{1*}, Sri Wahyudi²

¹² Universitas Doktor Nugroho Magetan, Indonesia

*Corresponding Author: nurhidayat@udn.ac.id

ABSTRACT

Values-based entrepreneurship learning may strengthen students' willingness to pursue entrepreneurship, but its effects should be distinguished from unmeasured ethical or behavioral outcomes. This study evaluated a Pancasila-integrated entrepreneurship learning intervention using a quasi-experimental pretest-posttest control-group design. Eighty students in two intact university classes were included (experimental group, $n = 40$; control group, $n = 40$); students were not individually randomized. The reported outcome was a self-reported entrepreneurial-intention score. Because individual-level data were unavailable, the revision reanalyzed the reported summary statistics through baseline comparison, paired changes, and a between-group Welch comparison of change scores, with confidence intervals and effect sizes. Pretest means were comparable (68.45 vs. 67.98; $p = .754$). Mean intention increased by 16.28 points in the experimental group and 5.56 points in the control group. The between-group difference in change was 10.72 points, 95% CI [7.33, 14.11], $t(76.00) = 6.29$, $p < .001$, Hedges' $g = 1.39$. Thus, exposure to the integrated condition was associated with a larger short-term increase in entrepreneurial intention. The study did not directly measure ethical awareness, social responsibility, entrepreneurial competence, or actual venture behavior; these remain proposed mechanisms and future outcomes rather than demonstrated effects.

Keywords: Entrepreneurial intention, Entrepreneurship learning, Pancasila education, Quasi-experiment

INTRODUCTION

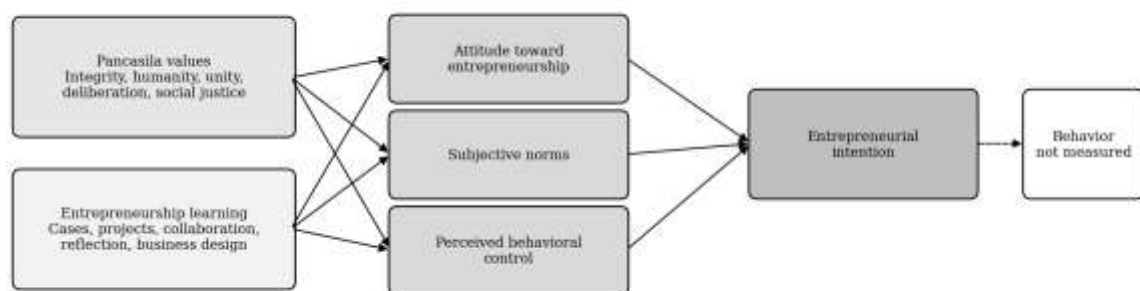
Entrepreneurship education is expected to help universities prepare graduates who can recognize opportunities, create value, and respond to uncertain labor markets. Yet its outcomes should be stated carefully. Meta-analytic evidence indicates that entrepreneurship education and training can develop entrepreneurship-related human capital, but its effects on entrepreneurial intention are heterogeneous and depend on program design, prior exposure, and evaluation method (Martin et al., 2013; Bae et al., 2014). Studies using experiential activities suggest that inspiration, active participation, and opportunities to practice can matter more than the transmission of business concepts alone (Souitaris et al., 2007; Fayolle & Gailly, 2015). Reviews and empirical studies in Indonesian higher education likewise emphasize curriculum design and report that entrepreneurship education can strengthen intention through perceived desirability, feasibility, attitudes, motivation, and other proximal mechanisms (Elpisah et al., 2024; Fauzi, 2022; Astiana et al., 2022). These findings support intervention-based research while also showing why pre-intervention intention must be considered when estimating educational effects.

Entrepreneurship learning is used consistently in this article to mean a designed educational process that combines conceptual knowledge with activities such as case analysis, opportunity evaluation, project work, feedback, and reflection. Entrepreneurial intention, by contrast, is a learner outcome describing a stated readiness or plan to pursue entrepreneurship. The two terms should not be treated as interchangeable. A program can improve intention without yet producing a venture, and a student's intention can change for reasons outside the program. Likewise, stronger intention does not by itself demonstrate competence, creativity, ethical conduct, or sustainable business performance. Separating the intervention from its measured outcome prevents curricular aspirations from being reported as empirical findings and provides a clearer basis for theory, measurement, and evaluation.

The Theory of Planned Behavior (TPB) provides a coherent explanation of entrepreneurial intention. According to Ajzen (1991), intention is predicted by attitude toward the behavior, subjective norms, and perceived behavioral control; entrepreneurship research has used these antecedents to compare intention models (Krueger et al., 2000). In an entrepreneurship context, attitude represents the perceived desirability and value of starting a venture; subjective norms represent perceived approval or

expectations from relevant social groups; and perceived behavioral control reflects confidence that the behavior is feasible and manageable. The Entrepreneurial Intention Questionnaire developed by Linan and Chen (2009) illustrates how these constructs can be operationalized in different cultural settings. The theory does not imply that intention is identical to behavior: intention is a proximal predictor, while actual venture creation also depends on opportunities, resources, and control. This distinction is essential because the present study reported self-reported entrepreneurial intention rather than observed entrepreneurial behavior.

Pancasila Education offers a culturally grounded values framework that may shape the meaning students attach to entrepreneurship. The five principles emphasize belief and moral accountability, just and civilized humanity, national unity, deliberative democracy, and social justice. Education based on these values has been associated with character-oriented, collaborative, and reflective learning in Indonesian settings (Effendi, 2024; Indrawadi et al., 2023; Winarno et al., 2023; Komalasari et al., 2024). In entrepreneurial learning, integrity and accountability may make responsible entrepreneurship more positively valued; humanity and social justice may orient opportunity evaluation toward stakeholder welfare; unity and mutual cooperation may strengthen supportive peer norms; and deliberation may normalize participatory decision-making. These propositions describe potential pathways to TPB antecedents, not outcomes directly measured in this study. Ethical awareness, social responsibility, creativity, self-efficacy, opportunity recognition, and risk readiness therefore remain explanatory possibilities unless separately assessed.



TPB pathways are explanatory mechanisms proposed by theory; only total entrepreneurial intention was reported as measured.

Figure 1. Conceptual framework linking the integrated learning model to entrepreneurial intention

The intervention was described as Pancasila-integrated because values were embedded in entrepreneurship cases, group discussion, project work, and reflection instead of being taught as a separate moral lecture. Emerging work on Pancasila-based entrepreneurship similarly argues for connecting national values with experiential and competency-based activities (Kurniawan et al., 2024). This integration has a plausible dual function: values can influence the perceived desirability and social legitimacy of entrepreneurship, while practical tasks can influence perceived behavioral control. A program can therefore affect entrepreneurial intention without establishing that it has already produced ethical entrepreneurs. The appropriate empirical claim is narrower: students exposed to the integrated learning condition may report a larger improvement in entrepreneurial intention than students receiving the usual non-integrated learning condition.

Previous research leaves three gaps. First, many studies assess entrepreneurship education cross-sectionally, making it difficult to separate educational exposure from students' prior interest. Second, values education and entrepreneurship education are often examined as distinct curricular areas even though entrepreneurship is embedded in social and ethical contexts. Third, evidence from culturally specific integrations remains limited, and a national values framework may not transfer unchanged to other countries. The present study addresses these gaps through a pretest-posttest control-group comparison involving intact university classes. Its contribution is the evaluation of a Pancasila-integrated learning model while explicitly limiting inference to the measured outcome and recognizing the contextual specificity of Pancasila.

The study asked whether the change in self-reported entrepreneurial intention was greater in the integrated group than in the control group. Two hypotheses were specified: H1, the experimental group would show a positive pretest-posttest change in entrepreneurial intention; and H2, the experimental group's change would exceed the control group's change. Figure 1 summarizes the proposed theoretical pathways. It is a conceptual framework rather than a tested mediation model because the supplied study record contained only total entrepreneurial-intention scores.

METHOD

Research Design and Setting

The study used a quantitative, quasi-experimental pretest-posttest control-group design in a real university setting where individual randomization was not feasible (Shadish et al., 2002). Two institutionally formed classes were used. One class received Pancasila-integrated entrepreneurship learning and the other continued with the usual non-integrated learning condition. The pretest measured initial entrepreneurial intention before the intervention, and the posttest measured the same outcome after instruction. Because allocation occurred at the intact-class level, the design estimates an association between class exposure and score change and does not provide the control of a randomized individual trial.

Participants and Allocation

The analytic sample contained 80 undergraduate students, with 40 complete pretest-posttest records in each group as indicated by the paired-test degrees of freedom. Purposive sampling was used to identify students with exposure to Pancasila Education and entrepreneurship coursework. Institutional class membership determined group allocation; students were not randomly assigned individually. No a priori power analysis was reported, so the sample size appears to have been fixed by the available intact classes. Table 1 distinguishes information available in the supplied study record from information requiring author confirmation.

Table 1. Participant and allocation information available for reporting

Item	Available information
Educational context	One university
Eligibility	Undergraduate students with Pancasila Education and entrepreneurship-course exposure
Allocation	Two intact classes; no individual randomization
Analytic sample	Experimental n = 40; control n = 40
Demographics	Not reported
Attrition/missing data	No missing values within the reported analytic sample
Power analysis	No a priori calculation reported
Ethics and data protection	Not reported

Integrated Learning Intervention and Control Condition

The experimental condition combined Pancasila values with entrepreneurship tasks through discussion, case analysis, project-based learning, and structured reflection. Integration means that values were used as criteria for analyzing opportunities and making business decisions, while entrepreneurship activities gave students a context in which to apply those values. Table 2 provides a provisional component map reconstructed from the activities named in the source manuscript. It should not be treated as a verified session schedule until the original lesson plan is checked.

Table 2. Provisional mapping of Pancasila-integrated entrepreneurship learning components

No.	Topic	Pancasila value	Entrepreneurship task	Intended competency
1	Moral accountability and opportunity framing	Belief in God; integrity	Analyze an ethical opportunity case	Responsible opportunity evaluation
2	Human-centered problem definition	Just and civilized humanity	Stakeholder and empathy analysis	Value proposition and social responsibility
3	Collaborative venture development	Unity; mutual cooperation	Team project and resource mapping	Collaboration and networking
4	Deliberative business-model decisions	Democracy and deliberation	Business-model design and peer feedback	Communication and reasoned decision-making
5	Inclusive value creation and reflection	Social justice	Project presentation and reflective evaluation	Feasibility, impact awareness, and intention

Measure and Data Collection

Entrepreneurial intention was measured at pretest and posttest with a questionnaire using five-point Likert responses. The source manuscript stated that experts reviewed the content and that validity and reliability tests were conducted, but it did not provide the information required to evaluate those claims. It also did not establish whether the questionnaire was adapted from a TPB-based instrument such as the Entrepreneurial Intention Questionnaire (Linan & Chen, 2009), whether TPB antecedents were scored separately, or whether only a total intention score was used. The statistical tables supplied for this revision contained only total entrepreneurial-intention scores. Consequently, attitude, subjective norm, perceived behavioral control, Pancasila values, ethical awareness, creativity, self-efficacy, opportunity recognition, and risk readiness were not treated as measured outcomes.

Procedure, Ethics, and Data Protection

Students completed the same outcome measure before the intervention and after the instructional sequence. The experimental class participated in the integrated activities, while the control class followed the usual condition. The supplied manuscript did not report the interval between measurements, administration mode, safeguards against instructor influence, ethical approval, informed consent, confidentiality procedures, data storage, or participant access to study information. These details are necessary for a complete account of the research procedure.

Statistical Analysis

Analyses were reconstructed from the reported group means, standard deviations, sample sizes, and paired-test statistics. Baseline equivalence was evaluated with a Welch independent-samples t-test. Within-group change was summarized with the reported paired t-tests, 95% confidence intervals, and standardized paired effect size d_z . To align the primary inference with the pretest-posttest design, the groups were compared on change scores. Because change-score standard deviations were not printed, they were recovered from each paired t statistic using $SD_{\text{change}} = \text{mean change} \times \sqrt{n} / t$. A Welch t-test then compared the two mean changes, and Hedges' g quantified the standardized between-group contrast (Lakens, 2013). A two-sided alpha of .05 was used, exact probabilities were reported when available, and values below .001 were written as $p < .001$.

The reported degrees of freedom indicate 40 complete pairs per group, so the summary analysis used 80 complete cases. Recruitment-stage exclusions or attrition before the analytic sample could not be reconstructed. Individual observations and statistical output were unavailable; therefore, ANCOVA, a mixed group-by-time model, influence diagnostics, and exact normality or variance-homogeneity statistics could not be calculated. The summary-data analysis assumes independent classes and

approximately normal change scores. Reanalysis of the original dataset with ANCOVA or a mixed model remains preferable because it would directly account for individual baseline scores and permit assumption testing.

RESULTS AND DISCUSSION

Results

The experimental and control groups had similar pretest means. The baseline difference was 0.47 points, 95% CI [-2.51, 3.45], Welch $t(77.89) = 0.31$, $p = .754$, Hedges' $g = 0.07$. This result does not prove that the intact classes were equivalent on unmeasured characteristics, but it indicates no material difference in the reported baseline entrepreneurial-intention score. Descriptive results and change estimates are shown in Table 3.

Table 3. Entrepreneurial-intention scores and within-group change

Group	n	Pretest M (SD)	Posttest M (SD)	Change M (SD)	95% CI for change
Experimental group	40	68.45 (6.82)	84.73 (5.91)	16.28 (6.97)	[14.05, 18.51]
Control group	40	67.98 (6.57)	73.54 (6.41)	5.56 (8.21)	[2.93, 8.19]

The experimental group improved by 16.28 points, $t(39) = 14.762$, $p < .001$, $dz = 2.33$. The control group improved by 5.56 points, $t(39) = 4.281$, $p < .001$, $dz = 0.68$. The primary between-group comparison showed that the experimental group's improvement exceeded the control group's improvement by 10.72 points, 95% CI [7.33, 14.11], Welch $t(76.00) = 6.29$, $p < .001$, Hedges' $g = 1.39$. The posttest-only comparison reported in the original analysis was also significant, $t(78) = 8.154$, $p < .001$; from the rounded group summaries its standardized effect was approximately $g = 1.80$. Table 4 separates these inferential results from interpretation.

Table 4. Inferential tests, effect sizes, and confidence intervals

Comparison	Mean difference	Test	p	Effect size	95% CI
Experimental pretest-posttest	16.28	$t(39) = 14.762$	$< .001$	$dz = 2.33$	[14.05, 18.51]
Control pretest-posttest	5.56	$t(39) = 4.281$	$< .001$	$dz = 0.68$	[2.93, 8.19]
Between-group change	10.72	$t(76.00) = 6.29$	$< .001$	$g = 1.39$	[7.33, 14.11]
Posttest group difference	11.19	$t(78) = 8.154$	$< .001$	$g \text{ approx. } 1.80$	[8.45, 13.93]

Discussion

The results support the primary hypothesis at the level of self-reported entrepreneurial intention. Both groups improved, but the experimental group's mean change was almost three times the control group's change, and the between-group change contrast was large. The comparable pretest means reduce concern that the result merely reflects an obvious initial difference between the two intact classes. The positive control-group change also matters: conventional instruction, repeated testing, concurrent experiences, or maturation may have contributed to improvement. The relevant intervention estimate is therefore the additional 10.72-point change in the experimental group, not the experimental group's within-group gain considered in isolation.

The pattern is broadly consistent with studies in which experiential entrepreneurship programs increased intention or its antecedents (Souitaris et al., 2007; Fayolle & Gailly, 2015; Astiana et al.,

2022). It also aligns with the argument that entrepreneurship education develops human capital more consistently when learning is active and practice oriented (Martin et al., 2013). However, Bae et al. (2014) found that the education-intention relationship becomes smaller when pre-education intention is controlled. That finding strengthens the rationale for the present change-score comparison and cautions against interpreting a posttest difference alone as a treatment effect.

Several alternative explanations remain compatible with the observed pattern. The experimental class may have differed from the control class in instructor behavior, peer climate, timetable, assessment expectations, or prior exposure even though their pretest means were similar. Novelty and additional attention can also increase engagement independently of the specific Pancasila content. Conversely, the control group's improvement suggests that ordinary coursework or common university experiences may already support entrepreneurial intention. A stronger evaluation would match instructional time and instructor characteristics, document implementation in both conditions, measure expectations about treatment, and model students as nested within classes. With only one class per condition, a class effect cannot be separated statistically from a treatment effect; replication across multiple classes and instructors is therefore especially important.

TPB offers plausible explanations for the larger gain, but the present evidence does not identify which explanation operated. Ethical cases and stakeholder analysis may have improved attitudes by presenting entrepreneurship as socially legitimate and personally meaningful. Collaborative projects and deliberation may have strengthened perceived support from classmates and instructors, affecting subjective norms. Business-model tasks, presentations, and iterative feedback may have increased perceived behavioral control by giving students mastery experiences. The Pancasila values may also have provided a shared vocabulary for evaluating responsible business choices. Because attitude, subjective norm, perceived behavioral control, ethical awareness, and entrepreneurial competence were not separately reported, these pathways should be tested in future studies rather than stated as demonstrated mechanisms.

The cultural specificity of the model is both a contribution and a boundary condition. Pancasila is embedded in Indonesia's constitutional, historical, and educational context, and the intervention's legitimacy may partly depend on students' prior familiarity with its language and norms. The model should not be exported by simply relabeling generic entrepreneurship education. Adaptation elsewhere would require identifying locally legitimate civic or ethical principles, mapping them transparently to entrepreneurship tasks, consulting stakeholders, and testing measurement equivalence. What may be portable is the design logic - integrating an explicit values framework with experiential entrepreneurship learning - rather than the Pancasila label itself.

For curriculum practice, the findings justify a cautious recommendation to develop and test integrated modules. Each activity should specify the relevant value, entrepreneurship competency, learning objective, materials, instructor role, and assessment evidence. Fidelity can be monitored through lesson logs, observation checklists, student work samples, and periodic review of whether the values component is substantively integrated rather than merely mentioned. Evaluation should retain pretest measurement, use validated TPB-based scales where appropriate, report reliability by measurement occasion, and add follow-up measures of behavior when feasible. These steps would make future implementations more replicable and would allow the mechanism and durability of the observed intention change to be assessed.

Future research should test the full explanatory chain rather than relying on a total intention score. At minimum, attitude, subjective norm, perceived behavioral control, and entrepreneurial intention should be measured with a documented and culturally adapted instrument. Measures of ethical reasoning, stakeholder orientation, social responsibility, and entrepreneurial competence should be added only when supported by clear construct definitions and validation evidence. Repeated follow-ups could determine whether changes persist and whether they predict concrete behaviors such as opportunity exploration, team formation, prototype development, or venture initiation. A multi-site design with several classes per condition would allow class-level clustering to be modeled and would improve the credibility and transferability of conclusions about values-integrated entrepreneurship learning.

Limitations

This study has several limitations. The two groups were intact classes selected purposively rather than students randomized individually, so unmeasured group differences and concurrent experiences cannot be ruled out. The single-institution setting limits generalizability, and the source manuscript did not provide academic-program, semester, age, gender, recruitment, or pre-analysis attrition details. Measurement was short term and self-reported; entrepreneurial behavior was not observed. The supplied record stated that a five-point Likert questionnaire underwent expert review, validity testing, and reliability testing, but it did not identify the instrument, item count, dimensions, scoring range, adaptation process, pilot sample, item statistics, or reliability coefficients. Intervention duration, instructor qualifications, materials, fidelity checks, and control-group contact details were also incomplete. Finally, individual-level data and assumption-test output were unavailable for this revision, preventing ANCOVA or a mixed model and preventing independent reporting of normality, variance-homogeneity, and missing-data diagnostics. The summary-data change analysis improves alignment with the design but cannot replace a reanalysis of the original dataset. These limitations require conservative causal language and should be resolved through author verification and, where possible, reanalysis of the raw data.

CONCLUSION

Students in the intact class receiving Pancasila-integrated entrepreneurship learning showed a substantially larger short-term increase in self-reported entrepreneurial intention than students in the usual non-integrated condition. The change-score difference was 10.72 points with a large standardized effect, but the quasi-experimental allocation, single-institution context, incomplete methodological documentation, summary-data reanalysis, and absence of behavioral follow-up require cautious interpretation. The study supports further development and rigorous testing of values-integrated entrepreneurship modules; it does not demonstrate that participants became more ethical, socially responsible, creative, self-efficacious, opportunity oriented, risk ready, or behaviorally entrepreneurial because those outcomes were not separately measured. Universities considering the approach should specify activities and fidelity criteria, use validated multidimensional measures, retain baseline-adjusted analyses, and assess whether intention persists and translates into responsible entrepreneurial action.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Astiana, M., Malinda, M., Nurbasari, A., & Margaretha, M. (2022). Entrepreneurship education increases entrepreneurial intention among undergraduate students. *European Journal of Educational Research*, 11(2), 995-1008. <https://doi.org/10.12973/eu-jer.11.2.995>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254. <https://doi.org/10.1111/etap.12095>
- Effendi, Y. R. (2024). Character education based on the values and norms of the Indonesian philosophical system. *Sophia*, 37, 255-282. <https://doi.org/10.17163/soph.n37.2024.08>
- Elpisah, E., Suarlin, S., Latang, L., & Pada, A. (2024). Indonesian higher education's entrepreneurial curriculum: A literature review. *Journal of Education Culture and Society*, 15(2), 815-833. <https://doi.org/10.15503/jecs2024.2.815.833>
- Fauzi, R. U. A. (2022). Does entrepreneurship education promote students' entrepreneurial intentions in Indonesia? The mediating role of motivation and attitude. *Proceedings on Engineering Sciences*, 4(2), 125-136. <https://doi.org/10.24874/PES04.02.003>
- Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93. <https://doi.org/10.1111/jsbm.12065>
- Indrawadi, J., Komalasari, K., Winarno, & Luthfi, Z. F. (2023). Blended learning: How can multimedia enhance students' characters? *New Educational Review*, 71, 63-77. <https://doi.org/10.15804/ner.2023.71.1.05>

- Komalasari, K., Abdulkarim, A., Saripudin, D., & Iswandi, D. (2024). Blended learning based on living values education for the development of students' digital citizenship. *Kasetsart Journal of Social Sciences*, 45(4), 1229-1240. <https://doi.org/10.34044/j.kjss.2024.45.4.16>
- Krueger, N. F., Jr., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Kurniawan, M. U., Murwani, F. D., Wahjoedi, & Nasikh. (2024). Entrepreneurship learning: Implementation of Pancasila values in developing higher education models. *Revista de Gestao Social e Ambiental*, 18(5), e05994. <https://doi.org/10.24857/rgsa.v18n5-183>
- Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: A practical primer for t-tests and ANOVAs. *Frontiers in Psychology*, 4, Article 863. <https://doi.org/10.3389/fpsyg.2013.00863>
- Linan, F., & Chen, Y.-W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224. <https://doi.org/10.1016/j.jbusvent.2012.03.002>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Winarno, Komalasari, K., & Indrawadi, J. (2023). Authentic assessment in online learning to develop students' character. *Kasetsart Journal of Social Sciences*, 44(4), 1091-1100. <https://doi.org/10.34044/j.kjss.2023.44.4.13>