

Investment Literacy: Building Future Wealth for Generation Z in Malaysia — A Community Service Program for High School Students in Selangor

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ABSTRACT

Purpose: This community service program was designed to strengthen investment and financial literacy among high school students in Malaysia and to evaluate the effectiveness of a short, practical financial-education module in improving their understanding of saving, investing, inflation, and long-term wealth accumulation.

Method: The program used a participatory, interactive approach delivered offline on 8 May 2026 to 28 participants (23 high school students and 5 accompanying teachers) at Maahad Tahfiz Al-Quran Lil Muttaqin, Selangor, Malaysia, in collaboration with the Faculty of Economics and Business, Universitas Pancasila (FEB UP). A one-group pre-test/post-test (pre-experimental) design was used, without a control or comparison group. Effectiveness was measured using a structured worksheet administered as a pre-test and post-test, covering term-matching, a case scenario, and a reflective question on the power of compounding; responses were analyzed descriptively by comparing the proportion of correct answers before and after the intervention, supplemented by an effect-size estimate (Cohen's h).

Results and Conclusion: The average correct-response ratio rose from 41.7% in the pre-test to 87.5% in the post-test, an increase of approximately 45.8 percentage points (Cohen's $h \approx 1.0$, a large effect), indicating that participants' short-term knowledge of investment concepts, inflation, portfolio diversification, and the importance of investing from a young age improved substantially after the session. Because the study used a single-group, single-session design without a control group or a measure of actual financial behavior, these results should be interpreted as a knowledge gain associated with the intervention rather than a causal or behavioral effect, and any scalability to other settings should be treated as a tentative, not established, possibility.

Keywords: Investment Literacy, Financial Education, Generation Z, Capital Market, Community Service Program

INTRODUCTION

Financial literacy has become an increasingly important competency for younger generations amid rapid digitalization and growing access to financial products. Adolescents today are exposed to digital payment systems, online investment platforms, and social-media-based financial information earlier than previous generations, making financial education a necessary life skill rather than an optional one (OECD, 2020).

In Malaysia, concerns about youth financial literacy have grown alongside the expansion of the financial and investment sector. The Financial Education Network (FEN) Malaysia, under the National Strategy for Financial Literacy 2019–2023, reports that many Malaysian youths still have limited understanding of concepts such as investment diversification, inflation, retirement planning, and long-term wealth accumulation. The RinggitPlus Malaysian Financial Literacy Survey (2023) further found that many young Malaysians have inadequate emergency savings and limited preparedness for financial uncertainty.

At the same time, Malaysia's capital market has seen substantial growth in retail participation, particularly among younger investors. The Securities Commission Malaysia (2024) reported a significant increase in retail investor participation, supported by digital trading platforms and mobile investment applications, while Bursa Malaysia (2024) recorded a steady rise in Central Depository System (CDS) account openings among investors below the age of 30. However, this growth in participation has not always been matched by adequate investment literacy: many young, first-time investors enter the market without a clear understanding of diversification, risk and return, or the difference between speculative trading and sustainable long-term investing.

For high school students specifically, exposure to practical financial education remains limited, as school curricula tend to be theoretical and rarely address real investment decision-making. This concern is echoed by recent Malaysian evidence: the FINCO (2023) Money SENse survey found that most Malaysian secondary students have only poor-to-moderate financial knowledge, while the Securities Commission Malaysia's (2022) Youth Capital Market Survey reported that a majority of young respondents were unable to answer basic capital-market questions correctly. Despite this evidence of low financial literacy among Malaysian secondary students, published evaluations of short, practical, school-based financial-education interventions specifically targeting Malaysian high school students remain scarce; most available Malaysian evidence instead concerns financial literacy levels or their correlates among university students or working-age adults (e.g., Sabri et al., 2023), rather than the evaluation of a delivered intervention among secondary school students. This is the specific gap addressed by the present study: an evaluation, using a pre-test/post-test design, of a short, practical financial-literacy module delivered directly to Malaysian high school students in a real, school-based setting. This gap motivated the present community service program, which sought to (1) improve financial literacy among Malaysian high school students, (2) introduce students to the Malaysian capital market and local investment instruments, (3) strengthen understanding of long-term wealth accumulation strategies, (4) raise awareness of and interest in responsible financial behavior among Generation Z, and (5) evaluate the short-term effectiveness of the training through a one-group pre-test/post-test design. The originality of this study lies in its cross-border, university-facilitated delivery to a Malaysian secondary-school audience, its use of a structured, item-level pre-/post-test instrument rather than a single self-reported literacy score, and its explicit reporting of the design's limitations — elements that are not consistently present in the existing community-service literature on youth financial literacy in Malaysia and the wider Southeast Asian region (Kaiser & Menkhoff, 2020; Ekasasmita et al., 2024).

RESEARCH METHOD

This study used a descriptive quantitative approach embedded within a community service (Pengabdian kepada Masyarakat) activity, following a one-group pre-test/post-test (pre-experimental) design: a single group of participants was assessed before and after the intervention, with no separate control or comparison group. The program was implemented through several stages: preparation and institutional coordination with the partner school, needs identification, development and validation of a simple financial-literacy module, offline delivery of the training, and evaluation using a pre-test/post-test instrument.

The activity was conducted on 8 May 2026 at Maahad Tahfiz Al-Quran Lil Muttaqin, Selangor, Malaysia, in partnership with the Faculty of Economics and Business, Universitas Pancasila. Participants consisted of 28 individuals: 23 high school students and 5 accompanying teachers, selected through the partner school's participant list. All 28 respondents, including the 5 teachers, were pooled into a single sample for the descriptive analysis reported in this study; results were not disaggregated by student/teacher status because the teacher subgroup ($n = 5$) was too small to support a separate, statistically meaningful comparison. This pooling is a limitation of the present analysis, since teachers and students may differ in baseline financial knowledge and in how they responded to the training; it is addressed further in the Discussion, and future iterations of this activity should record participant role at the point of data collection so that student and teacher responses can be analyzed separately.

The financial-literacy module covered basic concepts of saving and budgeting, an introduction to the Malaysian capital market, investment fundamentals, risk and return, and the power of compounding,

delivered through presentations, discussion, real-life case examples, and question-and-answer sessions.

Effectiveness was measured with a worksheet consisting of three parts: Part A (matching six investment-related terms with their definitions, e.g., dividend, inflation, portfolio), Part B (a case scenario asking participants to recommend a suitable investment instrument and explain why idle cash loses value to inflation), and Part C (a reflective question on why it is important to start investing at a young age, illustrated with a compounding example).

The worksheet was developed by the author team, who are FEB UP faculty members with teaching and research experience in investment and financial literacy, drawing on the OECD/INFE financial literacy assessment framework (Atkinson & Messy, 2012) and on the specific content delivered during the training. Item wording and the term definitions used in Part A were cross-checked by two team members for content accuracy and readability before the session, providing a basic level of content/face validity. No formal pilot test, item-difficulty analysis, or psychometric reliability assessment (e.g., Cronbach's alpha or KR-20 internal-consistency coefficients) was conducted, given the single-session, small-sample nature of the activity; this is acknowledged as a limitation of the instrument, and future iterations of this module should include a pilot test and a formal reliability assessment before administration.

Part A was scored as the number of correctly matched terms out of six, converted to a percentage. Part B and Part C were scored using a simple rubric in which a response was coded as "correct/adequate" if it identified the appropriate investment instrument or reasoning (Part B) or the correct rationale for investing early (Part C), and as "not adequate" if the response was incorrect, incomplete, or left blank; two members of the author team scored the open-ended items independently and reconciled any discrepancies through discussion before the percentages reported in Table 1 were calculated.

The same instrument was administered before (pre-test) and after (post-test) the training. Responses were analyzed descriptively by comparing the percentage of correct/adequate answers per item and on average across all items.

Individual pre- and post-test responses were not retained as linked participant-level pairs, so a paired inferential test (e.g., McNemar's test) could not be computed; instead, the magnitude of change was summarized using Cohen's h , an effect-size measure for the difference between two proportions, calculated directly from the aggregate pre- and post-test percentages for each item and for the overall average (Cohen, 1988). Following Cohen's (1988) conventional benchmarks ($|h| \approx 0.2$ small, 0.5 medium, 0.8 large), the resulting effect sizes are reported alongside the descriptive results in the following section.

As a one-group pre-test/post-test design without a control or comparison group, this study cannot rule out alternative explanations for the observed improvement, including test-retest (practice) effects from completing the same worksheet twice, maturation, regression toward the mean for participants who scored very low on the pre-test, or the influence of events unrelated to the training occurring between the pre- and post-test.

The single, short (one-day) session and the absence of a follow-up assessment also mean that the results reflect only immediate, short-term knowledge gain and cannot speak to the retention of this knowledge or to any change in actual financial behavior over time. These design limitations are revisited, together with their implications for interpreting the findings, in the Discussion section.

RESULTS

Improvement in Investment Literacy After the Training

All 28 participants completed both the pre-test and post-test. The results showed a clear improvement across every evaluated item, as summarized in Table 1.

Test Item	Pre-Test (n=28)	Post-Test (n=28)	Increase
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Dividend (Part A)	42.9%	89.3%	+46.4 pp
Inflation (Part A)	53.6%	92.9%	+39.3 pp
Portfolio (Part A)	35.7%	82.1%	+46.4 pp
Suitable investment instrument (Part B, Q1)	28.6%	78.6%	+50.0 pp
Reason to avoid idle cash (Part B, Q2)	50.0%	96.4%	+46.4 pp
Importance of early investing (Part C)	39.3%	85.7%	+46.4 pp
Average	41.7%	87.5%	+45.8 pp

Table 1. Comparison of pre-test and post-test correct-response ratios

On average across the six items, the correct-response ratio rose from 41.7% to 87.5%, an increase of approximately 45.8 percentage points, roughly a two-fold increase in the proportion of correct/adequate responses. Using the aggregate proportions, the overall effect size was Cohen's $h \approx 1.01$; per-item effect sizes ranged from $h \approx 0.96$ (Inflation) to $h \approx 1.19$ (reason to avoid idle cash), all of which exceed Cohen's (1988) conventional threshold for a "large" effect ($|h| \geq 0.8$). The largest percentage-point gains were observed in the ability to suggest a suitable investment instrument for a case scenario (+50.0 pp) and in explaining why idle cash loses value to inflation (+46.4 pp).

Facilitators' monitoring notes during the session recorded that participants asked more questions and engaged more actively in topics related to investment, financial planning, and capital market participation when practical, real-life examples were used, compared with more theoretical segments of the module. This observation was not independently coded or quantified and is reported here as a qualitative field note rather than a formal outcome measure.

DISCUSSION

The large observed gains, including on items requiring applied reasoning such as recommending a suitable investment instrument and explaining why idle cash loses value to inflation, suggest that the module was associated with a meaningful improvement in participants' ability to translate abstract investment concepts into applied financial reasoning, at least as measured immediately after the session. The pattern of stronger engagement during practical, example-based segments, noted informally by facilitators, is consistent with the case-based, participatory design of the module, although this observation was not formally measured and should be treated as illustrative rather than confirmatory.

These findings are consistent with prior literature showing that targeted financial-education interventions can meaningfully improve young people's financial decision-making and confidence (Lusardi & Mitchell, 2014; Lusardi, 2019). The sharp increase in understanding of inflation and portfolio diversification supports the OECD's (2020) argument that structured financial education is strongly associated with better financial decision-making and long-term financial resilience.

The results also echo Chen and Volpe's (1998) observation that students with limited financial literacy tend to make suboptimal financial decisions, and that this gap can be substantially narrowed through short, applied training rather than only theoretical instruction. The compounding-based reflection exercise, in particular, was associated with stronger reasoning about the importance of investing early, in line with Atkinson and Messy's (2012) framework on measuring financial literacy, which treats attitudes toward saving and investing as a core dimension alongside knowledge and behavior; because this study measured reasoning on a worksheet item rather than attitudes directly, this association should be read as suggestive rather than as evidence of attitude change.

These results should nonetheless be interpreted with caution. Because this study used a one-group pre-test/post-test design without a control or comparison group, the observed 45.8-percentage-point increase cannot be unambiguously attributed to the training itself: part of the improvement may reflect test-retest

(practice) effects from encountering the same items twice, or regression toward the mean among participants who scored particularly low on the pre-test, rather than learning attributable to the module alone. This caution is reinforced by Kaiser and Menkhoff's (2020) meta-analysis, which found that school-based financial-education programs tend to produce sizeable gains in financial knowledge but only small effects on financial behavior; because the present worksheet measured knowledge and reasoning rather than observed behavior, its results speak to short-term understanding and should not be read as evidence of behavior change.

A further limitation is that the reported percentages pool all 28 participants, including the 5 accompanying teachers, whose baseline financial knowledge and learning trajectory may differ systematically from those of the 23 high school students. Without role-disaggregated data, it is not possible to determine whether the aggregate gain was driven more strongly by one subgroup than the other; this should be addressed in future iterations of the activity by recording participant role at the point of data collection so that students and teachers can be analyzed separately.

With these caveats in mind, the improvement in knowledge scores observed here is broadly consistent with findings from comparable short, practical financial-education activities for secondary school students elsewhere in the region, such as a similarly designed pre-test/post-test community-service program among Indonesian high school students (Ekasmita et al., 2024), and with survey evidence indicating that Malaysian secondary students' financial knowledge is generally limited (FINCO, 2023), while financial behavior among Malaysian young adults is shaped by a wider set of factors beyond knowledge alone, including self-control and financial socialization (Sabri et al., 2023). Taken together, this suggests that a simple, contextualized module using local Malaysian investment examples may be a promising, low-cost approach to raising short-term investment knowledge among Generation Z students; however, claims about actual financial behavior change, long-term wealth accumulation, or scalability to other cross-border community service settings would require a controlled design, a longer follow-up period, and a direct measure of financial behavior, none of which were part of the present study.

CONCLUSION

The community service program on investment literacy, jointly implemented by the Faculty of Economics and Business, Universitas Pancasila (FEB UP) and Maahad Tahfiz Al-Quran Lil Muttaqin, Selangor, Malaysia, was successfully carried out on 8 May 2026 with 28 participants, using a one-group pre-test/post-test design. The program was associated with a marked short-term increase in participants' knowledge of investment fundamentals, evidenced by a rise in the average correct-response ratio from 41.7% in the pre-test to 87.5% in the post-test, an improvement of approximately 45.8 percentage points (Cohen's $h \approx 1.0$). Because the study did not include a control group, a longer follow-up, or a direct measure of financial behavior, this improvement should be understood as a short-term gain in measured knowledge and reasoning rather than as confirmed evidence of responsible financial behavior or long-term wealth accumulation, both of which would require further, more rigorous evaluation.

Future programs are recommended to deepen the material, extend session duration, incorporate more interactive learning methods and practical investment simulations, adopt a stronger evaluation design (e.g., a control or comparison group, a delayed follow-up test, and disaggregated recording of student and teacher responses), and establish continuous or follow-up financial-literacy programs to sustain long-term financial awareness among youth communities in Malaysia and similar contexts.

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