

# **From Classroom to Society: Exploring the Role of Economic Literacy on Public Pedagogy**

**Nurudeen B. Bamiro**<sup>1,2\*</sup>

<sup>1</sup>Department of Economics, Universiti Pendidikan Sultan Idris (UPSI), Malaysia

<sup>2</sup>Department of Language, Arts and Social Science Education, Lagos State University, Nigeria

\*Corresponding author: nurudeen.bamiro@lasu.edu.ng

**Received:** 04 October 2024; **Accepted:** 11 November 2024; **Published:** 28 November 2024

**To cite this article (APA):** B. Bamiro, N. (2024). From Classroom to Society: Exploring the Role of Economic Literacy on Public Pedagogy. *Asian Journal of Assessment in Teaching and Learning*, 14(2), 41–58. <https://doi.org/10.37134/ajatel.vol14.2.4.2024>

**To link to this article:** <https://doi.org/10.37134/ajatel.vol14.2.4.2024>

## ***Abstract***

This study delves into the powerful role of economic literacy in sparking public pedagogy and fostering civic engagement. It examines how formal education, innovative teaching strategies, and active public discourse can work together to enhance individuals' economic understanding and participation in society. The study is guided by the PRISMA protocol. The study identified 31 high-quality studies that meet the criteria of relevance, methodological rigor, and recent publication. The study focuses on exploring the role of economic literacy in promoting public pedagogy by addressing three key areas: identifying effective teaching strategies that foster economic literacy, examining classroom environments that extend economic literacy into public pedagogy, and investigating how classroom-based economic literacy programs influence students' engagement in public economic discourse. The review reveals that economic literacy enhances public engagement and drives greater participation in economic matters. Additionally, this research offers a conceptual framework for educators and policymakers, aimed at optimizing the integration of economic literacy into both formal education systems and public pedagogy. These findings shed light on the significant influence of economic education in cultivating informed, engaged, and economically active citizens.

**Keywords:** *Economic Literacy, Assessment, Public Pedagogy, Public Advocacy, Civic Engagement*

## **INTRODUCTION**

Economics, one of the oldest branches of social science, holds a significant position and plays a vital role in the daily lives of individuals. People frequently encounter numerous economic decisions related to consumption, production, business operations, and asset evaluation (Yayar & Karaca, 2017). These choices are complex due to limited resources and infinite human needs (Barış & Şeker, 2017). Moreover, globalization and technological advancements add further intricacies to these decisions. Successfully making the right choices, achieving economic goals, and understanding the changing economic landscape heavily depend on citizen's economic literacy (Durmuş & Yardımcıoğlu, 2018; Dilek et al. 2019). Thus, being economically literate is crucial for rational decision-makers, as they navigate the complexities of our social world.

Economic literacy holds paramount importance in every nation as it equips students to navigate the evolving world financial system effectively. In light of the dynamic global economy, students must acquire a deeper comprehension of economics to actively engage and thrive (Narmaditya & Wibowo,

2021, Bamiro et al., 2024a). Naturally, attaining economic literacy requires a combination of innate economic behaviors and essential skills like critical thinking, evidence-based decision-making, numeracy, and effective communication, which are integral to various fields of study (McCowage & Dwyer, 2022).

Economic literacy empowers individuals to make informed decisions regarding economic matters and non-economic matters deemed most suitable (Oktafikasari & Mahmud, 2017). It acts as a tool for enabling individuals to utilize their income for investment, savings, precautionary measures, and meeting various needs (Surindra, 2022). Acquiring economic literacy is crucial as it determines one's ability to grasp economic issues accurately and implement sound economic practices (Melina & Wulandari, 2018). It is not a natural trait but rather a skill that requires a gradual learning process, often starting within the family and one's immediate environment (Jannah, 2019).

With a solid grasp of economic literacy, individuals find it easier to meticulously plan, analyze, and manage their financial affairs to achieve optimal outcomes. People who are economically literate benefit from improved decision-making skills, refined economic reasoning abilities, expert problem-solving skills in real-world scenarios, and a greater capacity for understanding and interpreting fundamental economic ideas and values. (Akhan, 2013). The ability to identify economic problems, evaluate potential solutions, weigh benefits and costs, examine the incentives at work in economic scenarios, analyse the effects of changes in the economy and in governmental policies, grasp and organise economic insights, and weigh benefits and drawbacks are all components of economic literacy (Yayar & Karaca, 2017). Increasing economic literacy gives people the reason they need to make rational decisions in all sphere of human existence.

Promoting economic literacy requires teaching and learning economics beyond the lower levels of Bloom's Taxonomy. Economics classrooms aiming to develop economically literate learners must integrate higher-order thinking in both instructional objectives and pedagogical strategies used to convey economic content (Bamiro et al., 2024a). It is essential that citizens must obtain an education that goes beyond simple memorizing of economic facts and fundamental concepts in light of the numerous uncertainties that the global economy faces. Simply being able to recall these essential ideas is insufficient to prepare individuals for the competitive environment of today. Additionally, they must be able to evaluate, implement, and design workable solutions to the socioeconomic problems in their immediate environment (Qasrawi & BeniAndelrahman, 2020).

As a result, developing economically literate people requires a learning environment that stimulates and develops students' capacity to recognize economic possibilities, make defensible financial decisions, and weigh the pros and cons of various economic policies and initiatives (Qasrawi & BeniAndelrahman, 2020). The goal of the economics curriculum is to ensure that learners have a thorough understanding of the concepts, their applications in real-life scenarios, and the resources used in the discipline. This lofty agenda has often drive economics educators to frequently attempt to have a more profound impact on their learner than only the short-term learning outcomes (Hoyt, 2021). The advocacy of Raj Chetty and other supporters for a change in economic education towards a more practical oriented pedagogical approach, emphasizing how economic analysis can be used to successfully address real-world difficulties and contribute to public discourse (Matthews, 2019).

Economic literacy and public pedagogy are closely intertwined in fostering an informed and engaged citizenry capable of tackling complex societal challenges. Public pedagogy expands the learning process beyond traditional classrooms, embedding education in everyday activities such as social movements, community involvement, and public dialogue. This approach enables individuals to link academic knowledge to real-world issues like climate change, economic inequality, and sustainable development (Sutton, 2024). Within this framework, economic literacy plays a vital role by providing individuals with the skills needed to analyze and engage with economic policies and make sound decisions (Bamiro et al., 2024a).

With a solid understanding of economic principles—such as inflation, fiscal policy, taxation, and financial management—individuals are better equipped to manage personal finances and comprehend broader economic trends. This knowledge allows citizens to critically evaluate government policies, advocate for changes that promote economic equity, and contribute meaningfully to discussions on issues like income distribution and sustainable development (Ye & Kulathunga, 2018; Bamiro et al., 2024a). Public pedagogy, by encouraging active civic participation, ensures that such engagement is informed and focused on addressing broader systemic economic challenges. By weaving

economic literacy into public pedagogy, communities can create a more knowledgeable and engaged populace that actively participates in economic debates, influences policy-making, and advocates for fair and sustainable economic systems. The integration of these two elements not only empowers individuals but also strengthens collective efforts to bring about societal change and tackle pressing economic issues.

Economics pedagogy plays a crucial role in enhancing citizens' reasoning abilities, empowering them to make informed decisions that extend beyond personal finances. By promoting economic literacy, this approach fosters deeper understanding and critical thinking that influence not just financial matters but also critical life choices such as career paths, voting decisions, political strategies, and even international diplomacy. Economic literacy goes beyond teaching numbers; it equips individuals with the tools to assess the broader economic landscape, encouraging sound decision-making in various facets of life and contributing to a more informed society.

In a sovereign state, economic literacy is indispensable for maintaining peaceful coexistence and fostering a strong civic culture. Citizens with a solid grasp of economic principles are more likely to make informed voting choices, understand and support government policies, and actively engage in civic duties. This heightened awareness diminishes the impact of political manipulation, both from within and outside the country, that seeks to mislead the public with distorted economic data. By enhancing economic literacy, a nation strengthens its democratic fabric, reducing political apathy and building trust in governance, ultimately promoting a more resilient and engaged citizenry.

The ultimate goal of teaching economics does not merely involve students discerning the perspectives and arguments made by economic agents (Dubas & Toledo, 2016). Instead, they must be able to apply economics concepts and use the tools and methods of economic reasoning to solve problems in complex and high-risk situations that often occur in the field of economics (Foo, 2021). Pedagogical strategies that stimulate critical thinking is needed to enhance students' understanding of economics concepts and improve students' reasoning ability in economic and non-economic issues.

Recent studies have consistently highlighted a concerning trend, a significant majority of graduates are facing reduced competitiveness in the global marketplace due to their lack of economic reasoning and critical thinking skills (Flores et al., 2012; Goldsmith, 2013; Fernald & Jones, 2014). This study aims to explore the role of economic literacy in promoting public pedagogy by addressing three key objectives: identifying the most effective teaching strategies for fostering economic literacy, examining the classroom environments that best support the extension of economic literacy into public pedagogy, and investigating how classroom-based economic literacy programs influence students' participation in public economic discourse. By understanding these factors, the study seeks to reveal how economic literacy can empower students to engage meaningfully with societal issues and contribute to informed public discussions on economic matters.

## 1. Conceptual Framework

The conceptual framework explores the pivotal role of economic literacy in fostering public pedagogy by examining how classroom knowledge transforms into societal impact. This framework integrates essential components such as content knowledge, teaching strategies, pedagogical tools, and external factors that influence the transmission of knowledge from formal education to public discourse and civic engagement. Economic literacy encompasses foundational concepts like inflation, supply and demand, fiscal policy, and personal finance taught through diverse strategies such as collaborative learning, problem-based learning, and ICT-based pedagogical tools (Wyk, 2018; Adu, 2023).

At the heart of the framework lies the process of knowledge transfer through the implementation of effective learner-centered pedagogical strategies. Approaches like project-based learning encourage critical thinking and the practical application of economic principles. These strategies help students cultivate cognitive abilities that enable them to bridge the gap between theoretical knowledge and real-world economic participation (McCormick et al., 2015). Public pedagogy, within this framework, refers to the way economic understanding extends beyond formal schooling, empowering individuals to engage in public discourse, influence policies, and actively participate in economic decision-making.

The effectiveness of economic literacy in promoting public pedagogy is shaped by various contextual and individual factors. For instance, teacher influence is vital in nurturing critical economic

thinking, helping students to contextualize abstract economic concepts, and guiding them toward meaningful real-world applications (Farias & Balardini, 2018). Additionally, student motivation plays a significant role in how effectively individuals transfer classroom knowledge to the public sphere. Social, cultural, and technological contexts further mediate this process, affecting how economic principles are internalized and applied in everyday life.

The framework culminates in several significant societal outcomes. Economically literate individuals are more likely to engage in activities such as entrepreneurship, informed consumerism, and policy development, all of which contribute to economic growth and stability (Li & Qian, 2019). Enhanced civic engagement arises as these individuals participate in public debates on economic policies, fostering a more informed and active citizenry (Asongu et al., 2020). Furthermore, improved public awareness and decision-making enable individuals to make sound financial choices, thereby positively impacting the broader society (Chytilova, 2017).

An essential aspect of the framework is the feedback loop that illustrates how public pedagogy can influence educational policies. As economically literate individuals engage in public discourse and advocate for policy changes, their involvement helps shape the way economics is taught in schools. This advocacy leads to curriculum improvements that are better aligned with contemporary economic challenges, ensuring that education evolves to meet societal needs (Merry et al., 2022). This dynamic, reciprocal relationship between classroom learning and public pedagogy allows educational practices to remain relevant and responsive to the changing economic landscape (Gbadamosi, 2019). In essence, this framework not only underscores the significance of economic literacy in fostering an informed, engaged, and economically active society but also highlights the continuous interaction between education and societal development a relationship that reinforces the role of public pedagogy in shaping the future of economic education and civic engagement.

## **METHODOLOGY**

This systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, ensuring a rigorous approach to data collection and analysis (Bamiro et al., 2024b). The review process began with the development of a review protocol, including a clear definition of inclusion and exclusion criteria and the formulation of a search strategy. Only articles published from 1992 onwards were considered for inclusion.

### **1. Search strategy**

The author conducted an extensive review of the literature concerning the promotion of economic literacy through different pedagogy approaches. The search process used databases like Google Scholar, Web of Science, and Scopus. The author employed different combinations of keywords, such as "economic literacy and public pedagogy", "pedagogical strategies for teaching economics", "economics methodology for economic literacy" and "critical thinking and problem-solving strategy for teaching economics" to obtain relevant sources. To ensure the relevance of the selected studies in accordance with the research objectives, the author of the study applied specific inclusion and exclusion criteria.

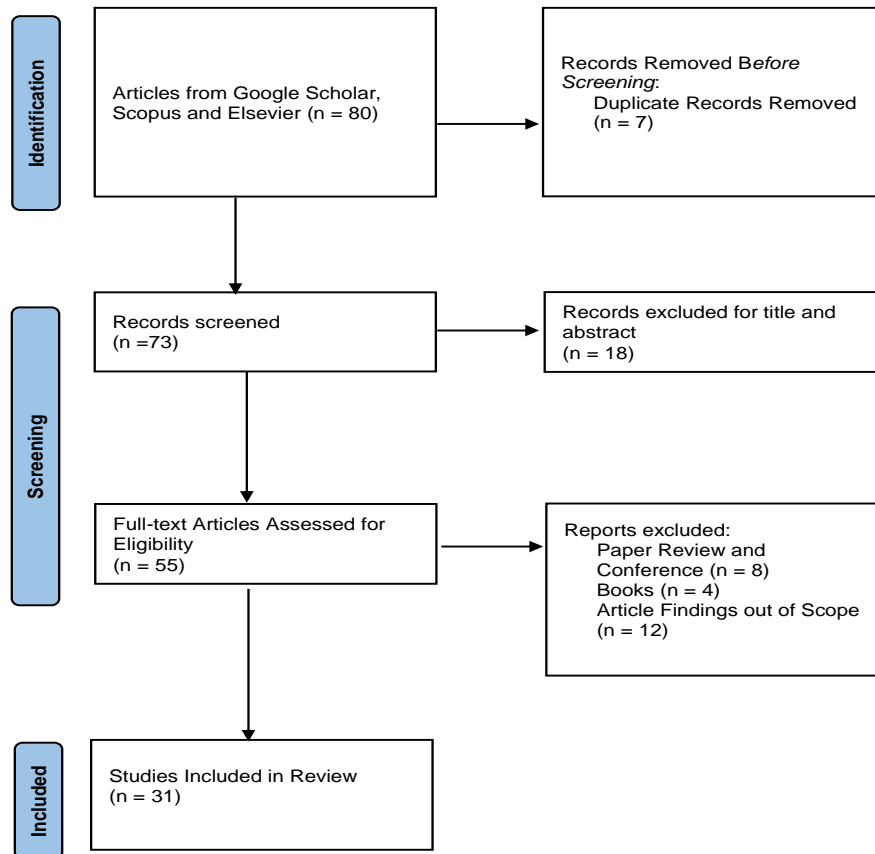
### **2. Eligibility criteria**

To ensure transparency and alignment with the study's goals, specific inclusion and exclusion criteria were developed based on an initial literature review (Martin et al., 2020; Utaminingsih et al., 2023). The screening process began with evaluating titles and abstracts using predefined inclusion criteria. Studies that met these criteria underwent a full-text review, focusing on methodology, results, and discussions. Non-English studies and those not focused on pedagogical approaches or economic teaching were excluded. Ultimately, 31 studies met the criteria and were included in the systematic review.

### **3. Data Extraction**

A comprehensive literature review was carried out on this study, and 80 articles were identified through

the initial search using the specific keywords. Duplicate articles were removed, which left 73 articles for further evaluation based on titles & abstracts. Furthermore, 55 articles were selected for an in-depth analysis of their full texts, thereby thoroughly examining their methodology, results, and discussion sections to determine their relevance in addressing the research questions for this study. After the rigorous exclusion exercise, 31 articles were included in the systematic literature review. The entire literature search and study selection process is detailed in a PRISMA flow diagram, as shown in Figure 1.



**Figure 1** PRISMA Flow Diagram Illustrating the Literature Search and Study Selection Process

## RESULTS

The study used a data extraction table to systematically gather and organize data from the selected studies. Key information fields included author names, country of origin, publication years, learning strategies used, methodologies and findings of the studies. Additionally, the content analysis of the findings from the reviewed articles is thoroughly examined. A comprehensive breakdown of the extracted data from the articles is presented in Table 1.

**Table 1** Data Extraction Table

S/N	Authors & Year	Method	Pedagogical Strategy	Impact	Country
1	Howard and Sarbaum (2022)	Quantitative Descriptive	Study Skills	Economics rationality & student participation	USA
2	Perdanasari and Sudiyanto (2022)	Non-randomized Quantitative	TM-PBLPOE	Economics rationality	Indonesia
3	Anggrianto et al. (2016)	Non-randomized Quantitative	Logan Avenue Problem Solving (LAPS) - Heuristic learning Model	Economics knowledge, rationality and learners' participation	Indonesia
4	Shackelford (1992)	Qualitative	Feminist pedagogy	Economic rationality & survival skills	USA
5	Utami and Rusdarti (2021)	Non-randomized Quantitative	Think-Pair-Share Learning Model	Economic knowledge & rationality	Indonesia
6	Thoma (1993)	Qualitative	Perry Model	economic rationality and career choice decision making	USA
7	Maghfiroh and Mulyani (2019)	Quantitative Descriptive	Problem-Based Learning	Economic knowledge and rationality	Indonesia
8	Lapuz and Fulgencio (2020)	Quantitative Descriptive	Problem-Based Learning	Economic knowledge and rationality	Philippines
9	Saepuloh et al. (2021)	Non-randomized Quantitative	Problem-Based Learning Model	Learners' engagement, economic rationality, economic knowledge and self-efficacy	Indonesia
10	Foo (2021)	Qualitative (Content Analysis)	Expressing, Asking, Summarising and Yielding (EASY) Framework	Economic rationality and policy analysis	Korea
11	Borg and Stranahan (2010)	Quantitative Descriptive	WatsonGlaser Critical Thinking Appraisal (WGCTA-S)	Economic knowledge and rationality	USA
12	Singh and Bashir (2018)	Quantitative Descriptive	Problem-Based Learning	Economic rationality	India
13	Yin and Fitzgerald (2017)	Mixed method	Peer Learning with Concept Cartoons (PLCC)	Economic knowledge and rationality	Australia
14	Pang and Marton (2005)	Mixed method	Phenomenography and Variation Pedagogy	Economic knowledge	China Sweden
15	Assan (2009)	Mixed method	Phenomenography and Variation Pedagogy	Meaningful classroom experiences and economic knowledge	South Africa
16	Borg and Borg (2001)	Qualitative	Team Teaching	Economic rationality and non-routine problem-solving skills	USA
17	Putri (2019)	Mixed (Descriptive)	Problem-Based Learning	Economic knowledge	Indonesia

*continued*

18	Asih et al. (2023)	Non-randomized Quantitative	Blended Problem-Based Learning	Economic rationality	Indonesia
19	Sudarmiani (2020)	Qualitative Descriptive	Contextual Teaching and Learning	Economic knowledge and rationality	Indonesia
20	Paxton (2021)	Qualitative (Behavioral Approach)	Service-learning pedagogy (Learning by Giving)	Civic engagement, motivation, economic knowledge and rationality	USA
21	Hoyt (2021)	Qualitative (Behavioral Approach)	Service-learning pedagogy (Learning by Giving)	Civic engagement, decision-making, economic knowledge and rationality	USA
22	Tila (2021)	Quantitative Descriptive	Economic Experiment	Learner's attitude and economic knowledge	USA
23	Oliveira et al. (2023)	Qualitative (Discourse of the Collective Subject)	Economic Experiment & Case Studies	Economic Attitude & Economic Socialization	Brazil
24	Soroko (2023)	Qualitative	Critical Economic Literacy Pedagogy	Policy Analysis, Policy Evaluation and Economic rationality	USA
25	Arthur (2014)	Qualitative	Public Pedagogy	Public policy analysis and evaluation	Canada
26	Farias and Balardini (2018)	Qualitative	Critical pedagogy, watching and discussing documentaries about the great financial crisis, reflective writing exercises, outdoor classrooms and guided walking tours of big stores	Application of economics in real-life scenario	USA
27	Kaku and Arthur (2021)	Quantitative	Leaner-centered pedagogy	Improve economic knowledge	Ghana
28	Menberu (2024)	Mixed method	Technology-mediated economics pedagogy	Improve financial literacy	Ethiopia
29	Merry et al. (2022)	Qualitative	Public pedagogy	Improve financial behaviour	USA
30	Ogbonnaya et al. (2020)	Quantitative	Topic-Specific Pedagogical Content Knowledge (TS-PCK)	Economic Knowledge	South Africa
31	Wyk (2018)	Qualitative	Flipped Classroom Pedagogy	Economics knowledge	South Africa

### 1. Descriptive Studies

Table 2 indicates the year of publication of the reviewed articles, where the paper number corresponds to the article's serial number in Table 1. Approximately 81% of the review articles were conducted since 2014, indicating a significant increase in research in recent years. On the other hand, less than 19% of the reviews were conducted before 2014, suggesting that research in this area was relatively limited in the earlier years.

**Table 2** Year of Publication

Paper Number	Year of Publication	Number of Publications
[28]	2024	1
[18, 23, 24]	2023	3
[1, 2,29]	2022	3
[5, 9, 10, 20, 21, 22,27]	2021	7
[8, 19,30]	2020	3
[7, 17]	2019	2
[12, 26,31]	2018	3
[13]	2017	1
[3]	2016	1
[25]	2014	1
[11]	2010	1
[15]	2009	1
[14]	2005	1
[16]	2001	1
[6]	1993	1
[4]	1992	1

Also, Table 3 presents the regional distribution of articles used in this study. Notably, the USA leads with 11 articles, indicating a strong contribution from this region. Indonesia follows closely with 8 authors, highlighting its significant involvement. Noteworthy contributions also come from South Africa, which contributed 4 studies. Australia, Korea, China, Philippines, India, Canada, Ethiopia, Ghana and Brazil each contributed 1 study each, representing a diverse range of geographical engagement. Additionally, the table indicates collaborative research efforts that span multiple countries. This distribution underscores a rich tapestry of international research activity, reflecting both local and global engagement in the field.

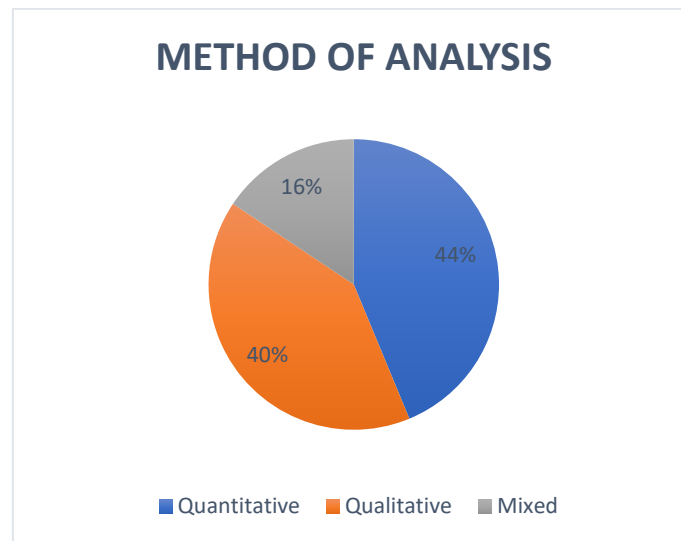
**Table 3** Regional Distribution of Articles

Paper Number	Research country of affiliations	Number of authors
[1, 4, 6, 11, 16, 20, 21, 22, 24,26,29]	USA	11
[2, 3, 5, 7, 9, 17, 18, 19]	Indonesia	8
[13]	Australia	1
[10]	Korea	1
[8]	Philippines	1
[12]	India	1
[15,30,31]	South Africa	3
[23]	Brazil	1
[25]	Canada	1
[14]	China	1
[27]	Ghana	1
[28]	Ethiopia	1

## 2. Literature Classification

Figure 2 illustrates the research methodologies used in the reviewed articles. A total of 14 studies employed quantitative analysis, 12 utilized qualitative methods, and 5 used mixed methods. This distribution highlights the prominence of qualitative studies, which often focused on narrative reviews, case studies, and in-depth explorations of the subject matter. Quantitative studies, on the other hand, involved data-driven statistical analyses, providing empirical evidence to support research findings. The mixed-methods approach combined both qualitative and quantitative techniques, offering a comprehensive perspective by integrating rich, qualitative insights with empirical, quantitative data, thereby strengthening the robustness of the findings.





**Figure 2** Distribution of Methodology

## DISCUSSION

### 1. Which Teaching Strategies Best Ignite Economic Literacy?

Perdanasari and Sudiyanto (2022) found that using Teaching Material-based Problem-Based Learning and Predict-Observe-Explain (TM-PBLPOE) strategies effectively enhanced students' economic rationality by stimulating critical thinking. This method activates students' latent problem-solving abilities, helping them apply economic concepts in real-world situations. Similarly, Anggrianto et al. (2016) discovered that the LAPS-Heuristic learning model outperformed conventional approaches in fostering economic knowledge and rationality. This method not only engaged learners in the classroom but also encouraged them to identify and tackle diverse problems, thereby improving their problem-solving skills and creating a repository of experiences that support future learning.

Further, Assan (2019) highlighted the importance of creating an environment that encourages questioning and using varied examples to match students' comprehension levels. By addressing confusion and adapting to learners' needs, Assan observed significant improvements in understanding economics concepts through the variation theory approach. Supporting this, Asih et al. (2023) concluded that blended problem-based learning, particularly via SIMPEL-12, is highly effective in cultivating critical thinking. Similarly, Sudarmiani (2020) emphasized the Contextual Teaching and Learning (CTL) model, which led to improved student outcomes and critical thinking by making the learning process more meaningful.

Maghfiroh and Mulyani (2019) found that problem-based learning in economics effectively boosted students' critical thinking skills. Complementing this, Lapuz and Fulgencio (2020) demonstrated that problem-based learning significantly outperformed traditional lecture methods, fostering critical thinking in students. Howard and Sarbaum (2022) echoed these findings, arguing that study skill modules enhance critical thinking and participation by encouraging the effective use of classroom time. This shows that when students develop their own study skills, they gain not just economic knowledge but also problem-solving capabilities, a key element of economic literacy.

In addition, Erwiza et al. (2019) demonstrated that both learning engagement and critical thinking are critical drivers of academic success in economics. Borg and Borg (2001) observed a similar trend, noting that as students gain economic knowledge, their critical thinking improves, a finding supported by (Singh & Bashir, 2018; Putri 2019). Their studies showed that problem-based learning models significantly enhance critical thinking in senior secondary school economics classes. Moreover, Borg and Stranahan (2010) found that higher-order thinking approaches foster noteworthy improvements in students' critical thinking and economic reasoning abilities.

Yin and Fitzgerald (2017) revealed that participating in Peer Learning with Concept Cartons (PLCC) activities positively impacted both students' critical thinking skills and overall performance. Pang and Marton (2005) added to this by showing that students involved in learning study groups demonstrated superior comprehension of economics topics compared to their counterparts in lesson study groups. These findings emphasize the power of experiential learning in promoting deeper economic understanding.

Anggrianto et al. (2016) also stressed the importance of fostering independent, systematic thinking in students, which encourages active participation in discussions and enhances self-reliant problem-solving abilities in economics. Utami and Rusdarti (2021) found that the Think-Pair-Share approach, when applied to economic subjects, not only improved students' critical thinking but also their creativity. By combining Think-Pair-Share with Problem-Based Learning (Saepuloh et al., 2021; Utami and Rusdarti, 2021), teachers foster more dynamic, creative learning environments where students gain deeper understanding by actively engaging with the material.

Shackelford (1992) argued that critical and creative thinking, alongside continuous learning, are essential skills for 21st-century success, emphasizing the need for educators to adopt strategies that nurture these skills. In line with this, Foo (2021) suggested that using the Expressing, Asking, Summarizing and Yield (EASY) pedagogical framework helped students develop from lower-level thinking to more complex, higher-order economic analysis. This scaffolded approach enhanced critical thinking, analysis, and evaluation, enabling students to synthesize economic data effectively.

Tila (2021) predicted that incorporating economic experiments as part of pedagogical strategies in economics education would yield multiple benefits, such as improved attitudes toward the subject, a stronger grasp of concepts, and better test performance. Oliveira et al. (2023) also advocated for the use of case studies and economic experiments in the classroom, emphasizing their effectiveness in raising economic literacy levels. These pedagogical tools not only enrich students' economic knowledge but also enhance their rational decision-making abilities, enabling them to navigate the complexities of today's socioeconomic landscape.

Wyk (2018), explores the Jigsaw Pedagogy collaborative learning approach that allows individual members of a group to become "experts" in one component of the lesson's content and then share it with their group, while at the same time learning the content of other components from the other home group members, each of whom has become experts in his or her portion of the lesson. The study proved that the jigsaw teaching method supports active and participative learning, helps economics teachers create classrooms for optimal learning, and also improves the understanding of economics among the learners. Also, Wyk (2018), proved that flipped classroom pedagogy (FCP) enhanced economics students' academic performance and perceptions. FCP ensures students take responsibility for their learning and that the teacher plays a crucial role in decision-making about out-of-class and in-class activities to enhance self-directed learning.

Hoyt (2021) highlights the transformative power of service-learning, also known as learning by doing, as a dynamic teaching approach that allows students to apply financial tools for the betterment of their communities. This hands-on method not only strengthens students' grasp of economic principles but also sharpens their analytical and empirical skills. Beyond the numbers, it fosters essential soft skills like diplomacy, negotiation, and the ability to appreciate diverse perspectives. Through community-based projects, students learn to communicate effectively, practice active listening, and adapt to unpredictable real-world scenarios. They also develop patience and perseverance when facing challenges that might slow their progress. Perhaps one of the most rewarding outcomes of this approach is watching students shift from being academically driven to becoming truly passionate learners. Paxton (2021) study, which examines the "Economics of Altruism" class, underscores how service-learning resonates with Gen Z students, who are known for their commitment to social justice and preference for experiential learning. This approach also attracts nontraditional economics students, with a significant increase in female participation.

Service-learning pedagogy has proven to enhance critical thinking, civic economic literacy, and students' ability to engage meaningfully with their communities. It also sparks curiosity, motivation, and a deep reflection on socioeconomic issues. One of the standout features of this strategy is its flexibility, it can be tailored to various economic topics and skill levels, making it an inclusive and effective method for diverse classrooms. Ultimately, this approach not only encourages active engagement with academic material but also empowers students to make a positive impact on their local

communities through hands-on learning experiences with nonprofit organizations.

The research by Farias and Balardini (2018) integrates five distinct teaching methodologies aimed at improving students' critical understanding of economics. The study develops students' capacity to relate current economic, social, and environmental challenges to theoretical ideas covered in class, encouraging critical thinking and practical application by including them in critical dialogue through reading and discussion of current events. They further employed watching & discussing documentaries on financial crises to help students understand the cyclical nature of crises within capitalist systems, helping students grasp their inevitability and significance in economic dynamics. Also, reflective writing was used to allow students to investigate the effects of macroeconomic policies and current events on their personal lives and communities, which promotes self-reflection and a better grasp of economic frameworks. Additionally, outdoor classrooms were employed to offer experiential learning opportunities centered on sustainability, demonstrating the interrelation of economic development, environmental issues, and global crises. Finally, guided walking tours enable students to observe competitive market dynamics in action, juxtaposing actual economic behavior with theoretical textbook models. These approaches collectively promote active learning and critical dialogue, aligning with the pedagogical strategy of engaging students in meaningful economic discussions, as highlighted by Farias and Balardini (2018).

In sum, the adoption of varied pedagogical strategies that encourage critical thinking, problem-solving, and active learning significantly elevates students' economic literacy. These approaches not only build economic knowledge but also promote the rational decision-making skills essential for thriving in today's dynamic world.

## 2. What Classroom Environment Can Foster Economic Literacy and Extend its Impact into Public Pedagogy?

According to Ogbonnaya et al. (2020), effective economic literacy begins with teachers employing pedagogical strategies that promote critical thinking and active participation. Classrooms that prioritize interactivity and inquiry-based learning foster deeper engagement with economic concepts (Tila, 2021). Teachers can implement this by incorporating case studies, role-playing, and discussions centered on real-world economic issues. Experiential learning techniques, such as market simulations and budget management exercises, further enhance students' ability to connect theory with practice, helping them grasp the application of economic principles. By moving beyond passive learning, students are empowered to engage more deeply with economic content, solidifying their understanding (Wyk, 2018).

Additionally, teachers play a vital role in creating inclusive environments where all students feel encouraged to participate in economic discussions, regardless of their prior knowledge or background (Assan, 2009). Fostering inclusivity in the classroom has been shown to yield more equitable outcomes in the development of economic literacy (Merry et al., 2022). Collaborative learning environments, where students with varying skill levels work together, can bridge knowledge gaps and collectively deepen understanding. Teachers who incorporate diverse perspectives—such as examining global economic disparities or inequalities offer students a broader socio-political context, helping them see how economics intersects with societal issues (Howard & Sarbaum, 2022).

The integration of technology in teaching is also critical in creating engaging and modern learning environments. Tools such as online simulations, interactive graphs, and data analysis software make complex economic trends more accessible and allow students to interact with virtual economic systems (Menberu, 2024). Teachers who adopt these technological tools often see a significant improvement in student engagement and comprehension of economic concepts. Additionally, encouraging the use of online resources like economic news websites and academic databases fosters critical information literacy, a key skill for participating in public economic discourse (Wyk, 2018). As students move from the classroom into the real world, these skills are essential for navigating and contributing to economic conversation.

One of the most critical aspects of fostering economic literacy in the classroom is helping students recognize the relevance of economic concepts beyond academia. Connecting economic principles to current events in classroom discussions helps students understand the broader societal implications of their studies (Farias & Balardini, 2018). Assignments that require students to analyze

real-world economic issues, such as budget proposals or mock public debates, provide practical opportunities to apply academic knowledge to public policy discussions. These experiences equip students to extend their classroom learning to societal issues, preparing them for informed public engagement (Sudarmiani, 2020; Saepuloh et al., 2021).

Moreover, nurturing a sense of civic responsibility within students is crucial for extending the impact of economic literacy into public pedagogy. When students grasp how economic decisions affect societal outcomes, they are more likely to participate in civic activities (Foo, 2021). Pedagogical strategies such as role-playing and simulations are particularly effective in fostering civic engagement (Paxton, 2021). For instance, Kalu and Arthur (2021) found that role-playing exercises where students simulate real-world economic policy debates provide a deeper understanding of the complexities involved in decision-making and its societal consequences. These activities not only enhance economic literacy but also give students the confidence to actively participate in public discourse, applying their knowledge to real-world economic and civic challenges (Soroko, 2023).

By cultivating a classroom environment that emphasizes critical thinking, inclusivity, technological integration, and real-world relevance, teachers can create a foundation for economic literacy that extends beyond the classroom into public pedagogy. This prepares students not only to excel academically but also to engage meaningfully in public economic discussions and civic activities.

### 3. How Classroom-Based Economic Literacy Programs Shape Students' Engagement in Public Economic Discourse?

Classroom-based economic literacy programs have a significant and lasting impact on students' ability to engage with complex fiscal policies, taxation, and government spending debates. Research shows that these programs equip students with critical thinking and analytical skills, empowering them to actively participate in public discourse (Asih et al., 2023). Through financial education, students gain the knowledge to engage in social media discussions and community forums on pressing issues such as government budgets, inflation, and economic inequality (Singh & Bashir, 2018). These programs often employ real-world simulations and case studies, which help students assess complex topics like government budget proposals with greater depth and nuance. Longitudinal studies consistently demonstrate that students exposed to such learning experiences develop a stronger ability to evaluate fiscal policies, considering not just immediate outcomes but also long-term societal impacts (Maghfiroh & Mulyani, 2019).

Additionally, the problem-solving skills nurtured in economic literacy classrooms enable students to make meaningful contributions to public policy debates (Yin & Fitzgerald, 2017). They learn to critically evaluate economic decisions like tax reforms and wage policies, weighing the trade-offs and long-term implications for different sectors of society. This analytical ability positions students as valuable contributors to policy discussions, as they can advocate for decisions that align with the broader goals of economic equity and social well-being (Lapuz & Fulgencio, 2020). Informed by their education, these students often influence public opinion and shape policy outcomes that promote responsible and sustainable economic practices (Saepuloh et al., 2021).

Beyond their immediate academic context, economic literacy fosters long-term civic engagement by cultivating well-informed citizens. Economic education plays a pivotal role in preparing individuals to influence public policy, advocate for fiscal responsibility, and make informed decisions in their personal and professional lives (Hoyt, 2021). The knowledge and skills acquired through these programs extend far beyond the classroom, preparing students for leadership roles in entrepreneurship, governance, and financial decision-making. This has broader societal benefits, as economically literate individuals often support policies that promote entrepreneurship, economic inclusivity, and sustainable growth within their communities (Putri, 2019). By shaping informed citizens who understand the complexities of economic systems, these programs contribute to the development of a more engaged, economically savvy public that can drive positive change.

## **CONCLUSION**

This study has emphasized the critical role that economic literacy plays in stimulating public pedagogy and promoting civic engagement. By linking classroom-based economic education to real-world applications, individuals become better equipped to participate in economic activities and public discourse. The review underscores the importance of pedagogical strategies that facilitate knowledge transfer, such as collaborative and problem-based learning, which encourage critical thinking and practical application of economic concepts. The success of this transfer largely depends on the effectiveness of teaching strategies, student motivation, and the influence of societal factors.

Despite the promising potential of economic literacy to drive public engagement, several challenges exist, such as the need for tailored teaching approaches, the role of teacher support, and societal attitudes towards economic education. These factors must be addressed to ensure that economic knowledge effectively extends beyond the classroom. Additionally, integrating media and technology in education can further enhance public understanding and participation in economic matters, making economic literacy more accessible and impactful in the public sphere.

This study highlights the importance of a holistic and adaptable approach to economic literacy education, ensuring that it not only imparts knowledge but also empowers individuals to actively engage in economic decisions and policy advocacy. By addressing the challenges and leveraging the strengths of economic education, educators and policymakers can create more robust frameworks that bridge classroom learning with societal impact, fostering a more informed and economically literate citizenry.

## **IMPLICATIONS FOR CURRICULUM DEVELOPMENT**

The findings regarding public pedagogy have significant implications for curriculum development. To ignite economic literacy effectively, curricula should integrate active learning models, such as the Teaching Material-based Problem-Based Learning and Predict-Observe-Explain (TM-PBLPOE) approach which fosters critical thinking and economic rationality. Similarly, including the LAPS-Heuristic learning model can enhance students' ability to approach complex problems methodically. The inclusion of models like Contextual Teaching and Learning (CTL) or variation theory approaches ensures adaptability to diverse learning styles, improving overall economic understanding.

Curriculum developers should also consider incorporating blended learning approaches and digital tools, such as SIMPEL-12, which have proven effective in cultivating critical thinking through hybrid online and in-class learning activities. Economic experiments, case studies, and service-learning projects are crucial in making abstract economic principles tangible and applicable to real-world scenarios. Developing curricula that emphasize these experiential methods will likely boost students' critical thinking and decision-making skills while making economic literacy more practical and engaging.

## **IMPLICATIONS FOR CIVIC ENGAGEMENT AND LEADERSHIP**

The connection between economic literacy programs and long-term civic engagement highlights the importance of designing educational experiences that extend beyond academic settings and foster active participation in societal discussions. Service-learning approaches that allow students to apply economic principles to community-based projects can be transformative in nurturing informed citizens. These strategies enable students to engage in public economic discourse confidently, analyze government policies, and contribute meaningfully to public debates on fiscal responsibility, tax reforms, and wage policies.

Educators should emphasize civic responsibility by incorporating real-world applications of economic concepts into lessons. Engaging students in role-playing exercises, such as simulating economic policy debates, prepares them for leadership roles by developing skills in negotiation, diplomacy, and public communication. Programs that combine economic literacy with entrepreneurship and leadership training to foster a mindset geared toward community development, economic inclusivity, and sustainable growth, empowering students to take on leadership roles within their communities and advocate for positive societal change should be developed.

## **SUGGESTIONS FOR FURTHER RESEARCH**

Given the wealth of evidence supporting active, problem-based learning in economic education, further research is needed to explore the long-term effects of these teaching strategies on students' civic engagement and leadership development. While some studies demonstrate that experiential learning fosters critical thinking and participation in public discourse, more research should investigate the sustained impact of these approaches on students' future contributions to public policy and economic debates.

Moreover, the research could focus on comparative studies between different pedagogical methods, such as TM-PBLPOE, LAPS-Heuristic models, and traditional lecture-based approaches, to assess which models most effectively promote higher-order thinking skills in diverse student populations. Researchers could also examine the role of digital tools and blended learning environments in economic literacy, exploring how technologies like interactive graphs, simulations, and online resources impact students' engagement and real-world application of economic knowledge.

Finally, research should investigate how economic literacy programs can further be integrated into broader public pedagogy, exploring how classroom learning can shape public economic discourse, influence policy-making, and foster economic equity at the community level. This will provide critical insights into the full spectrum of outcomes that economic education can generate for both individuals and society.

## **ACKNOWLEDGEMENT**

I would like to express my gratitude to Universiti Pendidikan Sultan Idris, the Faculty of Management and Economics, and the Research Management and Innovation Centre for their invaluable support in the successful completion of this paper.

## **FUNDING**

No funding is available for this study.

## **DATA AVAILABILITY STATEMENT**

Data will be made available on request.

## **CONFLICTS OF INTEREST**

The authors declare no conflict of interest.

## **REFERENCES**

- Adu, E. O. (2023). Economics Teachers' Content Knowledge and Teaching Strategies Used to Teach Economics in Selected South African Schools. *Journal of Curriculum and Teaching*, Vol. 12, No. 4; 2023. <https://doi.org/10.13140/RG.2.1.1801.2005>
- Ahrari, S., Samah, B. A., Hassan, M. S. H. B., Wahat, N. W. A., & Zaremohzzabieh, Z. (2016). Deepening critical thinking skills through civic engagement in Malaysian higher education. *Thinking Skills and Creativity*, 22, 121–128.
- Anggrianto, D., Churiah, M., & Arief, M. (2016). Improving Critical Thinking Skills Using Learning Model Logan Avenue Problem Solving (LAPS)-Heuristic. *Journal of Education and Practice*, 7(9), 128-136.
- Arthur, C. (2014). Financial Literacy Education as Public Pedagogy for the Capitalist Debt Economy. *Canadian Journal of Cultural Studies*, 30-31:147-164.
- Asih, R. A. D., Kardoyo, K., & Oktarina, N. (2023). Blended Problem Based Learning Through SIMPEL-12: Strategies to Improve Economic Critical Thinking Ability. *Journal of Economic Education*, 12(1), 33-41.
- Asongu, S., Nnanna, J., & Acha-Anyi, P. (2020). Inclusive education for inclusive economic participation: the financial access channel. *Gender in Management: An International Journal*, 35(5), 481-503.

- Assan, T. E. (2009). Educators' classroom experiences with variation of learning theory. *Problems of Education in the 21st Century*, 18, 8.
- Baki, N. U., Rafk-Galea, S., & Nimehchisalem, V. (2016). Malaysian rural ESL students critical thinking literacy level: A case study. *International Journal of Education & Literacy Studies*, 4(4), 71–80.
- Bamiro, N. B., Zakariyah, Z., Qian Li, & Adewale, S. (2024a). Evaluating the Psychometric Properties of Economic Literacy Measures: A Systematic Review. *Asian Journal of Assessment in Teaching and Learning*, 14(1), 85–104. <https://doi.org/10.37134/ajatel.vol14.1.8.2024>.
- Bamiro, N.B., Zakariya, Z., Raimi, L. and Thomas, Y. (2024b), "Unlocking the nexus: exploring the mediating and moderating dynamics of risk factors in economic literacy for organizational performance - A systematic review", *Journal of Economic and Administrative Sciences*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JEAS-12-2023-0343>.
- Blackburn, G. (2015). Innovative eLearning: Technology Shaping Contemporary Problem Based Learning: A Cross-Case Analysis. *Journal of University Teaching and Learning Practice*, 12(2), 19.
- Borg, J. R., & Borg, M. O. (2001). Teaching critical thinking in interdisciplinary economics courses. *College Teaching*, 49(1), 20-25.
- Borg, M. O., & Stranahan, H. A. (2010). Evidence on the relationship between economics and critical thinking skills. *Contemporary Economic Policy*, 28(1), 80-93.
- Chytilova, H. (2017). Economic Literacy and Money Illusion: An Experimental Perspective (1st ed.). *Routledge*. <https://doi.org/10.4324/9781315304472>
- Cleveland, L. M., Olimpo, J. T., & DeChenne-Peters, S. E. (2017). Investigating The Relationship between Instructors' Use of Active-learning Strategies and Students' Conceptual Understanding and Affective Changes in Introductory Biology: A Comparison of Two Active-Learning Environments. *CBE—Life Sciences Education*, 16(2), 19.
- Dilek S., Keskingöz, H., Nergiz, E. (2019). Ekonomi Okuryazarlığının Girişimcilik Niyeti Üzerine Etkisi, *Üçüncü Sektör Sosyal Ekonomi Dergisi*, 54(1), 89-107.
- Tila, D. (2021). Economic experiments in a classroom improve learning and attitudes toward economics: A case study at a community college of the City University of New York. *Journal of Education for Business*, 96(5), 308-316. DOI: 10.1080/08832323.2020.1812489
- Dubas, J. M., & Toledo, S. A. (2016). Taking higher order thinking seriously: Using Marzano's taxonomy in the economics classroom. *International Review of Economics Education*, 21, 12–20
- Durmuş, M.E., Yardımcıoğlu, F. (2018). "İlahiyat Öğrencileri Ne Kadar İslami Finans OkurYazarı", *Siyaset Ekonomi ve Yönetim Araştırmaları Dergisi*. 6(1), 167-183.
- Ennis, R. H. (2018). Critical Thinking Across the Curriculum: A Vision. *Topoi*, 37(1), 165–184. <https://doi.org/10.1007/s11245-016-9401-4>.
- Erwiza, E., Kartiko, S., & Gimin, G. (2019). Factors affecting the concentration of learning and critical thinking on student learning achievement in economic subject. *Journal of Educational Sciences*, 3(2), 205-215.
- Farias, C., & Balardini, F. (2019). Teaching social economics: Bringing the real world into the classroom and taking the classroom into the real world. *International Journal of Social Economics*, 46(8), 960-976.
- Fernald, J. G., & Jones, C. I. (2014). The future of US economic growth. *American Economic Review: Papers & Proceedings*, 104(5), 44–49
- Flores, K. L., Matkin, G. S., Burbach, M. E., Quinn, C. E., & Harding, H. (2012). Deficient critical thinking skills among college graduates: Implications for leadership. *Educational Philosophy and Theory*, 44(2), 212–230.
- Foo, S. Y. (2021). Using EASY framework to facilitate economics students' critical thinking in asynchronous online discussions. *Asia Pacific Education Review*, 22(4), 637-654.
- Hoyt, G. M. (2021). Learning by Giving applied in an upper-level course on the Economics of Altruism, Philanthropy, and Nonprofit Organizations. *The Journal of economic education*, 52(2), 141-155.
- Goldsmith, R. E. (2013). Encouraging critical thinking skills among college students. *The Exchange*, 2(2), 9–19
- Hasan, M. S. R, & Chumaidah, N. (2020). Strategi Pembelajaran PAI Anti Radikalisme di SMP Negeri 1 Ngoro Jombang. *Al-Insyiroh: Jurnal Studi Keislaman*, 6(1), 36–56.
- Heijltjes, A., Van Gog, T., Leppink, J., & Paas, F. (2014). Improving critical thinking: Effects of dispositions and instructions on economics students' reasoning skills. *Learning and Instruction*, 29, 31-42.
- Howard, E., & Sarbaum, J. (2022). Addressing Study Skills, Learning Theory and Critical Thinking Skills in Principles of Economics Courses. *Frontiers in Education*, 7, 770464.
- Jannah, R. (2019). Pengaruh Literasi Ekonomi dan Gaya Hidup terhadap Perilaku Konsumtif Mahasiswa Jurusan Pendidikan Ekonomi UNESA. *Jurnal Pendidikan Ekonomi, Manajemen Dan Keuangan*, 3(2), 117–124. <https://journal.unesa.ac.id/index.php/jpeka/article/view/5837/3491>.
- Jovanović, J., Gašević, D., Dawson, S., Pardo, A., & Mirriahi, N. (2017). Learning analytics to unveil learning strategies in a flipped classroom. *The Internet and Higher Education*, 33(4), 74–85.

- Paxton, J. (2021). Learning by Giving in an introductory economics of altruism course. *The Journal of economic education*, 52(2), 128-140.
- Kaku, D. W., & Arthur, F. Effect of Economics Teachers Pedagogical Strategies on Economics Students' Academic Achievement.
- Koszalka, T. A., Pavlov, Y., & Wu, Y. (2021). The informed use of pre-work activities in collaborative asynchronous online discussions: The exploration of idea exchange, content focus, and deep learning. *Computers & Education*, 161, 104067.
- Lai, E. R. (2011). Critical thinking: A literature review. Pearson Research Reports. Retrieved from <http://images.pearsonassessments.com/images/tmrs/CriticalThinkingReviewFINAL.pdf>.
- Lapuz, A. M., & Fulgencio, M. N. (2020). Improving the critical thinking skills of secondary school students using problem-based learning. *International Journal of Academic Multidisciplinary Research*, (4), 1, 1-7.
- Li, R., & Qian, Y. (2020). Entrepreneurial participation and performance: the role of financial literacy. *Management Decision*, 58(3), 583-599.
- Lismaya, L. 2019. Critical Thinking and PBL (Problem Based Learning). Surabaya: Media Friends of Scholars.
- Maghfiroh, L., & Mulyani, E. (2019). Development of problem-based learning module in economics to increase students' critical thinking. *Jurnal Pendidikan dan Pengajaran*, 52(2), 40-48.
- Matthews, D. 2019. The radical plan to change how Harvard teaches economics. Vox.com. Updated May 22. <https://www.vox.com/the-highlight/2019/5/14/18520783/harvard-economics-chetty> (accessed January 15, 2020).
- Maynes, J. (2015). Critical Thinking and Cognitive Bias. *Informal Logic*, 35(2), 183–203.
- McCormick, N. J., Clark, L. M., & Raines, J. M. (2015). Engaging students in critical thinking and problem solving: A brief review of the literature. *Journal of Studies in Education*, 5(4), 100-113.
- McCowage, M. & Dwyer, J. (2022). Economic Literacy: What Is It and Why Is It Important? *Reserve Bank of Australia Bulletin*, 1-12.
- McGoldrick, K., & Garnett, R. (2013). Big think: A model for critical inquiry in economics courses. *The Journal of Economic Education*, 44(4), 389–398.
- Melina, A., & Wulandari, S. (2018). Pengaruh Literasi Ekonomi dan Gaya Hidup terhadap Perilaku Konsumtif Mahasiswa Pendidikan Ekonomi STKIP YPM Bangko. *Scientific Journals of Economic Education*, 2(1), 141–152.
- Menberu, A. W. (2024). Technology-mediated financial education in developing countries: A systematic literature review. *Cogent Business & Management*, 11(1), 2294879.
- Mengist, W., Soromessa, T., & Legese, G. (2020). Method for conducting systematic literature review and meta-analysis for environmental science research. *MethodsX*, 7, 100777.
- Merry, K. E., Webster, F., & Kucharczyk, S. (2022). Investing in Students with Extensive Support Needs: Steps to Integrate Personal Financial Literacy in Inclusive Settings for Educators, Students, and Families. *Inclusive Practices*, 1(4), 156-170.
- Mustafa I. (2016). Implementation of Problem-Based Learning (PBL) in Chemical Thermodynamics Course at the Yanbu Industrial College, Saudi Arabia. In: *Asia Pacific Confederation of Chemical Engineering Congress 2015, incorporating CHEMECA 2015*. Melbourne: Engineers Australia, 2015, 1565-1572.
- Narmaditya, B. S., & Wibowo, A. (2021). Family economic education, peer groups and students' entrepreneurial intention: the mediating role of economic literacy. *Heliyon*, 7(4).
- Ogbonnaya, I. C., Mji, A., Mafa-Theledi, O. N., & Ngulube, B. (2020). Economics teachers' use of topic-specific pedagogical content knowledge in teaching market dynamics. *Problems of Education in the 21st Century*, 78(3), 371- 393. <https://doi.org/10.33225/pec/20.78.371>
- Oktafikasari, E., & Mahmud, A. (2017). Konformitas Hedonis Dan Literasi Ekonomi Terhadap Perilaku Konsumtif Melalui Gaya Hidup Konsumtif. *Economic Education Analysis Journal*, 6(3), 684–697. <https://journal.unnes.ac.id/sju/index.php/eeaj/article/view/20280/9615>.
- Oliveira, N.D.S., Lellis, I.L., Barillas, M.D.G., (2023). Teachers' beliefs about Economic Literacy: challenges and perspectives in the context of Early Childhood Education. *Ensino Em Re-Vista*, 30, 1-25.
- Pang, M. F., & Marton, F. (2005). Learning theory as teaching resource: Enhancing students' understanding of economic concepts. *Instructional science*, 33, 159-191.
- Park, S. J., & Choi, S. H. (2015). Effects of problem-based learning on the learning attitudes, critical thinking disposition and problem-solving skills of nursing students: Infant Care. *Advanced Science and Technology Letters*, 103, 192-196.
- Perdanasari, A., & Sudiyanto, K. B. S. (2022). Critical Thinking Skills in Economic's Learning using Teaching Material based Problem Based Learning and Predict Observe Explain (TM-PBLPOE). *Journal of Positive School Psychology*, 6(8), 8525-8532.
- Pill, S., & SueSee, B. (2017). Including Critical Thinking and Problem Solving in Physical Education. *Journal of Physical Education, Recreation & Dance*, 88(9), 43–49.



- Putri, D. P. (2019). Problem-Based Learning Application to Increase Critical Thinking Ability and Learning Result of Economic Student Learning. *Classroom Action Research Journal*, 3(2), 9-14.
- Qasrawi, R., & BeniAndelrahman, A. (2020). The higher and lower-order thinking skills (HOTS and LOTS) in Unlock English textbooks (1st and 2nd editions) based on Bloom's Taxonomy: An analysis study. *International Online Journal of Education and Teaching (IOJET)*, 7(3). 744-758. <https://iojet.org/index.php/IOJET/article/view/866>
- Ragin, G, Refando, A, & Utami, D. C. (2020). Implementasi Strategi Pembelajaran Ekspositori untuk Meningkatkan Hasil Belajar Matematika di Sekolah Dasar. *PANDAWA*, 5(1), 54–60.
- Rahman, S. A., & Manaf, N. F. A. (2017). A Critical Analysis of Bloom's Taxonomy in Teaching Creative and Critical Thinking Skills in Malaysia through English Literature. *English Language Teaching*, 10(9), 245-256.
- Raimi, L., Bamiro, N.B. and Haini, H. (2024), "Do institutional pillars support or harm entrepreneurship and economic growth? A systematic review", *Journal of Entrepreneurship and Public Policy*, Vol. 13 No. 2, pp. 278-305, doi: 10.1108/JEPP-10-2023-0100.
- Rokhmawati I.D., Djatmika E.T., & Wardana L. (2016). Implementation of problem-based learning model to improve students' problem-solving skill and self-efficacy (A study on ix class students of SmpMuhammadiyah). *IOSR Journal of Research & Method in Education*, 6 (3), 51-55.
- Rosari, I. (2019). Pengaruh Strategi Pembelajaran dan Gaya Kognitif Spasial terhadap Hasil Belajar Ikatan Kimia SMA. *IJIS Edu: Indonesian Journal of Integrated Science Education*, 1(2), 163–168.
- Saepuloh, D., Sabur, A., Lestari, S., & Uâ, S. (2021). Improving Students' Critical Thinking and Self-Efficacy by Learning Higher Order Thinking Skills Through Problem Based Learning Models. *JPI (Jurnal Pendidikan Indonesia)*, 10(3), 495-504.
- Santosa, D. S. S, Sampaleng, D, & Amtiran, A. (2020). Meningkatkan Prestasi Belajar Siswa Melalui Model Pembelajaran SIKIP. *Jurnal Pendidikan Agama Kristen*, 1(1), 11–24.
- Shackelford, J. (1992). Feminist pedagogy: A means for bringing critical thinking and creativity to the economics classroom. *The American Economic Review*, 82(2), 570-576.
- Singh, D., & Bashir, H. (2018). Effects of problem based learning and conventional learning on critical thinking ability of higher secondary school students in economics. *International Journal of Education and Management Studies*, 8(1), 81-86.
- Soroko, A. (2023) Teaching young people more than “how to survive austerity”: From traditional financial literacy to critical economic literacy education, *Theory & Research in Social Education*, 51:1, 128-156, DOI: 10.1080/00933104.2022.2104674
- Sudarmiani, S. (2020). The Development of Economic Learning Model through CTL (Contextual Teaching and Learning) to Promote Students' Critical Thinking Skill. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(2), 714-723.
- Surindra, B. (2022). The influence of economic literacy and digital literacy on consumptive behaviour of students. *International Journal of Humanities Education and Social Sciences (IJHESS)*, 1(5).
- Sutton, B. A. (2024). Towards an understanding of how school climate strikes work as public pedagogy. *Qualitative Research Journal*, 24(1), 65-79. <https://doi.org/10.1108/QRJ-04-2023-0059>
- Thoma, G. A. (1993). The Perry framework and tactics for teaching critical thinking in economics. *The Journal of Economic Education*, 24(2), 128-136.
- Utami, W. C., & Rusdarti, R. (2021). Effectiveness of Think-Pair-Share Learning Model on Students' Creativity and Critical Thinking Ability. *Economic Education Analysis Journal*, 10(2), 268-284.
- Utaminingsih, S., Fajrie, N., Bamiro, N.B. and Azman, M.N.A. (2023), “Teachers and students’ perception of technology and sustainable adoption framework in the pedagogical process: a systematic review”, *International Journal of Learning, Teaching and Educational Research*, Vol. 22 No. 12, pp. 162-186, doi: 10.26803/ijlter.22.12.9.
- Gbadamosi, T. V. (2019). Economics teachers' awareness, utilization of collaborative, interactive, learner-oriented instructional strategies and sustainable economic literacy in Ibadan. *Education & Science Journal of Policy Review and Curriculum Development*, 9(2), 75-84.
- Widyawati, P. E., Hariani, L. S., & Yudiono, U. (2020). Perilaku Ekonomi: Literasi Ekonomi, Kelompok Teman Sebaya, dan Kontrol Diri. *Jurnal Riset Pendidikan Ekonomi*, 5(1), 1–9. <https://doi.org/10.21067/jrpe.v5i1.4302>.
- Wyk, Micheal. M V. (2018). Economics student teachers' views on the usefulness of a flipped classroom pedagogical approach for an open distance eLearning environment. *The International Journal of Information and Learning Technology*, 35(4), 255-265. <https://doi.org/10.1108/IJILT-07-2017-0068>
- Yayar, R. & Karaca, O.E. (2017). Economic Literacy Levels of Public Officers in Turkey. *Pakistan Journal of Commerce and Social Sciences* .11 (1), 49-65
- Ye, J., & Kulathunga, K. (2018). How Does Financial Literacy Promote Sustainability in SMEs? A Developing Country Perspective. *Sustainability*, 11(10), 2990. <https://doi.org/10.3390/su11102990>

- Yin, K. Y., & Fitzgerald, R. (2017). Peer learning with concept cartoons enhance critical thinking and performance in secondary school economics. *Journal of economics and economic education research*, 18(1), 1-13.
- Zapalska, A. M., Nowduri, S., Imbriale, P., Wroblewski, B., & Glinski, M. (2018). A Framework for Critical Thinking Skills Development Across Business Curriculum Using the 21st Century Bloom's Taxonomy. *Interdisciplinary Education and Psychology*, 2(2), 2.