

**EXTENDED ABSTRACT FOR INTERSPILL 2025 CONFERENCE, EXCEL,
LONDON
THEME: OUTREACH & COMMUNICATION
Sustaining ESD in Malaysian Primary Schools: Industrial Stakeholder Engagement
Framework**

Rosnah Mohamed Ismail^{1,2} and Sheena Bidin²

¹ VJ Engineering Solutions Sdn. Bhd. Selangor, Malaysia.

² Universiti Putra Malaysia (UPM), Serdang, Selangor, Malaysia.

Email: rosnah@vjengineering.com.my

Introduction

Education for Sustainable Development (ESD) is essential for equipping future generations with the knowledge, skills, values, and attitudes needed to address environmental challenges. In Malaysia, the integration of ESD within primary education faces several challenges, including fragmented implementation across various subjects, inadequate teacher training, and insufficient resources. These obstacles hinder the effectiveness of ESD initiatives, which are critical for achieving the United Nations Sustainable Development Goals (SDGs) related to quality education and environmental sustainability (UNESCO, 2024; Abidin et al., 2024).

Despite government efforts to promote sustainable education, ESD is not treated as a standalone subject in Malaysian schools. Instead, it is often integrated into other disciplines such as religious studies, science, geography, and mathematics. This integration can dilute the focus and effectiveness of environmental education, leading to a lack of continuity and depth in its implementation (Karim et al., 2022; Rahman et al., 2018). Furthermore, teachers frequently perceive ESD as burdensome due to insufficient training, limited time, and inadequate teaching aids, which intensify the challenges in delivering effective environmental education (Lateh & Muniandy, 2010).

Problem Statement

The current approach to ESD in Malaysian primary schools underutilizes industrial stakeholders who possess valuable resources and expertise. The involvement of these stakeholders in supporting environmental education is often limited and unstructured, representing a missed opportunity to align corporate social responsibility (CSR) efforts with national and global sustainability agendas (Chien & Knoble, 2024). This research addresses the need for a structured framework that integrates industrial stakeholder contributions to enhance the effectiveness and sustainability of ESD in Malaysian schools.

Research Aim and Objectives

This study aims to develop a comprehensive framework that enhances the long-term involvement of industrial stakeholders in the implementation of ESD within Malaysian primary schools. The research objectives are:

1. To explore the current challenges and gaps in ESD implementation within Malaysian primary schools.
2. To identify the potential roles and contributions of industrial stakeholders in supporting and sustaining ESD initiatives.
3. To develop a strategic framework that aligns industrial stakeholders' CSR initiatives with ESD goals, facilitating continuous and effective environmental education across various stages of children's cognitive development.

Methodology

The research adopts a qualitative approach, utilizing semi-structured in-depth interviews with key industrial stakeholders, particularly those identified as significant contributors to environmental pollution. This method provides detailed insights into stakeholders' perspectives, motivations, and capacity to support ESD initiatives. In addition, thematic analysis of existing literature and policy documents will contextualize the findings within the broader discourse on sustainable education and stakeholder engagement (Abidin et al., 2024). The collected data will be analysed to identify recurring themes and strategies that can inform the development of a practical and scalable framework for industrial involvement in ESD.

Significance of the Study

This study holds significant implications for policymakers, educators, and industry leaders by providing actionable insights and strategies for building strong partnerships that enhance the quality and sustainability of ESD. By aligning industrial CSR efforts with educational needs, the framework proposed has the potential to:

- Improve the availability and quality of resources and training for teachers, thus improving ESD delivery and effectiveness (Rahman et al., 2018).
- Promote a culture of sustainability among young learners through consistent and comprehensive educational experiences.
- Contribute to the achievement of national and international sustainability targets, including the SDGs, by leveraging the joint efforts of the education and industry sectors (UNESCO, 2024).

Conclusion

Overcoming the challenges in implementing ESD in Malaysian primary schools requires innovative and collaborative approaches that draw on the strengths and resources of various stakeholders. This study proposes a strategic framework that unites educational institutions and industrial stakeholders to promote and sustain effective environmental education. The contributions of this research range from theoretical advancements and improved stakeholder engagement to significant societal impacts, offering a model that can be adapted by other countries facing similar challenges. This has the potential to amplify the global significance of the research.

Keywords: Education for Sustainable Development (ESD), Environmental Education, Industrial Stakeholder Engagement, Sustainable Development Goals (SDGs), Malaysian Primary Schools, Curriculum Development, Corporate Social Responsibility (CSR), Teaching Challenges, Student Engagement, Industry-Education Collaboration, Sustainability, Conservation Learning, Industrial Stakeholder framework, industry funding.

Abbreviations: Education for Sustainable Development (ESD), CSR – Corporate Social Responsibility, SDGs – Sustainable Development Goals.

References:

UNESCO. (n.d.). *What you need to know about education for sustainable development*. Retrieved June 16, 2024, from <https://www.unesco.org/en/sustainable-development/education/need-know>

- Abidin, M. S. Z., Mokhtar, M., & Others. (2024). *Unraveling the challenges of education for sustainable development: a compelling case study*. *Qualitative Research Journal*, January 2024. <https://doi.org/10.1108/QRJ-05-2023-0090>
- Rahman, N. A., Halim, L., Ahmad, A. R., & Soh, T. M. T. (2018). *Challenges of environmental education: Inculcating behavioural changes among indigenous students*. *Creative Education*, 9(1), 43-55. <https://doi.org/10.4236/ce.2018.91004>
- Chien, S.-C., & Knoble, C. (2024). *Research of education for sustainable development: Understanding new emerging trends and issues after SDG 4*. *Journal of Sustainability Research*, 6(1), e240006. <https://doi.org/10.20900/jsr20240006>
- Lateh, H., & Muniandy, P. (2010). *Environmental education (EE): Current situational and the challenges among trainee teachers at teachers training institute in Malaysia*. *Procedia - Social and Behavioral Sciences*, 2(2010), 1896-1900. <https://doi.org/10.1016/j.sbspro.2010.03.1005>