

UNIVERSITI TEKNOLOGI MARA

**PROMOTING DESIGNOMIC UNDERSTANDING AMONG
SECONDARY SCHOOL STUDENTS THROUGH ECO
PROJECT-BASED LEARNING ACTIVITIES MODULE**

JULIEZA BINTI GHAZALI

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ABSTRACT

In light of social inequality, economic hardship, and environmental deterioration, the demand for sustainable development has grown increasingly pressing. Education is a crucial tactic to provide the future generation the information and abilities they need to handle these issues. The goal of this project was to encourage secondary school pupils to adopt an interdisciplinary approach called Designomic Understanding, which combines design thinking with economic principles. In order to involve students in real-world, problem-solving activities that promote creativity, critical thinking, environmental awareness, and an understanding of economic principles in the context of sustainability, the suggested framework makes use of Eco Project-Based Learning (ECO-PBL Designomic) activities. This module was created as a learning resource to help students learn Visual Art Education. This study uses a hybrid method that integrates qualitative and quantitative data using the DDR research strategy. Students' performance on summative tests, artwork, and feedback on gallery walk activities are also evaluated in this study. In addition, the module's usability was assessed following the conclusion of the course. As a guide for creating Visual Art lesson plans and to be used in the teaching and learning process, the ECO-PBL Designomic module was developed using the ADDIE paradigm, which was backed by Lev Vygotsky's (1978) Zone of Proximal Development and Scaffolding Theory and Allan Paivio's (1971) Dual Coding Theory. Quantitative and descriptive statistics form the basis of the methods used in the data collecting. This study is supported by the qualitative methodologies' findings. Five teachers—two RBT teachers, two visual art education teachers, and one expert—as well as sixty students participated in the needs analysis portion of the study. A quasi-experimental single-group comparison design was used in the investigation. Forty pupils and one visual art teacher were purposefully chosen to participate in this phase. The findings showed that students who used the ECO-PBL Designomic module had a noticeably higher mean overall score on their summative assessments. This suggests that students' comprehension of Designomic was successfully enhanced by the ECO-PBL Designomic program. Future research directions are examined and conclusions are given.

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CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

Implementing Project-Based Learning (PBL) ideas in the field of visual art education is referred to as art practice. With this method, the student's understanding of work on practical, artistic projects is intended to be instructive and meaningful. Integrating sciences in art practices in ECO Project-Based Learning using Designomic topics fosters cooperation, critical thinking, a social, natural environment, and active engagement (Adriyawati, E. U., 2020), Ahmad Dasuki Mohd Hawari, A. I. (2020). These components can benefit students' education and skill development in several ways.

Therefore, one vision and an ongoing research field in advancing educational theory and practice is integrating science into creative production (Ministry of Education, 2013). The term "Designomic" topic describes how Malaysian school curricula incorporate entrepreneurial components with the Element Merentas Kurikulum (EMK) by Malaysia Education Blueprint 2013-2025. This program aims to develop entrepreneurial attitudes and abilities in students at an early age. The field of entrepreneurship has evolved from mainly being taught in business schools to being trained in various fields (Toscher, B., 2019).

Furthermore, there is still a dearth of knowledge in Designomic. The content of the textbook is simple and boring. There is less process explanation—a brief rundown of the stages of making art. The interesting writing style of the text can improve readers' understanding of designomic. The development of creativity, innovation, risk-taking, problem-solving, and financial literacy are some of the main areas of emphasis (Ahmad Dasuki Mohd Hawari, A. I., 2020). To thrive in the twenty-first-century economy, it is anticipated that students will need these talents. While "Elemen Keusahawanan's" implementation is still in its early stages, encouraging results have already been seen. The emphasis on the interdisciplinary, student-centered, and practical application of knowledge and skills across various disciplines—including art, science, technology, engineering, and mathematics—is shared by both, as revealed by Adriyawati, E. U. (2020).