

The Effectiveness of an Information Literacy Training Program at the Faculty of Science, Mahidol University

Background and Objectives



Information literacy is an essential 21st-century skill for academic learning, research, and AI-era digital competency

Research Objectives

- 1 Perceived learning achievement
- 2 Training effectiveness
- 3 Participants' attitudes
- 4 Alignment between subject areas and participant roles

Methodology

700 Satisfaction Survey Responses (Fiscal Year 2023–2025)

- Students ($n = 272$)
- Lecturers ($n = 134$)
- Staff ($n = 294$)

Mixed Methods Research

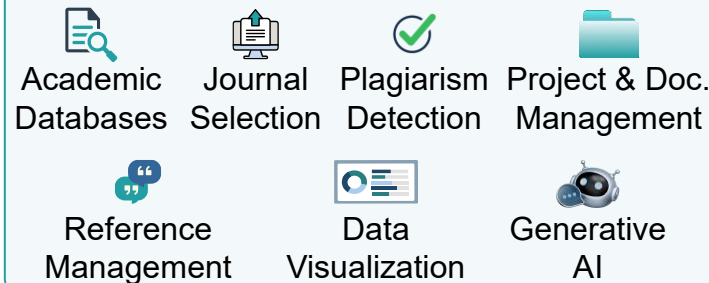
Quantitative Analysis

- Paired t-test
- One-way ANOVA
- Tukey HSD

Qualitative Analysis

- Content analysis
- Comparative analysis

7 Subject Areas



Key Findings

1 Significant Learning Improvement

Before Training $M = 2.09$ (Low) $t = 62.13$, $p < .001$ After Training $M = 4.39$ (High)

2 High Training Effectiveness

- Instructor Competence
 - Benefits for Job Performance
- > 4.50 / 5.00 (Highest)**

3 Participant Differences

- Students showed the **highest post-training knowledge**
- Staff showed **lower scores in Modern Technology topics**

4 Subject Area Trends

- **Higher Perceived Learning** Academic Databases, Journal Selection
- **Lower Perceived Learning** Data Visualization, Generative AI

5 Participants' Attitudes

Positive Comments **74.45% (102 comments)**

Suggestions & Challenges **25.55% (35 comments)**

Curriculum Development Implications



Training content should align with participant roles and prior knowledge

Basic
Foundational for Undergrad & Staff

Intermediate
Academic for Grad & Lecturers

Advanced
In-depth Modern Tech. by Role



Supports sustainable information literacy development in higher education libraries