



15 - 17 May 2026

Rome , Italy

# Designing Meaningful Technology-Enhanced Art Learning Experiences: From Theory to Practice

Ai Wee Seow , Ms Silvia Lim

*Singapore Teachers' Academy for the aRts, Ministry of Education Singapore*

## Abstract

This paper investigates how primary-level (7–12 years) art teachers leverage educational technology (EdTech) to enhance art learning, with a focus on instructional practices that foster conceptual understanding and develop metacognitive skills. Drawing on assignment submissions from 50 teachers who participated in a self-paced e-learning course conducted in 2025, the paper examines three key areas. The first area outlines design considerations for the course, emphasising digital andragogical principles in content curation and learning experience management. This includes integrating active learning strategies into digital platforms, addressing challenges of learner isolation and motivation, and meeting the needs of practising educators with diverse technological competencies and classroom contexts. The second area presents examples of participant-designed art learning experiences that foster conceptual change—opportunities for students to externalise their understanding—and develop metacognition by supporting students in monitoring, organising, and refining their thinking. This section also highlights observed misalignments between theoretical frameworks and classroom realities, revealing how art teachers adapt digital tools to meet practical constraints. The third area examines how quantitative and qualitative data collected through end-of-course evaluations and follow-up interviews inform iterative improvements to course design, while also addressing the ongoing tension between integrating EdTech and safeguarding the sensory, material nature of artmaking within limited curriculum hours. The findings contribute to the emerging field of digital andragogy by clarifying how adult learning principles can be meaningfully translated for professional growth as well as strengthen e-pedagogical decision making that would elevate quality of art learning.

**Keywords:** Digital Andragogy; E-Pedagogy; Edtech; Active Learning; Professional Learning

