ReflectAI: AI-Assisted Journaling to Support Emotional Awareness and Reflective Practice

Author: Pujan Pokharel
Advisor: Dr. Tim Gorichanaz
Drexel University, College of Computing & Informatics

Abstract

ReflectAI is a prototype journaling platform that integrates AI-generated prompts to reduce blank-page anxiety and scaffold deeper reflection. We ran a 21-day longitudinal study with six undergraduates (ages 21–25; majors: Computer Science ×2, Biology ×2, Business ×1, Data Science ×1). Participants journaled in the app (36 total entries; ~6 per student; ~720 characters per entry on average) and completed pre/post surveys with optional interviews. Sessions were typically brief (self-reported ~15 minutes; 42% under 10 minutes, 39% between 10–20 minutes, 19% over 20 minutes), with mid-week usage most common (Wednesday peak).

Findings indicate that ReflectAI helped students organize thoughts, process academic stress, and articulate the "why/so-what" behind feelings. Quantitatively, **emotional awareness** increased from 3.58 (pre) to 3.92 (post), a net change of **+0.34**, and **confidence in understanding emotions** increased from 3.33 (pre) to 3.75 (post), a net change of **+0.42** (1–5 Likert, 0.5-step). Qualitative feedback highlighted the value of clear, targeted prompts and a non-judgmental, "therapist-like" tone. Students also suggested improvements including customizable prompt packs (e.g., for exam weeks), easier access and search across past reflections, offline use, and a more polished, notebook-style interface.

This study offers preliminary evidence that lightweight, AI-assisted scaffolding can sustain reflective practice and strengthen both emotional awareness and confidence for students. Future work should examine longer-term outcomes, broaden participant diversity, and explore how AI journaling complements—not replaces—human support systems such as advising and counseling.

Keywords: AI, journaling, students, stress, reflection, emotional awareness, confidence, human–AI interaction