AI-Ready Curricular Oversight & Renovation (ACORN) Toolkit: A Scalable, Whole-Program Approach to AI Literacy Integration



SDSU CSU AIEIC Award #3 (PI: EJ Sobo)

Abstract: We will develop a **scalable toolkit** supporting intentional, faculty-led integration of AI at the curricular level. Designed **for updating entire majors or programs**, the Toolkit will help faculty embed AI competencies coherently and proactively—versus reactively or piecemeal, course-by-course. Its application will foster faculty ownership of AI-related curricular changes that support critical thinking, reduce gaps and redundancies, enhance program relevance for students, and boost workforce readiness. A taskforce of AI-knowledgeable faculty and students will, with expert support, develop the Toolkit in three stages: (1) Summer: Curricular redesign and AI fundamentals/ literacies training plus interrogation of program-relevant data from SDSU's AI Survey; (2) Fall: Toolkit design and stress-testing; and (3) Spring: Piloting, assessment, and further refinement. The final deliverable will enable units across the CSU to adopt a similarly strategic, whole-program approach to AI-related curricular upgrades.

Goals and Rationale: Prioritizing the whole (curriculum) over the part (course), we aim to plan, create, apply, evaluate, refine, and deliver a scalable **toolkit for making comprehensive, consensus-based, data-informed, program-level AI-related curricular changes**. By taking a holistic approach that systematically interrogates AI's place within a given program of study, our toolkit will help faculty units avoid gaps in coverage of relevant AI tools or literacies, reduce unnecessary redundancies between courses, and otherwise ensure the coherence of their major or program to uplift critical thinking, increase graduates' workforce readiness, and enhance the student experience overall.

A taskforce comprising eight SDSU College of Arts and Letters (CAL) faculty members and two students will undertake the work. With 19 academic departments offering over 85 majors and minors, CAL, the largest college at SDSU, is responsible for over one-third of all instruction on campus, reaching nearly all c.25,000 undergraduates through GE and writing-related offerings. CAL offers both BA and BS degrees–including a pilot BS in Artificial Intelligence and Human Responsibility. The College also houses a pioneering digital humanities initiative.

Led by PI EJ Sobo, a key member of SDSU's AI Response Team and participatory action research expert, the Taskforce will be supported by Instructional Technology Services (ITS), via an instructional designer and ITS's two AI Student Fellows. The library's AI Literacy team and our Center for Teaching and Learning also will support the taskforce, as will SDSU's and CAL's career services units.

Nomination to the taskforce required prior use of AI in teaching and demonstrated AI fluency (e.g., as confirmed via the *Academic Applications of AI* (AAAI) microcredential, available CSU-wide via https://csuco.instructure.com/login/canvas); affiliation with a high-impact program; commitment to group decision-making concerning curricular innovations; experience in curricular planning; and proven capacity as a respected role model at SDSU. Diversity in career stage, discipline, and leverageable cross-campus connections also was crucial (see budget for personnel list).

Timeline Details: The Toolkit will be built in three phases informed by the Plan-Do-Study-Act (PDSA) or Deming Cycle, a foundational Continuous Quality Improvement (CQI) approach emphasizing the need to test and refine changes in an iterative, systematic, data-informed manner (Deming 2000):

1. **Summer 2025** - *Planning*: Taskforce receives facilitated training (once a week, four weeks) and time to develop expertise regarding:
    a. *Proven models for curricular design and assessment*
    b. *Established perspectives on AI literacies*
    c. *Workforce-related AI needs*
    d. *Program-relevant data from SDSU's AI Survey*, with training from ITS on how to use SDSU's AI Survey Dashboard (see https://aaai.sdsu.edu/)
    e. *Dealing with resistance*

2. **Fall 2025** - *Doing, Studying*: Build a draft framework for curriculum redevelopment; create tools to support this, including custom generative pre-trained transformers (GPTs). Stress-test these with the taskforce members' home programs. (For instance, working with a program's most up-to-date syllabi and curricular map, faculty will apply the framework to their programs, identifying weak spots in the logic and iteratively upgrading the framework and related tools as needed. Beyond updating program-level student learning outcomes and ensuring course-level outcomes align, faculty might assess how effectively a GPT can help trawl curricula in search of strategic, intentionally placed opportunities for high-impact AI-related enhancements, or test how well a workforce/career-related AI competency mapping template works).

3. **Spring 2026** - *Studying, Acting*: Upgrade and retest the Toolkit, both ourselves and with two to four additional volunteer programs. An instructional design (ID) specialist will ensure that programs/majors leverage internally available (SDSU-licensed) AI tools, and that the Toolkit is based on solid pedagogical and instructional design principles. Together with taskforce member Pollard, who worked on SDSU's highly successful Canvas-based Pandemic teaching/course redesign toolbox, they will help create an uncomplicated Canvas-based module introducing our framework and tools. As the final report is prepared, we will further refine the Toolkit based on Phase Three experiences to ensure viability for wider-scale distribution and use.