

## Project on Open and Evolving Metaliteracies (POEM)

### Introduction

The Carnegie Mellon University (CMU) Libraries seeks \$243,216 for a 24-month National Leadership Grant for Libraries to **curate and publish POEM, a dynamic, evolving, and sustainable collection of open educational resources to enhance algorithm, data, and media literacy** for learners of high school age and above. The development of POEM will address NLG Goal 1, particularly objectives 1.1 and 1.3.

POEM is designed for a range of instructor and learner audiences interested in practical, peer-reviewed open educational resources designed to improve information literacy levels and empower digital citizens. It will initially be focused in three key areas: **algorithm, AI, and software literacies; data, computational, and analytical literacies**, and **media, visual, and information literacies**. It builds on the work of initiatives such as the [Algorithm & Data Literacy Project](#), UNESCO's work defining [AI and data competency frameworks](#), the White House's [Blueprint for an AI Bill of Rights](#), the [ACRL Framework for Information Literacy](#), and the [2022 ACRL Framework for Visual Literacy in Higher Education](#). Because the need is urgent and the technology and media landscapes are changing so rapidly, POEM will continuously publish and update contributions to the collection to ensure that its content remains relevant and up-to-date and will take an iterative approach to collection development, review, and maintenance.

### Project Justification

The widespread implementation of algorithmic decision-making risks compounding existing social and financial inequities and exacerbating social divisions. Increasingly ubiquitous, intuitive, proprietary user interfaces obfuscate computational processes to present only “automagical” results. At the same time, we are barraged with the presentation of falsified media content, misleading data visualizations, and selective and biased data as truth. Information professionals must ensure that students, learners, and citizens have access to vetted resources that can help them gain the skills not only to critically evaluate this landscape, but also to understand its impact—and how to intervene. There is currently no reliable clearing house of materials to enable digital citizens, information professionals, and postsecondary educators to undertake this critical effort to raise algorithm, data, and media literacy.

### Project Work Plan

Year one:

- *Platform Development*
- *Call for inaugural co-editors for each of three literacies:* Each literacy will have two editors: a CMU librarian and a librarian chosen from an open call. The editors will create an overview of existing projects in their literacy area and propose and refine a set of ten keywords, or topics, to be covered. Co-editors are also responsible for writing a general, well-researched introduction to each literacy and creating learning objectives for the content that will feature in their collection.
- *Call for editorial curators:* Each keyword will have a curator, with preference given to public librarians, community college librarians, and disciplinary faculty, responsible for (a) writing an introduction to the keyword concept, (b) ensuring that the activities and exercises grouped under their keyword represent a diverse range of perspectives, voices, learning modalities, and methods, (c) that each activity is tagged with the appropriate audience, learning objectives, educational level, activity type, and activity duration and (d) that each activity undergoes peer review by a volunteer team of librarians.
- *Call for contributions of learning objects and lesson plans:* Editors and curators will disseminate a bilingual (English/Spanish) call for contributions of learning objects to the collection. These might take

the form of Jupyter Notebooks, videos, podcasts, or other creative and/or technical activities and exercises, each accompanied by a short description contextualizing its intended audience and use.. Learning objects and activities will be reviewed for their alignment with the learning objectives and designed to help students from a range of backgrounds, perspectives, and learning styles critically engage with the topic or keyword.

Year two:

- Peer review and publishing of “first edition”
- Presentation of first edition online (webinars with roundtable discussion between editors and curators) and at library and education conferences
- In-person community convocation (with hybrid audience participation) bringing together librarians, academic faculty, and 9-12 teachers to share pedagogical ideas, goals, outcomes.

### Diversity Plan

POEM will be created with diversity, equity, and inclusion at its core: it will be bilingual; its content and platform will be center accessibility and universal design principles; learning objects will represent diverse cultures and facilitate a range of learning styles; attention will be paid to building a diverse team of editors and curators, and the calls for participation will be advertised in BIPOC information communities to maximize representation.

### Project Results

A reproducible, sustainable collection of openly-licensed materials, activities, and lessons, initially available in English and in Spanish (as the two most spoken languages in the US), POEM will empower digital citizens, educators, and independent learners to navigate, interpret, and engage constructively with media, data, and algorithms in a complex sociotechnical landscape. POEM will be built and hosted using open-source technologies and will feature learning objects that adhere to digital preservation (NDSA level 2) and digital accessibility (WCAG 2.2) standards. Modeled on the Modern Language Association’s [Digital Pedagogy in the Humanities](#), POEM will be premised on the values of openness (open collaboration, open-source technology, openly-licensed content), access (despite barriers of language or ability) and inclusion (in its insistence on the representation of a diverse range of authorial voices, modalities, and content).

### Budget Summary

A total budget of \$243,216 is requested over a two-year period (August 1, 2024 - July 31, 2026).

- Travel: \$18,000 editor/curator travel for community convening; \$18,000 editor/curator travel for outreach at conferences etc. (\$3,000 per editor/curator)
- Subawards and contracts: *Editorial stipends*: \$24,000 total (\$3k per year x 6 editors); *Curatorial stipends*: \$75,000 total (\$2.5k x 30 curators)
- Student support: *Graduate assistant wages*: \$4,800 total (240 hours translation and editing into Spanish at \$20/hour)
- Other costs: *accessibility review of platform* \$2,000 total (10 hours at \$200/hour); *community convening*: \$18,000
- Indirect costs: \$83,416 per CMU 52.2% overhead