

Preserving and Disseminating Emerging Forms of Digital Scholarship in Academic and Research Libraries

The University of Utah's Marriott Library and Eccles Health Sciences Library, in partnership with the Entertainment Arts and Engineering (EAE) program and the Mountain West Digital Library (MWDL), seek the opportunity to submit a full proposal to IMLS for a \$24,803 Sparks grant that will include \$0 cost share. Our proposal is to develop and deliver recommendations for academic and research libraries seeking practical guidance to preserve and disseminate emerging forms of digital scholarship generated on university and college campuses. Addressing the IMLS's agency-level goals to demonstrate exemplary stewardship of library collections, and to use technology to facilitate access and discovery, we propose undertaking a project that will preserve and disseminate the degree-bearing scholarship of EAE graduate and undergraduate students. The scholarship generated within the EAE program is born-digital and includes an executable file to manage dependent files. Because of this, preservation and access can be studied and documented as it relates, on the one hand, to a single file, and on the other hand, as it relates to a larger group of interdependent files, collectively reliant on an executable file in order to function as intended. The library community, in order to acquire and integrate digital scholarship into their collections, will need to know and understand how to manage born-digital files singly, and also collectively, where they are a collection of dependent files and their executable file.

The mission of academic and research libraries includes collecting, archiving, and disseminating scholarship generated on their campuses, in all its forms. As such, colleges and universities share a common goal to organize and preserve scholarship generated on their campus as part of fulfilling their research mission. Falling under the National Digital Platform project category, our proposal addresses the intersection of digital issues facing libraries in the cutting-edge area of emerging forms of digital scholarship. Libraries wishing to preserve and disseminate works of digital scholarship will need to coordinate on multiple fronts. Bringing together expertise in emerging technologies, campus outreach, scholarly communications, library acquisitions, digital asset metadata management, digital archiving, digital asset preservation management, and user access systems. Our project team includes seasoned experts from each of these areas, who are also librarians in academic, research, and regional libraries.

The scholarship of the EAE program is focused on the creation and development of video games. Frequently, the video game scholarship moves beyond mere entertainment and addresses serious topics of cultural, social, and personal significance, intended to serve as tools for education, reflection, and experience. The format of the scholarship generated within the EAE program is entirely born-digital, includes dozens of files in varying formats, all of which are themselves dependent on an executable file in order for the scholarship product to function as intended by its authors. Packaged into a single "wrap kit", EAE students are required to include functionality components (e.g. graphic, code, software, hardware) and business materials (e.g. one-sheet summary, promotional and game play videos, posters, business plan) when submitting their degree-bearing work. Due to the departmental wrap kit requirements, EAE scholarship is an ideal candidate to identify and address issues related preserving and disseminating a wide variety of types of digital scholarship.

With an anticipated July 1, 2018 start date, project members plan to first form a series of task forces in the areas of scholarly communication and department outreach, data organization,

digital preservation, digital object acquisition, and digital asset dissemination. Reporting to a governing board, itself overseen by the co-PI's, each task force will include at least one governing board member and a group of individuals who have expertise in the core and ancillary areas of a task force topic. The task forces will be charged with addressing specific areas of the question at hand, e.g.: "What are the copyright and permissions implications for multi-author digital scholarship works?", "What is required to provide future access to the work?", "What is the mechanism for capturing metadata associated with the work?"

Upon completion, each task force will generate a report documenting the procedures and processes that were used to address their topic area. The report will also provide a set of shareable recommendations. Each challenge that remains unresolved is to be clearly and succinctly articulated into a set of strategic next steps for libraries. The governing board will incorporate each task force report into a larger comprehensive report which will be published electronically, as an ebook. Grant funding will additionally enable us to present on the project at a national conference. The resulting ebook, "A Report on Preserving and Disseminating Emerging Forms of Digital Scholarship in Academic and Research Libraries", will be integrated into the library's catalog, available to other WorldCat member libraries, and to anyone else through the Digital Public Library of America, of which the Mountain West Digital Library (our regional library partner on this project) is a member.

The successful preservation and dissemination of EAE's scholarship (and, for that matter, any form of digital scholarship) is not without risk. Predominantly, this is in the areas of data integrity, data preservation, and evolving technologies. Should data stability and integrity diminish over time, or become corrupt at some point, that data will become inaccessible, and ultimately unusable. While the preservation of individual files can reasonably be 'insured' over a certain amount time, there is the risk that access to a functional copy of the digital scholarship itself, or the "Work", can't be assured. In order to preserve a functional copy of the Work itself, the executable file (which all of the remaining files are dependent upon) must be able to migrate in a manner that allows for the Work to be accessed and used on the platforms, operating systems, and peripherals of the future. Otherwise, the risk is the Work will become orphaned in a way that is not so familiar to libraries, a work of scholarship, for which we have all the files, but no means of accessing. The scholarship itself will have vanished, while it's dependent, auxiliary, and ancillary files remain as the only evidence of it having once existed. Some risks are addressed by defining and implementing a preservation and migration program which addresses the question of 'whose role is this?' Is migration best managed by a library's digital preservation staff? By the department from which the scholarship comes, or a combination of both?

Co-PIs Anne Morrow, Librarian, Head of Digital Scholarship Services, and Tallie Casucci, Innovation Librarian, will be overseeing the project. The total cost for this project is \$25,000. Direct costs include: \$6,646 to cover 10% of Co-PI Morrow's time and \$3,155 to cover 5% of Co-PI Casucci's time for 12 months based on their annual salaries; \$893 to cover 5% of a full-time staff member's time for 6 months based on her annual salary; a total of \$4,674 for fringe benefits for the Co-PIs and the staff member; and \$3,000 for travel expenses. Indirect costs include \$6,632 to cover F&A budgeted at a rate of 36.5% in accordance with the University's federally negotiated rate for "Other Sponsored Activity."