

Narrative

UNCG requests \$149,706 to conduct research, hold a national forum, and convene a working group to chart a path forward for collecting independent-made (indie) digital video games in libraries. The project team will commence exploratory research in August 2024, hold the national virtual forum in October 2025, and produce all final deliverables by July 2026. Overall, the project seeks to address the issues, questions, and problems critical to collecting digital games in libraries from the perspective of four central stakeholder groups: academic and public librarians; indie game developers and publishers; users of game collections in both academic and public libraries; and library professionals or scholars with expertise in electronic resource licensing and technology policy. While there are other important stakeholder groups with a commercial interest in how digital games are distributed, namely existing digital game platforms and library vendors, these groups are excluded from the scope of the current project. These groups will need to be engaged at some point in the longer-term development of strategies for libraries to collect digital games, but libraries first need to collectively understand and articulate their own needs in this area, in relation to the needs of game creators and game users, before approaching entities with a significant commercial interest in the distribution of games. A Forum Grant is ideal to provide the necessary space and resources for academic and public librarians to engage with key stakeholders to articulate a shared set of goals and start building collaborative strategies to collect and provide broader access to digital games, thus directly advancing the National Leadership Grant Goal 5, Objective 5.1. This project will enable librarians as institutional collectors, along with game creators and game users as the direct beneficiaries of these collecting efforts, to develop a collective understanding of their needs, thus establishing a foundation to build the legal and technical infrastructure necessary to collect and provide access to this emerging area of significant cultural heritage.

Project Justification

Video games are not only an enormously popular entertainment medium—games are also widely recognized as a vital part of today’s cultural heritage by information professionals, scholars, game creators, and video game fans of all ages. Academic libraries have developed extensive collections of games to support scholarship on gaming history and game design (Wood and Carter 2018) and public libraries have integrated games and gaming spaces into their collections, buildings, and programming (Wyatt and Leorke 2024). However, the modes for creating, publishing, and distributing games have changed dramatically in recent years, in ways that will severely constrain the ability of libraries to continue collecting and providing access to games. The gaming industry has embraced digital distribution channels, Steam the most prominent among these,¹ with the release of games on physical media becoming the exception rather than the rule. These vendors typically sell games via single end-user licenses; no game vendors accommodate selling or licensing games to libraries or other cultural heritage institutions. Simply put, libraries have not kept pace with these changes and lack any scalable methods to collect and provide access to digital-only games. Academic and public librarians, as information professionals with distinct but overlapping needs in this area, must work together while engaging external communities of gamers and game developers in these efforts to develop collaborative approaches now to avoid the loss of this important cultural heritage.

Scholars from a range of disciplines have firmly established the cultural significance of video games. Some have contextualized games in relation to older cultural forms, for instance games displayed in museums and galleries as visual art (Sharp 2015), or narrative games that function as works of interactive literature (Ensslin 2014). As with artworks, books, and other cultural forms, games offer insight into human experience and pose questions about critical issues. For example, Phillip Penix-Tadsen (2016) explores how Latin American culture is represented in games and how games from Latin American developers cross cultures as part of global flows of information. Games are also unlike older cultural forms, foregrounding player interactions and nonlinear storytelling. As Ian Bogost (2011) puts it, “videogames are a medium that lets us play a role within the constraints of a model world” (4), offering experiences not possible in any other medium. These distinct aspects of games as a cultural form also make gaming hugely popular. As the Entertainment Software Association (2023) reports from its most recent survey of approximately 4,000 Americans, 65% play games for an average of 12.8 hours per week across mobile, console, PC, tablets, and virtual reality devices. According to the survey, the population of gamers is diverse in terms of gender, race and ethnicity, and age, with gamers claiming a range of benefits including stress relief, building cognitive and problem-solving skills, and creating community with other players. As the report summarizes the findings: “everyone plays.”

¹ “Welcome to Steam,” Valve Corporation, accessed March 5, 2024, <https://store.steampowered.com/>.

Indie games in particular represent a blossoming area of cultural production with important differences from major commercial game studios: “if mainstream games are seen as products made by anonymous corporations and marketed globally, then many independent games are promoted as unique creations made by specific, named people with personal histories, as part of communities that *you can join*” (Juul 2019, 21). The rise of accessible game design tools and open digital distribution platforms over the past decade have eliminated many of the barriers to making and selling games, leading to a renaissance of innovative games from diverse creators unprecedented in the history of games. While the US gaming industry has long been composed of predominantly young white men producing games targeted at that demographic, previously excluded communities are now creating games telling new kinds of stories and implementing novel gameplay styles and mechanics (Anthropy 2012). For example, Porpentine’s (2012) *howling dogs* explores themes of gender dysmorphia and trans identity. Games journalist Adi Robertson (2021) positions Porpentine’s work, along with other work made with the free and open-source software Twine by influential game designers Anna Anthropy and Zoe Quinn, as a watershed in the development of indie gaming as a force in the broader video game world. Along with tools for creating games, indie developers have found eager audiences of players through itch.io, an online storefront dedicated to indie gaming,² as well as through mainstream distribution channels. The market research firm Video Game Insights (2021) highlights the growing commercial market for indie games: 40% of all units sold on Steam are indie titles, representing 28% of Steam’s revenue, which has topped \$7 billion annually. Indie games are both culturally significant in the innovative gameplay experiences they deliver, and their popularity among players continues to increase.

Librarians have long recognized that video game collections serve a range of patron needs, from entertainment to serious study (Adams 2009). Scott Nicholson (2013) puts contemporary video game collections in a longer historical context, demonstrating how North American libraries have collected analog games and supported game-related programming back to the 1850s. Both academic and public libraries have collected video games released on physical media (e.g. CD-ROM, cartridges) for a wide variety of reasons. Academic libraries have developed video game collections to support teaching and scholarship in game design and game studies degree programs (Ferguson 2016). Along with other popular culture information resources like film and graphic novels, public libraries have collected video games to meet the demands of their users. As Eli Neiburger (2007) argues, “a taxpayer-funded content institution with a recreational component to its mission shouldn’t prize one form of recreational content above all others; it is inherently elitist and nondemocratic” (20). Public libraries on the whole have agreed with Neiburger’s sentiment: a 2009 study of 400 public libraries found that 78% supported gaming in some way (Nicholson 2009), a figure that has likely increased in the intervening years. More recently, public libraries have responded to the growing community interest in gaming by developing new programs and services like esports leagues (Santos 2019). Reviewing opportunities for libraries to develop gaming collections and services, Wilkes, Webb, Enis (2021) discuss the appeal of these initiatives for library users of all ages—not just kids. Expanding on popular gaming clubs aimed at teens, public libraries can build gaming clubs for adults using story-rich indie games. For example, *Venba* (Visai Studios 2023) tells the story of an Indian family immigrating to Canada through a series of minigames where the player helps to restore lost family recipes; this game appeals to people interested in Indian culture and cooking, even if they are not traditional gamers. Video game programs provide more than entertainment, fitting within the larger educational mission of both academic and public libraries to support the development of information literacies. Academic and public libraries can use collections of digital indie games to inspire community members to participate in game jams,³ or digital making workshops centered around game development tools (Meriläinen et al 2020). As a digital cultural medium, video games require players to develop new kinds of literacies including understanding interactive systems, social engagement with other players, and meaning making for nonlinear narratives (Abrams and Van Eck 2021). Providing access to video game collections and services is a natural extension of the digital and technology literacy programming that libraries of all kinds currently conduct.

The same factors that have made gaming more accessible to both creators and players, though, now pose serious challenges for libraries’ ability to continue collecting digital games to support these programs, services, and community needs. Digital game vendors primarily sell access to games under single end-user licenses; the multi-user license models that these vendors do have in place are intended for commercial venues like arcades or gaming cafes, with no accommodations for universities, libraries, or other educational contexts. Creators releasing games from their own websites or alternative platforms designed specifically for indie games do not have model licenses that would facilitate the

² “Download the latest indie games,” itch corp, accessed March 5, 2024, <https://itch.io/>.

³ For example, the Gwinnett County Public Library hosts an annual game jam and provides library resources for game developers: “Game Jam 2024,” accessed March 5, 2024, <https://www.gwinnettpl.org/learning-labs/game-jam-2024/>.

direct sale of their games to libraries. Librarians collecting and providing access to music face similar challenges, as the release of commercial music has shifted away from physical media and toward streaming platforms that are not set up to license access to educational and cultural heritage institutions (Colahan and Perske 2021). Even for electronic resource types like ebooks and digital video that libraries have some means to collect, librarians face significant challenges with rising costs and platforms lacking titles that users want to access (Adams and Holland 2017). Overall, the paradigm shift from collecting physical media to leasing electronic resources threatens the traditional mission of libraries as stewards of cultural heritage (Chou and Zhou 2005). Perpetual license agreements that strive “to retain some of the norms of the print world” involve considerable, ongoing efforts to maintain and still fail to fully guarantee long-term access comparable to keeping a print book on a shelf (Bullock 2014, 97). Work done to research, discuss, and develop strategies for collecting indie digital games can learn from the challenges librarians have faced with these other kinds of electronic resources, and the findings from this project can feed back into efforts in these other areas. Strategies devised to collect and provide access to indie digital games could extend to indie digital music, film, or small press ebooks.

Games, more so than these other types of electronic resources, face complicated preservation challenges. Complex digital objects compound digital preservation issues like technological obsolescence that already pose significant obstacles for libraries (Delve and Anderson 2014), for instance considering how to document the emergent properties of games that develop through real-time interactions between players in dynamic online spaces (Winget 2011). The digital distribution of games introduces further challenges, as it is now common for developers to push both minor patches and major updates months or years after the initial release of a game. Other developing trends in the gaming world, like the growing popularity of virtual reality and the application of artificial intelligence tools for game design, will only make games more difficult to preserve over the long term. The distinct cultural significance of indie games makes them an important target for libraries to collect and preserve over the long-term. Special collections in academic libraries proactively collect artists’ books, zines, and oral histories to document underrepresented cultural histories, and indie games will fulfill similar research and teaching needs for those interested in digital subcultures and countercultures. There is no risk of Nintendo’s Mario and Luigi disappearing from the cultural record, but games distributed independently by creators or put out by small publishers face rapid threats to preservation, especially in digital-only distribution ecosystem where there is no physical medium to act as a material “hedge against oblivion” (Kirshenbaum 2021, 9). While the focus of this project proposal is to develop collection and access models for current indie digital games, preservation issues are pressing questions that directly follow activities to support collection and access. As evidenced through the pilot research informing this project (see supplemental materials for summary of pilot research), many librarians and game developers are concerned about the long-term preservation of digital games. Preservation questions will motivate many in the library and gaming communities to participate in the project, and the preservation responsibilities of libraries will be discussed at the forum and by the working group. As of now, libraries lack the means to even collect and provide access to digital games at scale, let alone tackle complicated preservation challenges, so these are the initial priorities. By developing frameworks and infrastructure for collecting and providing near-term access to digital games, libraries can build a foundation for future work advancing strategies to preserve and provide long-term access to digital games.

Project Work Plan

The project consists of three phases to be carried out over the course of two years: 1) exploratory research to better understand the major issues and questions involved in libraries collecting indie digital games from the perspectives of different stakeholder groups; 2) a national virtual forum bringing together speakers from these different stakeholder groups and inviting participation from the broader community interested in seeing libraries collect digital games; and 3) the composition of a working group to build on the results of the previous phases to develop concrete products that will support libraries in taking next steps in collecting indie digital games. As the project aims to develop strategies that will meet the current and anticipated needs of core stakeholder groups, inviting the direct participation of these communities into the initial processes of discovery and discussion will ensure that the approaches and tools developed from this project will be adopted and carried forward by those communities. Participatory design methods will be used to foreground involvement of community members and to orient project activities and outputs toward practical application in these communities. These three phases largely follow the three stages of participatory design outlined by Clay Spinuzzi (2005): initial exploration carried out through observations and interviews; discovery processes involving direct cooperative interactions between researchers and community members; and prototyping of tools, artifacts, models, or other products that integrate what was learned from the first two phases.

The first phase of the project will lay the foundation for the forum and the working group efforts by carrying out initial exploration. Since there has been very little research on the needs and requirements of collecting digital games in libraries, gaining an empirical understanding of this emergent phenomenon from the perspective of multiple stakeholder

groups is essential for structuring the forum around the critical questions that need to be discussed across these communities. The forum will convene these different groups and provide opportunities to collaboratively ideate on possible solutions that address key questions and tensions across the stakeholder groups. The working group will synthesize the robust discussions from the forum to create concrete products that will facilitate libraries and indie game developers in taking next steps to collect and provide broad access to this area of cultural heritage. Members from all core stakeholder groups will be engaged throughout the research, as detailed below. Throughout all phases of the project, the PI will work closely with an advisory committee that has been assembled to represent the perspectives of all core stakeholder groups: Kendra Albert, Harvard Law School; Phillip Penix-Tadsen, University of Delaware; Diane Robson, University of North Texas; John Scalzo, Irondequoit Public Library; and Rebecca Slitt, Choice of Games. The advisory committee will meet virtually four times through the course of the project to support the planning and execution of each project phase. The PI may contact the advisory committee for targeted input as needed.

The first phase (8 months) will begin with an initial meeting of the advisory committee to consult with the PI on conducting exploratory research. As the primary means of data collection for this exploratory research, the PI will conduct semi-structured interviews (virtually via videoconferencing software) with six to eight members of each stakeholder group for a total of 24 to 32 interviews. The exploratory research in phase 1 of the grant period will expand upon pilot research that the PI has conducted. The PI will adapt the research design, instruments, and data collection methods from the pilot research for the exploratory research conducted in phase 1. The UNCG Institutional Review Board approved the pilot research; the PI will submit an application for the expanded research engaging with this broader set of study populations for IRB approval following the approved design for the pilot research. The phase 1 research is exploratory in nature with the primary motivation being to lay the groundwork for the subsequent phases of the project by identifying a broad range of ideas from the different stakeholder groups pertinent to collecting digital games in libraries. The PI will work with the advisory committee to develop purposive sampling approaches to identify individuals that will both represent the four core stakeholder groups and bring diverse perspectives to bear on the issue. For librarians, the exploratory interviews will focus primarily on public librarians as the PI has already conducted interviews with academic librarians for the pilot research mentioned above. To ensure that rural public librarians in particular are represented in the sample, the PI has identified three individuals interested in participating in all phases of the project: Matthew Baumgartner, Lake County Public Library; Dianne Connery, Pottsville Area Public Library; and Tyler Hahn, Cherokee Public Library. For academic library users, the PI will consult Penix-Tadsen as an established game studies academic for suggestions of other game studies faculty. For public library users, the PI will request the public librarian participants to recommend active users of their game collections, for instance people running game clubs or volunteers with game-related programming, to participate in the interviews; Connery and Hahn have developed esports and other game-related programming at their respective libraries, for instance. For indie game developers, Slitt will make connections to other indie developers who have worked with Choice of Games. The Interactive Fiction Technology Foundation (IFTF), a leading non-profit organization dedicated to preserving and promoting narrative games, has agreed to identify specific indie game developers who would be interested in participating in the exploratory research phase of the project. For policy experts, the PI will start by interviewing Albert and Brandon Butler (University of Virginia), another library legal policy expert who has expressed interest in participating in the project, and then request additional individuals from their professional networks who will be useful to interview for the exploratory phase of the project.

The PI will use situational analysis, a grounded theory research method that facilitates holistic understandings of the many sociocultural, legal, and economic factors shaping complex social phenomena to analyze the data collected during phase 1 (Clarke, Friese, and Washburn 2018). As the phenomenon of collecting and providing access to digital games in libraries involves many stakeholder groups and is impacted by a range of sociotechnical factors, situational analysis is an appropriate method for this exploratory research. Situational analysis methods will be applied to surface the major questions and points of tension across different stakeholder groups that will need to be addressed in the forum and working group. Rooted in the grounded theory tradition, situational analysis provides methods for the qualitative analysis of interview data along with other discursive sources like articles, websites, and documents discussed by interviewees. In addition to methods for analyzing interview and other discursive data, the PI will use situational mapping as an analytical technique. This method produces visual maps that illustrate how the major communities pertinent to an issue relate to one another, highlighting shared areas of concern and significant differences in perspectives. The PI will use the final visual situational map to identify points of tension, possible issues, and larger questions to explore in the forum. For example, the key issues from the perspective of each stakeholder group will be addressed and elaborated by speakers, and critical questions that sit at the intersection of different groups will be the focus of participatory breakout group discussions.

In phase 2 (8 months), the findings from the research will be used to structure a national virtual forum around key issues critical for collecting indie digital games in libraries. The primary audience for the forum will reflect the major stakeholder groups consulted in phase 1: librarians from academic and public libraries, especially those working directly with video game collections, planning video game programs, or managing related collections of electronic resources; indie game developers and publishers; users of library game collections, such as game studies faculty and students and people running gaming clubs at public libraries; and people with expertise in library policy pertaining to electronic resource collection management and licensing. The forum will be structured to both share information on key issues from selected speakers to the various communities interested in this issue and to foster collaborative cross-community discussions about digital game collecting strategies that will meet the needs of libraries, library users, and indie game creators. The forum will adapt methods from participatory design to involve forum participants in the discussion and to solicit their perspectives on the challenges and strategies for collecting digital games in libraries. The goals of the forum will be to articulate to a diverse audience the importance of collecting digital games in libraries, outline the major issues, and begin making the connections across the stakeholder groups needed to take collective action to address these issues.

The PI will meet with the advisory committee at the start of phase 2 to identify the 10 forum leaders. The five members of the advisory committee will be eligible to serve as forum leaders, pending availability and interest. Individuals contacted during phase 1 of the project will be considered as potential forum leaders. The PI will also consult members from the IFTF and the American Library Association Games and Gaming Round Table (ALA GameRT) for further suggestions of individuals representing any of the core stakeholder groups who should be considered to lead the forum. Collectively, the advisory committee will determine the five or more additional individuals representing the different stakeholder groups to serve as forum leaders. The advisory committee will take into consideration the diversity of the composition of the forum leaders and select a set of 10 individuals coming from a range of different background experiences and professional contexts. Given the importance of digital preservation considerations for future work that will build upon the results of this project, at least one forum leader will be selected who can speak to digital preservation concerns for indie digital games. Once the 10 forum leaders are selected and confirmed, the PI will work with UNCG SOE communications staff to develop promotional materials, such as fliers, social media posts, and email announcements that describe the purpose of the forum with the intent to appeal to a broad audience of people who have a stake in seeing libraries collect digital indie games. The PI will draw on previous experience organizing conferences, large-scale meetings, and exhibitions to ensure that logistical considerations for planning the event are sufficiently addressed. The PI will hire a current UNCG MLIS student to work as a Graduate Assistant, who will support planning of the forum and facilitate the transition from the forum to the working group. As described below, the GA will gain invaluable firsthand experience working with librarians and the gaming community on this project.

To ensure that all stakeholder groups are represented at the forum, several venues will be used to promote the event. First, all individuals who participated in the first phase of the research will be directly invited to participate in the forum and will be encouraged to spread the word about the forum through their personal networks. To expand on this core group, announcements about the forum will be sent through channels reaching relevant communities. For academic and public librarians, announcements about the forum will be made on professional mailing lists for the American Library Association, including the main announcements list, the Association of College and Research Libraries list, and the Film and Media Roundtable list. The GameRT has agreed to promote the event through its social media channels in addition to its mailing list; many members of the GameRT work in public library settings, so this targeted promotion will help to reach that audience. Announcements will also be sent to the mailing list of the Association of Small and Rural Libraries to target librarians outside of major, urban libraries. To engage the library community involved in digital preservation efforts, announcements for the forum will be distributed via the Software Preservation Network's (SPN) communication channels. Although the project is focused on near-term collection and access to digital games, future work will need to take up digital preservation issues more directly, so it is important to consider this facet of digital game collecting at the forum. SPN has been active in video game preservation efforts, so this project will appeal to their membership and align with existing work. For indie game developers, the IFTF will promote the forum through its mailing list and social media channels, and members of the IFTF board who are active in different indie gaming communities have agreed to spread the word about the forum through their personal networks. Several librarians engaged in phase 1 of the project run game development programming and indie game festivals at their libraries, and they will share information about the forum to game developers in their networks. The PI is also currently working with the International Game Developers Association (IGDA) to survey members on attitudes regarding selling digital games to libraries (Post and Lanham 2024); the IGDA will likely promote the forum to its membership. To target users of academic library game collections, announcements will be sent to the Digital Games Research Association (DiGRA) mailing list. DiGRA is the primary professional

association for game studies scholars, so these announcements will help to reach people using games in academic libraries for the purposes of teaching and research. The announcements sent to this list will encourage recipients to invite interested students to participate. All public librarians engaged in phase 1 of the research will be encouraged to share information about the forum with active users of their collections, for instance people running gaming clubs or esports teams, to secure involvement of public library users; announcements sent to mailing lists targeted at public librarians will also encourage recipients to share information about the forum with active users of game collections at their libraries.

The forum will be held virtually using Gather to facilitate broad participation and accessibility. As a virtual meeting platform that enables participants to create avatars and interact in a simulated physical space,⁴ Gather will encourage collaboration and community-building in the interactive breakout sessions that are key to the forum plan. The forum will take place over two days, with each day featuring presentations from five speakers representing the different stakeholder groups (a public librarian, an academic librarian, an indie game developer, a user of a game collection, and a library policy expert) followed by breakout discussions engaging the forum attendees on the issues presented by the speakers. Both days of the forum will follow the same structure: approximately four hours for presentations and two hours for participatory breakout sessions. For each day of the forum, up to 150 people will be able to attend. Participants will be asked to select one of the two days to attend, enabling a total of up to 300 people to participate in the forum. Overall, the forum will consist of 10 invited talks and 20 breakout discussions led by the forum presenters. In addition to the synchronous events occurring during the two-day forum, the forum leaders will host asynchronous discussions via a dedicated Discord server that will be open to all interested individuals for a month leading up to the forum and a month after the forum. The Discord server will remain open after this date for ongoing discussion across stakeholder communities, though the active involvement of forum leaders will not be guaranteed after that point.

Each forum leader will speak for about 30 minutes, giving a presentation that discusses the importance of collecting digital games in libraries from their perspective. Abstracts and outlines for the presentations will be shared by forum leaders with the PI and advisory committee by August 2025. The advisory committee will provide feedback at this point and make suggestions about what else each leader might want to include in their presentation. The specific content of the presentations will differ depending on the community group represented by the presenter: librarians may focus on challenges they have encountered in trying to develop digital game collections, programs, or services at their libraries; users of game collections may discuss how they have benefited from existing library game collections or present potential use cases for digital game collections; library policy experts may provide overviews of the legal landscape influencing how libraries can collect digital games, or establish points of comparison between digital games and the existing frameworks in place for other kinds of electronic resources collected by libraries; indie game developers may discuss the potential benefits they see in having their games collected and made accessible through academic and public libraries. All presentations will include the following two elements: 1) presenters will detail the most significant characteristics for a digital game collecting program from their perspective; 2) presenters will pose the most pressing questions that they feel need to be addressed for all communities to move forward with libraries collecting digital games. Each presentation will be followed by 10 minutes of question and answer pertaining to the experience of the particular presenter; general questions and discussion from participants will be reserved for the breakout group sessions. All presentations will be recorded and made publicly available after the forum.

Forum attendees will then participate in breakout sessions intended to solicit input from the broader range of participants on the questions and issues posed by the presentations. All 10 forum presenters will lead a breakout session both days of the forum, with approximately 15 participants in each of the 10 sessions per day. The breakout sessions will employ participatory design methods to facilitate participants in the process of generating ideas and providing feedback that can be integrated into the activities of the working group in phase 3. Each breakout session will begin with a focus group format, during which participants will respond to the key questions posed in the presentations from earlier in the day. This discussion will be semi-structured, allowing participants to bring in other questions and thoughts that arise during the course of the discussion, with the session leader moderating and advancing the discussion through the main set of questions. The breakout sessions will then transition to workshop discussions of various models for collecting and providing access to digital games in libraries, including single-user access on dedicated machines in a library space, circulating devices pre-loaded with games, multi-user access through controlled third-party platforms, and distributing games directly to library user devices. These are common models for libraries servicing ebooks and other electronic

⁴ “Your Virtual HQ,” Gather Presence, Inc., accessed March 5, 2025, <https://www.gather.town/>.

resources, so these will serve as the starting points for imagining access configurations for digital games. Participants will be presented with each model in turn, illustrated with a hypothetical illustration of a particular game in a specific library setting. The PI and GA will develop these examples in consultation with the advisory committee with the aim of representing a wide range of possible scenarios covering various types of games, libraries, and use cases. To allow participants to speak freely and participate in an uninhibited way, video of the participatory breakout sessions will not be recorded. The PI, GA, and eight other UNCG MLIS students will serve as notetakers to create robust documentation of the participatory breakout sessions. The GA will create a documentation template based on the semi-structured focus group questions and preplanned exercises to facilitate this notetaking.

By structuring discussions around specific illustrations, these sessions aim to elicit targeted and detailed feedback from participants as to what they think would work well and what challenges, issues, or other obstacles they anticipate for each scenario. With the workshop format, these scenarios will be framed as ideas-in-progress: fleshed out enough so that participants can envision how these access configurations would function in practice but only partially realized so as to invite critiques and alternative solutions. Throughout the workshop sessions, especially as participants mention perceived issues or challenges, breakout leaders will prompt participants to describe these alternative solutions, including approaches that push beyond how libraries currently collect and provide access to electronic resources. Because these are framed as ideas-in-progress, the workshop format will empower participants to exercise their imagination without being fully constrained by on the ground realities of an existing library system or service. By facilitating these breakout sessions with participants from across the core stakeholder communities, both the focus groups and the workshops have significant potential to produce emergent approaches to critical issues impacting digital game collecting that are generated at the intersection of two or more communities represented at the forum. As librarians, game developers, library users, and policy experts discuss these questions via collaborative activities, new ways of looking at collecting digital games in libraries are likely to develop, beyond what could have been gleaned during the first phase of exploratory research.

In phase 3 (8 months), the PI and advisory committee will constitute a working group tasked with building on the issues and ideas raised at the forum to develop two concrete products that will catalyze libraries to take next steps in collecting digital games: 1) a set of model licenses for collecting digital games tailored for different types of libraries; 2) a roadmap for developing or implementing the technical infrastructure needed for libraries to collect and provide access to digital games. During the initial part of phase 3, the GA will collate materials from the forum, including the abstracts and outlines of the 10 invited presentations and synthesized notes from the breakout sessions, into forum proceedings. These proceedings will be shared publicly and will also constitute the foundational data that the working group will use to inform its efforts. The working group will also have access to the raw notes from each of the breakout sessions and the reported findings from the phase 1 exploratory research.

A call for participating in the working group will be distributed directly to all individuals who participated in either phase 1 or 2 of the project, and an open call will be distributed through the same professional mailing lists and other communication channels used to promote the forum. The call will describe the details of the working group's charges and will encourage librarians and indie game developers to apply. Prospective working group members will submit brief applications detailing their experience and interest in supporting the development of strategies for libraries to collect digital games. The PI and advisory committee will review the applications, and then will meet to vote on the composition of the working group; advisory committee members will be eligible to serve on the working group but must recuse themselves from reviewing and voting on their own applications. Overall, the working group will be composed of eight members, consisting of two public librarians, two academic librarians, two indie game developers or publishers, one individual with expertise in library policy and legal issues, and one active user of a game collection in either a public or academic library context. For librarians participating on the working group, priority will be given to individuals with experience working directly with the collection development, management, preservation, or access to gaming collections or other electronic resource collections; having this hands-on expertise represented on the working group will be essential for ensuring that the products produced by the working group will meet the on the ground needs for developing digital game collections. The PI will also sit on the working group and contribute to both charges as needed.

The working group will designate a lead member for each of the two charges. The lead members will first be responsible for developing a timeline for completion and plan of work for their charge and will then be responsible for coordinating efforts among the other working group members to successfully complete the charge. The working group will be free to coordinate work on the two charges as they see fit (e.g. breaking up into two smaller subgroups, delegating responsibilities for parts of the charge to specific members), but all members will review and approve the two products before they are finalized. The advisory committee will meet with the full working group after the initial timelines and plans for work on the charges is established to provide feedback and offer insights gleaned from overseeing the previous

phases of the project. The PI will schedule regular check-ins with the working group to gauge progress and provide input as needed. The GA will provide research support to the working group as needed. By April 2026, the working group will submit draft materials for both charges to the advisory committee to review. The advisory committee will provide feedback and further suggestions for revisions or additions. By June 2026, the working group will finalize the materials for both charges and the PI will prepare the materials for public dissemination.

Diversity Plan

The project team will make concerted efforts to involve participation from librarians, library users, library policy experts, and indie developers from diverse backgrounds. This commitment to diversity starts with the composition of the project team and supporting organizations: the advisory committee brings together individuals with diverse backgrounds, reflecting the range of perspectives from the various communities that are important to represent for the success of this project, and all supporting organizations have demonstrated commitments to diversity, equity, and inclusion. Each project phase will include measures to recruit individuals with diverse backgrounds from the key stakeholder groups needed to shape a multifaceted understanding of the issues and challenges impacting the ability of libraries to collect indie digital games. Including diverse participants from all groups is important because the participatory design approach used for the project is strengthened through the contributions of individuals bringing a wide range of perspectives to bear on the issue.

Participants will be recruited for the initial phase of exploratory research using purposive sampling techniques with the intent of involving individuals that represent a wide range of perspectives and experiences from each stakeholder group, as the goal is to surface many different ideas about issues related to collecting digital games in libraries. Particular identity categories will not be targeted as inclusion or exclusion criteria; rather, the purposive sampling techniques are intended to include librarians coming from different kinds of libraries, library users from different communities in terms of size and geographic location, library policy experts from different professional contexts, and indie game developers coming with different kinds of game development experiences and working contexts. Given the relatively small sample size targeted for the exploratory research, diversity in terms of race, gender, ethnicity, sexual orientation, and other identity categories cannot be guaranteed, though the purposive sampling methods have been designed to ensure some level of diversity in terms of background experiences and perspectives represented.

For the forum, the advisory committee will work collectively to ensure that the invited forum speakers represent different backgrounds and perspectives with respect to different kinds of libraries, library user communities, library policy contexts, and game development backgrounds and working experiences. The project team will be using a wide variety of venues to promote the forum, as described above, with the intent of reaching prospective forum attendees from a broad diversity of libraries, library user communities, library policy contexts, and indie game development contexts. The advisory committee will also work collectively to review applications for the working group to select members coming from diverse backgrounds. The call for the working group will include language that strongly encourages members of underrepresented groups to participate, though prospective participants will not be asked to disclose any demographic information. To ensure that the forum and working group are inclusive environments where all participants feel welcome to contribute to an open, collaborative discussion, the forum will adapt the Code of Conduct policy used for NarraScope, the narrative gaming conference run by the IFTF.⁵ Following the example of the NarraScope policy, the project team will create an anonymous form to receive notifications of potential breaches of the policy; the PI in consultation with the advisory committee will review and respond to any breaches of the policy. The policy will apply to the synchronous virtual forum, the asynchronous Discord server, as well as the working group. All forum attendees, Discord participants, and working group members will be required to review this policy prior to participation. The PI, advisory committee, forum leaders, GA, and working group members will also review the NarraScope Guidelines for Volunteers, which includes resources for moderating discussions and responding to unacceptable behaviors.⁶

By addressing challenges libraries face in collecting and providing access to indie digital games, in particular, the overall project results serve to strengthen the field's commitment to diversity, equity, and inclusion. As discussed above, the indie gaming community comprises creators from diverse backgrounds in terms of race, ethnicity, gender, and other identity categories in large part due to the development of accessible tools for making and distributing games that have

⁵ "Code of Conduct and Policy Against Harassment," NarraScope, accessed March 5, 2024. <https://narrascope.org/pages/code-of-conduct.html>.

⁶ "NarraScope Guidelines for Volunteers," NarraScope, accessed March 5, 2024, <https://narrascope.org/pages/volunteer-guidelines.html>.

helped to counter longstanding barriers. Because indie games are released almost exclusively through digital-only distribution channels, the ability of libraries to develop video game collections from diverse creators telling stories representing a range of lived experiences will be severely hampered until strategies for digital game collecting are developed and implemented. The outputs from this project will aid libraries in following collection development policies and priorities for their video games that are comparable to any other collection type: libraries will be equipped to build game collections from diverse creators that will appeal to a wider range of library users. The project outputs that will establish a foundation to realize strategies for collecting digital games will be intentionally designed for academic and public libraries of varying sizes and resource levels to use. The aim of this project is to develop strategies that make collecting and providing access to indie digital games approachable for all libraries.

Project Results

The project will produce an array of outputs that will serve both to broaden awareness among the library and gaming communities about the importance and current challenges of developing indie digital game collecting programs and to establish a technical and legal framework for advancing these efforts in public and academic libraries, including small and rural libraries. The project outputs will include articles, blog posts, conference presentations, and webinars sharing information about the phenomenon of collecting digital games in libraries; documentation from the exploratory research and forum to serve as a foundation for others interested in developing strategies for libraries to collect digital games; and products generated by the working group, which will facilitate librarians and indie game developers and publishers to further develop the collaborative relationships initiated during the forum and advance shared goals of collecting digital games in libraries. Throughout the project, the PI will maintain a webpage on the UNCG's School of Education website that will aggregate links to all various outputs and provide status updates on the project.

The PI will share the findings of the exploratory research with librarians and the gaming community through a mix of publications, blog posts, and conference presentations. The PI will write a research article published in a peer-reviewed journal with significant impact aimed at a broad audience of librarians (e.g. *The Library Quarterly*). This article will offer librarians and LIS scholars insight into the current issues and challenges impacting collecting and providing access to digital indie games, in particular focusing on the implications for libraries. This article will support ongoing scholarship and innovations in practice by establishing the current understanding of this phenomenon and indicating open questions and areas for further research. The PI will share the final visual situational map produced from the exploratory research via the UNCG institutional repository; this research product will be used to plan the forum and working group but could also be built upon by others conducting research or developing innovative practice on this issue. For more immediate dissemination of the written results of the exploratory research, the PI will write a blog post shared by IFTF, SPN, and GameRT that will report the main takeaways from the research and will reach a broader audience than an academic journal article. The PI will present at two conferences as another avenue to disseminate research results and to directly build relationships with people interested in this issue: one conference attended by a large, diverse group of librarians, with the 2025 ALA Annual Conference being the target; and one conference attended by a large, diverse group of indie game developers, with the 2025 Game Developers Conference being the target. Both targeted conferences will occur before the virtual forum, and so these will also be opportunities to begin conversations about the shared needs and concerns from librarians and indie developers that can be further explored and addressed in the forum and working group.

The forum itself will provide direct benefits for up to 300 synchronous attendees as a venue for receiving critical information from varied stakeholder perspectives and for contributing to participatory breakout sessions that will shape the direction of collecting indie digital games in libraries. Beyond the intended outcomes for the project team, the forum will likely lead to the development of additional collaborative partnerships across the key stakeholder groups by virtue of bringing together several hundred people from different communities. The Gather platform will be especially productive of these informal meetings and networking opportunities because it emulates an in-person conference experience, unlike other virtual meeting platforms. The benefits of the forum will extend beyond those who are able to attend synchronously: recordings of the invited talks and conference proceedings will be shared publicly, and a Discord server will be maintained alongside the forum for asynchronous participation. This documentation of the forum activities will be used by the working group to directly inform work on their charges. Similar use could be made by other librarians and game developers, reasonably supporting work on aspects of digital game collecting beyond the scope of the working group's charges like long-term preservation strategies.

The working group will create two products that will build on the collective needs and concerns articulated by the stakeholder groups through the previous phases of the project and establish a clear path forward for collecting digital games in libraries: a set of model licenses for collecting indie digital games in different kinds of libraries, and a technical roadmap for the requirements to host and provide access to indie digital games according to different access models and

configurations. Comparable to efforts undertaken in the early days of ebook and electronic journal licensing (Cox 2000), model licenses for digital games will provide a starting framework for libraries and indie game creators and publishers to negotiate with each other. Following the example of this earlier work, the working group will develop distinct model licenses for both academic and public libraries, reflecting the different needs of these library types. Model licenses have been used for other types of electronic resources to reduce administrative obstacles by streamlining aspects of licenses that are common across agreements between various libraries and copyright holders. These model licenses also reflect shared needs across different types of libraries, establishing a collective baseline for the kinds of activities and use cases that libraries need to support with their electronic resources. Games function very differently than ebooks and digital video, and so both libraries and game developers and publishers likely have interests and needs that diverge from the arrangements covered in the existing model licenses for other types of electronic resources. Similar resources are now needed that reflect the distinct needs of digital games: with these model licenses, the project will pave the way for libraries that are equipped to collect and provide access to digital games to immediately begin negotiating with indie game creators and publishers and add digital games to their collections. As a direct follow-up to the proposed project, the PI plans to partner with libraries and indie game creators to apply the model licenses and report on the results of these efforts.

Anticipating that many libraries will not already be equipped to collect and provide access to digital games, the second working group charge is to develop a technical roadmap for the infrastructure needed for libraries of all kinds to service digital game collections. As with the model licenses, the technical roadmap will reflect the varying needs of libraries of different types and sizes and reflect the several different configurations and modes of access discussed at the forum, ranging from access on dedicated machines in a library space to access via a controlled third-party platform. Additional ideas for acquisition, collection management, and access that arise through forum discussions will be integrated into the technical roadmap. Similar to the model licenses, this product will provide a foundation for follow-up projects that the PI plans to pursue. These next steps will involve the allocation of further financial resources to realize, though the technical roadmap will provide a clear and detailed plan for seeking these additional resources. From pilot research, the PI has found that many librarians would prefer to work through third-party vendors comparable to extant library vendors for ebooks and digital video to develop digital game collections (Post, Reed, and Lanham 2024). The project will serve to demonstrate the viability of libraries as a market for indie digital games and generate attention sufficient to interest both commercial game vendors and/or library vendors in developing systems and services to distribute digital games to libraries. Both products created by the working group will support libraries and indie developers in establishing fair working relationships with existing vendors that meet the needs of these communities. Model licenses tailored to the distinct needs of digital games will be instrumental in negotiating with third-party vendors, in addition to negotiating directly with copyright holders. The technical roadmap can be used to assess whether commercial game vendors and/or library vendors have infrastructure currently in place that can meet the shared needs of libraries and game developers, or whether further technical development is required to build out this infrastructure.

In addition to the products generated during each project phase, the PI will pursue several venues for sharing overarching takeaways and results from the project to broader audiences. Both GameRT and SPN have agreed to host webinar discussions at the close of the project. These webinars will feature the PI and interested members of the advisory committee and/or working group to discuss what was learned about the shared needs and concerns from the perspectives of the different stakeholder communities and to present an agenda for taking next steps to implement the strategies developed through the forum and working group activities. The PI and GA will write a series of blog posts after the forum and at the conclusion of the project to be shared by IFTF, SPN, and GameRT. The webinars and blog posts will provide further opportunities for people who were not able to participate in the forum to learn about the project and to become involved in future work building on the current project.

Overall, the project will promote a deeper understanding of the current state of collecting indie digital games in libraries and lay the foundation for developing collective strategies for tackling these challenges in academic and public libraries. As with other once-new forms of cultural heritage that are now widely collected, libraries need to adapt existing practices and develop novel approaches in order to build collections of indie digital games that will serve the needs of both present and future library users. The forum and working group provide a necessary foundation for these larger goals and lead directly to future efforts implementing the strategies, tools, and approaches developed through this project. As a result of these activities, people from disparate communities will have formed connections and established collective goals that they can achieve through further collaborative work. Key supporting organizations like the IFTF and SPN will share the results of this work with their membership and help to sustain cooperative efforts across library and gaming communities. By producing concrete plans for next steps and connecting librarians and game developers through various communication channels and platforms, this project will foster communities of practice prepared to advance these issues.

Schedule of Completion

Project Year 1, August 2024 – July 2025

Activity	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Advisory committee holds initial meeting to provide guidance on exploratory research												
PI develops research design for exploratory research and acquires IRB approval												
PI recruits participants for research interviews												
PI conducts research interviews												
PI transcribes and codes research interviews												
PI creates situational analysis maps												
PI travels to present at Game Developers Conference												
PI drafts and submits manuscript for peer-reviewed article												
Advisory committee meets to discuss forum and provide guidance on identifying forum leaders												
PI recruits forum leaders												
PI travels to present at American Library Association Annual Conference												
PI and UNCG staff develop promotional materials for forum												
PI writes blog post reporting on findings from exploratory research												

Digital Products Plan

Each phase of the project will produce digital products that will be instrumental to support project activities and become resources for the broader library community after the project’s completion.

Type

Product description	Quantity	Project Phase	Format	Metadata
Visual situational map	1	1	TIFF	author, author’s institution, creation date, keywords, abstract, and citation information
Peer-reviewed article	1	1	PDF	author, author’s institution, creation date, keywords, abstract, and citation information
Blog post	3	1, 2, 3	HTML, PDF	author, author’s institution, creation date, keywords, abstract, and citation information
Presentation slides	2	1	PPTX	author, author’s institution, creation date, keywords, abstract, and citation information
Forum presentation recordings	10	2	MP4	speaker, speaker’s institutional affiliation, creation date, abstract, and title
Conference proceedings	1	2	PDF	names of all project team members with roles specified, institutional affiliations of project team members, abstract, title, and creation date
Model licenses document	1	3	PDF	working group members, working group members’ institutional affiliations, title, abstract, and creation date
Technical roadmap document	1	3	PDF	working group members, working group members’ institutional affiliations, title, abstract, and creation date
Webinar recordings	2	3	MP4	speakers, speakers’ institutional affiliations, creation date, abstract, title, webinar host

Availability

Products will be made available through several different platforms, depending on the needs and requirements of the items. The following items will be deposited in the UNCG open-access institutional repository (NC DOCKS):¹ visual situational map, copy of the peer-reviewed journal article, static copies of blog posts, and presentation slides. As the institutional repository committed to the long-term preservation of the scholarly output of UNCG faculty and students, NC DOCKS is ideal for storing and making accessible smaller digital objects produced by the PI and GA. The following items will be deposited in the Open Science Foundation (OSF) repository:² forum presentation recordings, conference proceedings, model licenses document, technical roadmap, and webinar recordings. OSF has been widely used by information professionals to store and make accessible products of LIS research. This repository is well suited to serve as a home for project outputs produced by multiple team members that are intended to be used for later work building on this project. In addition, links to all digital products will be aggregated on a project website hosted by the UNCG School of Education. This will provide a single location for all project products; all communications about the project will link to this primary location for project information. Both NC DOCKS and OSF are accessible via standard web browsers and the digital products will be saved in widely used and supported file formats accessible via software products compatible with standard operating systems. The one identifiable limitation in the delivery strategy pertains to the peer-reviewed journal article. The journal I am targeting for publication (*Library Quarterly*), has a green open-access model that enables authors to store a copy of their article in an institutional repository but only after a one-year embargo period. The article will be available immediately upon publication through the journal, but there will be a delay in open access to the article.

¹ “NC DOCKS – UNCG’s Institutional Repository,” UNCG University Libraries, accessed March 5, 2024, https://library.uncg.edu/services/scholarly_communication/ncdocks.aspx.

² “OSF Home,” Open Science Foundation, accessed March 5, 2024, <https://osf.io/>.

Access

The following digital products will be made available under a Creative Commons Attribution-ShareAlike 4.0 license:³ visual situational map, blog posts, conference proceedings, forum presentation recordings, webinar recordings, presentation slides, model licenses document, and technical roadmap. The intent for these products is to be used widely and adapted as needed by others to develop and implement strategies to collect digital games in libraries, and this license affords access permissions to that end. The terms requiring that others using these materials provide attribution and share any further materials that are developed under a comparable Creative Commons license ensures that a) the original materials produced by the project will be continue to be referenced as they are used, and thus other people will become aware of the original materials; and b) that further developments and additions to the project materials made by others will also be shared widely and made accessible to foster further collaborative work on this issue. The only product that will not be released under that license is the peer-reviewed journal article, which will be made available according to the terms outlined in the journal’s publishing agreement.

Sustainability

By depositing all digital products in either the NC DOCKS or OSF repositories, the materials produced from the project will be preserved and made accessible well after the period of performance. Through NC DOCKS, UNCG is committed to preserving artifacts of scholarly communication produced by faculty and students in perpetuity. This repository is especially designed for preserving and making accessible copies of articles and presentations in stable file formats, like PDFs. OSF provides up to 50 GB of storage space for public projects,⁴ which is sufficient for all digital products produced through this project, and has dedicated funding to ensure that data deposited in the repository will remain available for 50+ years even if the Center for Open Science, the organization behind OSF, goes away. OSF takes additional steps to backup data and uses MD5, SHA-1, and SHA-256 hashes to guard against data loss or unintended changes to data.⁵ The PI will also use OSF to create DOIs,⁶ unique and persistent URLs, for all digital products stored in that repository, which will support long-term access to the original project outputs, even as others use and reference these products in later work.

The following digital products will be targeted for curation and stewardship in perpetuity: conference proceedings, model licenses and technical roadmap documents, visual situational map, and journal article. These items represent the core outputs of the project and have the most value and potential to serve as a foundation for later work on this issue. These items will all be saved in stable, well-supported file formats, according to recommendations from the Library of Congress.⁷ As static text and image data, there is minimal risk of these format types changing dramatically or becoming obsolete in the current landscape. NC DOCKSS and OSF provide sufficiently robust storage environments to ensure long-term preservation of these products. The live blog posts will not be actively curated as the main intention is to spread awareness about the project during the period of performance; information contained in the blog posts significantly overlaps with other digital products. Copies of the blog posts will be maintained in NC DOCKS, but no special actions will be taken to preserve them past the period of performance. The recordings of the conference talks and webinars will be curated over the medium-term (approx. 10 years). As moving image files, these will be more challenging to preserve than the static text and image documents, though MP4 is a widely supported and relatively stable format.⁸ There is some overlap in the information contained in the recordings and the conference proceedings, working group outputs, and journal article, so critical information from the project will be preserved in perpetuity in these more stable text and image documents.

³ “CC BY-SA 4.0 Deed,” Creative Commons, accessed March 5, 2024, <https://creativecommons.org/licenses/by-sa/4.0/>.

⁴ “Shared Investment in OSF Sustainability,” Center for Open Science, September 29, 2020, accessed March 6, 2024, <https://www.cos.io/blog/shared-investment-in-osf-sustainability>.

⁵ “Backup and Preservation,” Center for Open Science, accessed March 6, 2024, <https://help.osf.io/article/547-account-and-security-faq-s#Backup>.

⁶ “Create DOIs (OSF Projects),” Center for Open Science, accessed March 6, 2024, <https://help.osf.io/article/220-create-dois>.

⁷ “Recommended Formats Statement, 2023-2024,” Library of Congress, accessed March 6, 2024, <https://www.loc.gov/preservation/resources/rfs/format-pref-summary.html>.

⁸ “Sustainability of Digital Formats: Planning for Library of Congress Collections, MPEG-4 File Format, Version 2,” Library of Congress, last updated April 26, 2023, accessed March 6, 2024, <https://www.loc.gov/preservation/digital/formats/fdd/fdd000155.shtml>.