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This case study examines a library design competition, "GIFABLE UNC", at the University of North Carolina at Chapel Hill during Fall 2017. Students were challenged to create GIFs, a developing social media, to capture UNC culture. This case study details and investigates the competition's success as an example of Connected Learning pedagogy for students. Connected Learning is a multifaceted pedagogical framework that encourages and supports building capacity and community for students through various frames including purposeful, productive, and interested-based learning and work. This case study found that "GIFABLE UNC" succeeded on some fronts, particularly value for students, but that further research and experimentation is required for this type of event to fully inhabit Connected Learning design criteria and features of new media.

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CASE STUDY: GIF-MAKING AS A MICROCOSM FOR CONNECTED LEARNING FOR UNIVERSITY STUDENTS

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A Master's paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Library Science.

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Approved by		
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INTRODUCTION

This case study examines "GIFABLE UNC," a new competition at the University of North Carolina at Chapel Hill during the Fall semester of 2017. The University of North Carolina at Chapel Hill is the nation's oldest public university and supports around 29,000 undergraduate, graduate, and doctoral students (UNC-Chapel Hill, 2018). The university is supported by a dozen libraries in its library system, including a library specifically aimed at undergraduate support, services, and spaces, which houses a Design Lab (University Libraries, 2018b; University Libraries, 2018c). "GIFABLE UNC" is a competition created by R.B. House Undergraduate Library's Design Lab to capture and share UNC's culture, encourage student exploration of University Archives and library design resources, and share student created art. The competition was created under the University Library's Innovation Grant, which seeks to encourage and support innovative library work and programs. The "GIFABLE UNC" competition ran from September 22-November 30, 2017 and is the first of its kind to be held at the university.

The primary media of this design competition is a format known as the "GIF." GIFs are animated looping images, popular for communicating animation, reactions, and "share-able" moments on social media (Eppink, 2014). Their popularity has boomed in recent years as objects of communication, art, and culture (Eppink, 2014). As GIF creators, students can recap interesting pop culture moments, capture a friend's funny

dance moves on loop and share inspiring or infuriating political moments with their communities.

This case study observes the value of GIF-making in comparison to a developing pedagogy, Connected Learning. Connected Learning (CL) is a pedagogy seeking to encourage and support student passion, community involvement, and productive learning (Itō et al., 2013). CL is supported by a multifaceted framework and core principles which may align with the "GIFABLE UNC" competition and its use of new media. The research focus of this case study follows three primary questions:

- Did participants of "GIFABLE UNC," a GIF-making and sharing competition – feel that it effectively incorporated Connected Learning's design framework?
- 2. Did "GIFABLE UNC" yield value in the lives of participating students?
- 3. Did participants of "GIFABLE UNC" feel that GIFs were an effective new media for the Connected Learning framework?

Because Connected Learning's complete framework is large and beyond the scope of this study, this research focuses on two sets of criteria and features that best address this research's questions: CL's design principles, which "inform the intentional creation of Connected Learning environments," and features of new media's role in CL (Itō et al., 2013, p.78).

Itō et al. (2013) listed criteria for environment creation include:

- 1. Everyone Can Participate
- 2. Learning Happens by Doing
- 3. Challenge is Constant
- 4. Everything is Interconnected

Features of new media's role in CL from Itō et al. (2013) are:

- 1. Foster Engagement & Self-Expression
- 2. Increase Access to Knowledge and Learning Experiences
- 3. Expand Social Support for Interests
- 4. Expand Diversity and Build Capacity

Together, these two sets address both the design of CL environments and the function of new media in those spaces, which can be used to study both the "GIFABLE UNC" competition and the function of GIFs as learning objects within the event. Further study is needed on other aspects of CL in relation to this competition, GIFs, and comparable library design events.

Connected Learning is a developing pedagogy advocating for self-engaged learning, low barriers to knowledge and tools, social support and community value in productivity, and links to increased diversity, activism, and expression for students (Itō et al., 2013). The principles of Connected Learning as proposed by Itō et al. are based on evidence that when learning is self-driven, socially supported, and mobile across student's communities (school, home, work, etc.) it is both "meaningful and resilient"

(2013, p.46). Students often already have passions and projects outside the classroom where they are driven to learn, produce, and share knowledge, and support from mentors and the community for those interests can have a profound impact (Martin, 2016; Itō et al., 2015). Connected Learning proposes that educators should support, encourage, and value the passion and work students are already engaging in, rather than stifling or replacing that drive completely with traditional work (Itō et al., 2013). The use of new media is also highly encouraged to offer accessible platforms for students to share their work and build valuable digital skills (Itō et al., 2013). Itō, et al. (2013) state, "We see new media, particularly as it is linked to youth-centered interests and community contribution, as providing new entry points into learning, opportunity, achievement, and civic participation (p. 34).

As previously mentioned, GIFs are medium defined by animated, looping images, often in the ".gif" format, which are used widely on social media platforms, and increasingly more online and mobile platforms (Eppink, 2014). As creative media, GIFs are multimodal and encompass multiple design elements including layering, time, coloring, and framing (Gürsimsek, 2016). GIFs often act as performances or reflections of self-identity and emotion online (Eppink, 2014). In an increasingly digital and visual world, GIF creators do not just start or join conversation; they create the "words." Gürsimsek (2016) even goes as far to describe the practice of making and using GIFs as its own form of literacy (p. 330). The world forming around this medium is one of participatory culture and gift economy (Newman, 2016; Uhlin, 2014). As an emerging visual medium, the GIF overlaps with Connected Learning on multiple fronts including

interest in popular media, opportunities for diverse storytelling, and celebration of work within the community (Gürsimsek, 2016; Tesema, 2017; Uhlin, 2014; Itō et al., 2013).

This case study uses a mixed method approach that includes surveys and semi-structured interviews with participants of the competition. The "GIFABLE UNC" competition at the University of North Carolina at Chapel Hill offers a unique opportunity to see this developing pedagogy and emerging medium working in tandem in a university setting. Connected Learning research has also focused on K-12 settings, so this study provides more information on the value of Connected Learning practices for university communities. This new library event is a concentration of multiple Connected Learning facets put forward by Itō et al., including digital production, competition, shared purpose, and interest driven creation (2013).

BACKGROUND

Connected Learning

In Itō et al., (2013) the state of current research and practice of Connected Learning is examined as a developing pedagogy. Connected Learning is built on the foundation of three learning contexts: peer supported, interest powered, and academically oriented. The core properties of the pedagogy are defined as production centered, shared purpose, and openly networked (Itō et al., 2013). Connected Learning is described as both a framework and a theory, but is "not simply a 'technique' for improving individual educational outcomes, but rather seeks to build communities and collective capacities for learning and opportunity..." (Itō et al., 2013, p. 7-8)

CL was developed partially in response to developing media ecology, as well as student need for pathways from "education to opportunity" (Itō et al., 2013, p.15).

Connected Learning encourages investment in passions and skills students are already building outside of the classroom or want to explore past the classroom (Itō et al., 2013).

CL posits that students not only require knowledge but the ability to translate that knowledge across multiple settings effectively. Development is also not reserved to skills, but also to community and culture. Itō et al. (2013) describes this saying

"We understand development as the acquisition and expansion of a cultural toolkit based on involvement in a range of specific cultural communities. Our hypothesis is that in order to develop these cross-cutting repertoires of practice, young people need concrete and sustained social networks, relationships, institutional linkages, shared activities and communication infrastructures that connect their social, academic, and interest-driven learning" (p. 47)

CL also champions the use of mentorship for inspiration and valuable skill building, as well as new media for openly networked tools and increased diversity and accessibility (Itō et al., 2013).

This researcher's study concentrates on two frames of Connected Learning's foundation, design principles and new media functions. Itō et al., (2013) state that technology is not required for Connected Learning, but new media greatly expands the accessibility and reach of Connected Learning practices. In *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*, Itō discusses new media's use by young adults to engage with creative production, among other practices (2010). She states that developing digital tools and platforms, like social media sites and media sharing sites such as Facebook or YouTube, have led to a "new media ecology" where educators can witness reshaping of student's relationship with media and its practices (Itō 2010, p. 244).

The majority of research on Connected Learning focuses on K-12 education, but some research has been conducted on collegiate spaces. Brown (2014) examined online content creation through Connected Learning for university students and found it to be a heuristic process and valuable for students in a "globally competitive society" (p.140) Martin (2016), while focusing on K-12 students, also found that youth garnered value

from Connected Learning environments by being able to see future pathways based on their current passions and skill building. Long (2016) examined how Connected Learning is driving the rise of a new "campus type" and how that mindset and environment is affecting colleges and universities. Long addresses that some universities are embracing Connected Learning head on, while others exist as "connected institutions" that support pedagogy and culture similar to Connected Learning, but which practice it on a large and often unfocused scale (2016). Dabbagh and Fake (2017) looked at university student perception of "PLE"'s, personal learning environments, with digital tools, primarily social media. They found that students saw digital tools as objects for, "foster discussion, collaboration, and interaction, organization, planning, and resource management, experiential learning, personalization" and that more research was needed on these environments (p.28).

In measuring Connected Learning, Maul et al. (2017) found that Connected Learning could be effectively measured by survey data, and that students experience the six facets of the Connected Learning framework differently. Maul et al. (2017) recommend that researchers do not need to correlate different facets of the framework to confirm Connected Learning experience but recommends that all six areas of the pedagogy be examined. They also found that qualitative research is helpful in supporting quantitative data when attempting to examine Connected Learning experiences. Massis (2016) examined libraries' role in Connected Learning development. Massis proposes that the mission of libraries has always aligned with similar practices to those of Connected Learning and that librarians are traditionally "connected educators" (2016, p.

540). Massis also concludes that it is the role of libraries to support Connected Learning practices and environments (2016).

GIFs as New Media

The term "new media" is a hard term to define. The Oxford Dictionary of Media and Communication defines new media as an umbrella term for computer-based media that, "tends to blur the distinction between interpersonal and mass communication" (Chandler & Munday, 2016). The term's widespread nature (umbrella) and lack of distinction (blur) makes it both catch-all and an almost meaningless term. However, GIFs, a digital media format that exists in both personal and mass communication platforms, as seen in the following literature, adheres to the new media definition in its current form. Itō et. al (2013) refer to new media for Connected Learning in the contexts of social media sites, blogs, and environments of the emerging Web 2.0, all of which are areas connected with the reputation of the GIF format as found in background research.

Eppink (2014) tackles the history of the "GIF" tracing the format from its predecessors, like zoetropes and flipbooks, in the 19th century to the creation and emergence of the GIF format in the 20th century. Eppink also addresses the cultural value of GIFs, examining their context through various platforms, communities, and online structures. GIFs are described as "promiscuous and frictionless (p. 303). Stark and Crawford (2015) describe GIFs as skeuomorphs of the emoji. Uhlin (2014) approaches GIFs as objects of both "art and commerce," and "play and work" (p.517). He argues that GIFs are part of a gift economy and supported by the "dispossessive spectator" (Uhlin,

2014, p. 518). They are not a commodity, but rather exist in a place of play and "liberation" from their source material (Uhlin, 2014, p. 517).

Tolins and Samermit (2017) approach GIFs as demonstrations in text messaging, arguing that sending a GIF promotes the GIF as the sender's own action or emotion and the GIF medium is an extension of human's gesture-based communication language (Tolins and Samermit, 2017). Miltner and Highfield (2017) analyze GIFs as adaptable objects whose layers and contexts make them capable of communicating "hidden meanings in plain sight" to audiences (p.2) GIFs have also been studied in the context of film history and analysis where their animation format is an asset to critics and scholars of moving images. Newman (2016) describes the GIF as "the attainable text" in film analysis. He proposes that GIFs are a solution to film critics' inability to effectively share film texts in their criticisms. GIFs can capture and share movement and connect film enthusiasts, academics, and professionals in the movie community (Newman, 2016). Bering-Porter (2014) also studies the GIF as a new media type and tool for film analysis, in the films of Martin Arnold and through cinemagraphs (a type of GIF). He explores the power of GIFs through their repetitive nature, analyzing what "temporal loops" can express and detail in film analysis (Bering-Porter, 2014, p.179).

Research on GIFs has started to take shape in the past few years as social media studies rise, but the study of GIFs in relation to academia, and specifically librarianship, is underdeveloped. Aleman and Porter (2016) examine GIFs as tools for online library instruction that allow instructors to share information in an engaging and low-threshold manner. Aleman and Porter (2016) embedded GIFs into their online tutorials and guides

to improve the guides' usability and value. Aleman and Porter also address the lack of GIF research in the library community (2016). Attu and Terras refer to GIFs in their 2016 study on academic research on the microblogging site Tumblr, which is a popular GIF sharing site. They address GIF's place in multimodal composition practice on the site and their importance and popularity in fan communities for communication and creation (Attu and Terras, 2016).

Some research has also been conducted on GIFs as design objects. Douglas (2014) discusses GIFs in his examination of the "ugly internet aesthetic," citing the format as an example of aesthetic and quality improvement because of digital and technological advances. Gürsimsek (2016) approaches GIFs as a design product, specifically in fan communities of the television series *Lost*. She argues GIF-making has its own literacy and vernacular language which empowers and builds community among creators and users in a fandom. Gürsimsek also proposes primary design elements of a GIF: figure/ground, layering, time and motion, color and transparency, and framing which this study used as markers of design skills learned by students. Grādinaru (2016) similarly poses GIFs as objects that teach "practical aesthetics" and offer up both power and questions around remix culture, participatory culture, online communication, and perception of visual media.

GIFs are developing as a powerful and popular form of communication in many online communities. GIPHY, Inc. reported in their 2016 State of the GIF, that their online repository of GIFs was made up of nearly a billion GIFs and that their users watch nearly 2 million hours of GIF content daily (GIPHY, 2016). As seen in the literature, GIFs are

developing in multiple disciplines and communities for a variety of purposes and entertainment. Connected Learning is also developing as a pedagogy that champions passions, production, and community. These principles seemingly align with the GIF's journey from old school format to new communication language. The question of this research is to what degree these developing stories match and whether students perceive this match as a valuable component of their lives and education.

METHODS

The R.B. House Undergraduate Library at the University of North Carolina at Chapel Hill is home to the Design Lab, which offers instructional and technical support for design software, concepts, and projects (University Libraries, 2018a). "GIFABLE UNC" was created to expand positive response to previous GIF-based events at the UL and to increase interaction with students over design and digital literacies. The competition also partnered with University Archives at UNC-Chapel Hill to increase student use of collections and to add to the collection itself. Participants in "GIFABLE UNC" were given the option to have their work saved in University Archives as part of the project in an aim to create a moving, diverse, and digital portrait of the university.

Students were allowed unlimited entries during the competition's ten week run.

The theme of the competition was "Carolina Stories," and GIFs had to either capture

UNC campus life in the past or present under the categories "UNC Past" or "UNC 2017".

Participants entered GIFs into the competition by submitting them on the "GIFABLE

UNC" website, which was housed through the main library site. To complete a

submission, participants also had to share a brief description of what content was used to

create the GIF along with their name and email. They also had to confirm that they had

followed the competition's guidelines for copyright and privacy, decide whether they

would like the GIF entered in the archive, and if they would be willing to be contacted further for research purposes.

"GIFABLE UNC" saw around 135 GIFs created and 100 student participants.

Numbers were estimated based on records of GIFs created through library technology outreach events, as well as the main competition. Forty-nine GIFs were turned into the official competition from 29 GIF creators. Six students were crowned as winners for five winning GIFs (one GIF was created by a team). The online survey was filled out by 14 participants (71% of the 29 GIF creators) and 5 participants were interviewed for the case study. Surveys were conducted two weeks after the competition ended, but before winners were announced. Interviews were conducted over a month after the competition ended due to scheduling issues with the university's winter break. Interview and survey data were anonymized for publication.

Online surveys fit into the existing workflow for participants who were turning a GIF into the competition on the online form and allowed for a space to build analytical structure. Connected Learning is a new pedagogy and it is likely that students would not be familiar with it by name. In the survey, the researcher described "symptoms" of Connected Learning that students could easily identify or not identify with as parallels to their experience. For example, a student might not be familiar with the CL new media role of "Increase Access to Knowledge and Learning Experiences," but they may remember meeting and interacting with a library staff member and finding value in that new relationship. Maul et al. (2017) also found that Connected Learning principles could

be observed through survey data, but that multiple facets of the framework should be addressed by research questions through the survey.

Interviews were conducted to obtain more extensive information about student's creative and educational process in the competition, as well as their response to the experience. Because Connected Learning is fundamentally tied to self-interest, passion, confidence, and community, the researcher felt it was also important to speak directly with students regarding their opinions and emotions during the project (Itō et al., 2013). Qualitative data from interviews was proposed to support, extend, and enliven the quantitative data from the preliminary surveys. Data analysis consisted of transcribing interviews and coding those interviews and survey questionnaire data. The aim of coding was to look for evidence of Connected Learning themes as outlined in the study's research questions. The researcher also gave an allowance for other themes to emerge inductively from interview or survey data. Coding was performed by the primary researcher.

The only risk anticipated for participants was a slight risk of embarrassment in sharing or discussing their creative process and work. However, since participants had already shared their artwork publicly, the researcher predicted that this risk would be rare or mitigated. To minimize risk, participants were also reminded that interviews and surveys were confidential. Interview response data was coded using pseudonyms. This study was approved as exempt by the University of North Carolina Institutional Review Board on September 11, 2017. The researcher for this proposal is also a co-administrator of the "GIFABLE UNC" project.

FINDINGS

Connected Learning is a developing pedagogy, and the Connected Learning *Agenda for Research and Design* from Itō et al. shares multiple evidence types of its criteria and features (2013). Some of these markers are specific to certain facets of the framework, while some branch across multiple frames. Itō et al. (2013) describe CL framework as, "The principles are interconnected: no single principle does much on its own. It is in the relationships among and between principles that the opportunities for connected learning experiences arise." (p. 78). Additionally, not all criteria or feature identifiers could be covered within the scope of this study. For the purposes of this study, the researcher will outline which identifiers were under review for CL design features or criteria, as well as others that emerged as themes during the competition and follow-up interviews.

Design Criteria

Everyone Can Participate

The Connected Learning Framework summarizes this first criteria as "Experiences invite participation and provide many ways for individuals and groups to contribute" (Itō et al., 2013, p. 78). Other indicators for open participation may include experiences that invite involvement, different types of contributions and expertise, a culture where multiple actors can and are contributing, mentors and diverse resources supporting learners, low barriers to entry, easy peer-based exchange and feedback, and opportunities for

experienced and new learners to "lurk and leech" (Itō et al., 2013, p. 79) Lurk and leech, or "observe and borrow," refers to the ability of students to participate in an experience or gain confidence and skills from the periphery" (Itō et al., 2013, p. 79). For example, at a GIF-making event a student might watch others create GIFs and offer feedback, but not create a GIF themselves. Later, when out a football game the student might make a GIF on their own with a mobile device using the confidence they've have developed from the sidelines.

For this study and this specific criterion, the researcher was looking for evidence of experiences that invite involvement and low barriers to entry. In set up, "GIFABLE UNC" was created to be open to all students. Survey data shows that the competition saw participation from graduate and undergraduate students across every grade level. Over 100 students are estimated to have participated in "GIFABLE UNC" through either the official competition or one of many outreach events. Event staff received some questions regarding alumni participation. Alumni and staff were not permitted to participate but opening the competition to more community members in the future could be a way of increase mentoring opportunities and interconnection in the competition.

Marketing and outreach included social media, print materials, listserv and email promotion, workshops, and peer-to-peer and mentor-to-peer invitation. Despite being a competition about social media, of students surveyed, surprisingly none said they first heard about the competition through a social media platform. Word of mouth proved to be the most impactful mode of marketing with 55% of students surveyed reporting they heard about the competition from someone in their community, either a Librarian (21%)

or Friend (29%). Initiation and encouragement were also reported in high number with 78% of surveyed participants saying they were invited or encouraged by others to participate in the competition, and 85% reporting having invited or encouraged others to participate. When asked about comfort level for participating one interviewed student, Warren, shared, "I was new to Carolina and this is the first thing I actively participated in."

For this competition, low barriers to entry includes both social and digital literacy barriers. Participating students could feel uncomfortable with the prospect of entering the competition, participating in a public event, creating with a new technology, or experimenting in a new medium. Survey data showed high levels of comfort about the competition from a mental standpoint. Half of participants reported being extremely comfortable with the prospect of making GIFs and entering GIFs in the competition, with the other half reported being somewhat comfortable on both accounts. None surveyed reported being uncomfortable or neutral about the competition. Alongside comfort, interest level was reported in high numbers with 100% of surveyed participants reporting that they found the prospect of a GIF-making contest interesting. Of this group, half reported the prospect of GIF-making to be "extremely interesting" and the other half reported "very interesting." These findings are affected by the fact that survey participants were all participating students in the competition. More research is needed to find out why students might not participate in the competition or comparable events.

In examining comfort level with the technology, the researcher was interested in how familiar students were with GIFs as a medium and a creative product. On a daily

basis, 64% of participants surveyed reported viewing or receiving GIFs while 14% reported interacting with GIFs 4-6 times a week and 14% for 2-3 times a week.

Interestingly, students reported lower GIF interaction instigated by themselves with 36% of students reporting sending GIFs daily and 29% of students saying they only send or post GIFs a couple times a year. Some interview participants also noted that they felt they saw or received GIFs more than they sent GIFs. Participants in both the survey and interviews mentioned "GIFABLE UNC" being their first experience with making GIFs. One interviewee, Cleo, stated, "I never really thought of making my own GIFs. Usually the thing, the GIFs I've seen are more, they have like perfect lighting and everything and they aren't homemade. So, I thought that was cool thing to do."

While participants were not directly asked about the "lurk and leech" affordances of the competition, the event setup may have offered such opportunities. Alongside the competition's wide call for participation, "GIFABLE UNC" also included multiple minievents to encourage participation and learning. These events included a "library crawl" where students traveled from library to library making GIFs about each location, GIF "photo-booths" in heavy traffic areas on campus, a Photoshop GIF-making community workshop, and participation in a Harry Potter-themed library event where students could learn to take "magic photos." These events were public, and staff often partnered with students or encouraged student collaboration in the GIF-making process. Students could watch, perform, record, help pick out props, or design as part of the process. These events encouraged the lurk and leech aspect of the "Everyone Can Participate" principle; however, the focus of this study is students who actively participated in the competition.

Further research is needed on how students on the edge of action feel about the prospect of GIF-making and participation in the competition.

Study results show that students who participated in the competition were interested and comfortable participating from early on in their exposure to "GIFABLE UNC". Students invited and were invited in high number to participate and word-of-mouth appears to be the most effective way of encouraging and supporting initial participation. Students also seem relatively comfortable with the GIF medium and the prospect of entering created GIFs into the competition. Self-expression and possible anxiety alongside sharing social media will be examined further in discussion of the GIF and its new media affordances. Further research into apathy or apprehension towards participating and the "lurk and leech" principle might be better served in a classroom or program environment where a limited scope can allow for more concentration on varying levels of participation.

Learning Happens by Doing

Learning Happens by Doing is defined in the Connected Learning framework as, "Learning is experiential and part of the pursuit of meaningful activities and projects" (Itō et al., 2013, p. 78). Other aspects of this principle include participant's testing, playing, and reflecting on work, opportunities for discovery, easy and shareable tools, resources, mentorship avenues, and ways to collaborate (Itō et al., 2013, p. 79). For this study and this specific criterion, the researcher was looking for evidence of an experiential process that included aspects of play, reflection, and specifically testing or experimentation, and a feeling that the competition was meaningful.

Experimentation proved to be one of the most interesting aspects of the competition. Most students surveyed reported experimentation in their process with 64% reporting some experimentation in their process. None surveyed reported no experimentation in their process, but 21% of participants surveyed said their process did not involve a lot of experimentation. Interviews proved to shed more light on experimentation and the process of "propose, test, play, validate, and reflect" as described in the CL framework" (Itō et al., 2013, p. 79). Participants described aspects of planning, dry-runs, tests, reflection on quality, and trying a concept again.

"[My partner and I] talked about it before we filmed. We knew what we wanted to do before we turned on my camera phone. So, we kind of walked through what we wanted...we did a dry run through... we did what we were gonna do and it ended up working really well." – Ginny

"There were some I wished I had gone back and improved upon. Some that I did think about for a little bit and thought about what is the best way that I can do this...Some of the GIFS I made I just trashed and I didn't even...This isn't what I want. I can do better." - Warren

"Sometimes it didn't turn out the way I wanted it to...It was kind of like I thought it was a good idea at first and I was like I can make this happen and then the moment happened and there was nothing I could do afterwards... It was kind of hard, but I loved it." – Warren

"Some of [my GIFs] were immediate and some of them I wasn't quite satisfied, so I would edit it to make it feel better because sometimes you have an idea or vision and you're like "That's exactly what I was looking for!" and sometimes it takes more time." – Cleo

"You had to do it a couple times to actually get it right. Even for the one I made, it could have been better...making sure everything comes into frame." – Rachael

As previously mentioned, the competition included multiple opportunities for students to engage with the competition, staff, and GIF-making. Students had opportunities to learn GIF-making digitally through online portals and guides, or in-

person at events and workshops. Outreach events also included opportunities for collaboration between peers and mentors (in this case "GIFABLE UNC" staff). One shortcoming of this research is that students were not surveyed to see which events they participated in throughout the competition. Further research could include this data as well as a tracking of how students do or do not engage with multiple events or opportunities within "GIFABLE UNC" or comparable library design competitions.

Participants did report that finding mentorship help for creating GIFs was extremely easy (56%) or somewhat easy (45%). Students found traditional mentors like librarians (19%), professors (8%) or UNC Staff (4%) but engaged more with peers such as a co-worker or classmate (27%) and friends (35%). For resources and mentoring overlaps, there was spread in the survey over how students learned to create GIFs. Of students surveyed, 37% reported that a mentor (librarian, friend, etc.) assisted them in learning how to make GIFs, 21% already knew how to make GIFs, and 32% used the "GIFABLE UNC" website to learn GIF-making tools and concepts. The competition website housed a guide to creating GIFs of different types (e.g. cinemagraphs), from different software (e.g. Photoshop, GIPHY CAM, etc.), on different tech (e.g. GIF on your phone), and with different aspects (e.g. GIF with text overlay). Guides linked out to online guides, videos, and resources and were curated by library staff. Additionally, the guide also housed information on how to find content for GIFs (through University Archives and other community resources), equipment, software, and examples.

In regard to the "meaningful" nature of "GIFABLE UNC", the shared goal of this competition was to create a digital and collaborative portrait of the university for

University Archives. Two students mentioned in interviews that having their GIFs archived by the university was a factor in enjoyment and participation of the competition. One student, Cleo, shared, "I think it's super cool and fun to do something that will last here...with participating in this competition I am doing something that will add to the University Archives, that's meaningful I think." In the survey, one student somewhat humorously shared, "I feel like I was able to turn something silly and maybe a little dumb into a piece of UNC history. After this university fleeces me with tuition bills, that's really all I could ask for." Student's also reported finding value in the community nature of the project and the skills they acquired during the competition. These responses will be further discussed in Value and "Expand Diversity and Building Capacity."

Challenge is Constant

The CL framework defines "Challenge is Constant" as, "Interest or cultivation of an interest creates both a 'need to know' and a 'need to share" (Itō et al., 2013, p. 78). Evidence of constant challenge can include development of expertise, motivation from an engaging context or problem, advancement opportunities, chances to build social capital, and competitions and collaborations for discovery or solving" (Itō et al., 2013, p. 79). For this study and this specific criterion, the researcher was looking for evidence of challenging and engaging activities and development of expertise. Interview research also addressed impact of competitive elements on participating students.

Survey and interview evidence suggest that students may have found the competition to not be as challenging as expected. When asked how challenging students

found the competition, 35% said not challenging at all and 14% said not very challenging. Additionally, 21% of students said they found the competition neither challenging nor not challenging. Only 29% of students found the competition very challenging. No students reported that the competition was extremely challenging. On the flipside, 50% of students found GIF-making tools to be extremely easy to use and 43% found them to be slightly easy to use. Of students surveyed, all reported that GIFs were easy to make with half reporting they thought GIF-making was extremely easy.

One student, Ginny, shared, "It's really... it's easy to do, a GIF. We thought about it for 5 minutes and what we wanted to do and then we did it and that was it. It's not that hard." Another student, Cleo, mentioned that while the concept of making GIFs is simple it can also be much more saying, "I feel like there is so much more that you can do that people don't know. It's not just taking a clip and putting it in an infinite loop. You can do other things to enhance it..." While ease was reported, students also shared that simplicity of the competition or GIF-making might be connected to which tools one uses or how far a student wants to go for their creation. Warren shares:

"At first, I thought because we had just started making GIFs in Photoshop, that this might be a little time consuming. Like maybe I could make 1 or 2 GIFs and throw them in there to see if I win and then I started using a little bit of [GIPHY CAM] and Photoshop and then it was not as hard as I thought it was. You just get used to it."

"So getting to that part of like 'this is how you animate this' that was kind of a road block. Cause I was like 'I get this. I get how to duplicate my layers and put it in' and then it just didn't work, and I was like, 'What did I do wrong?' so that was challenging. But I overcame that."

Ginny also described the compositional challenge of GIF-making as an area of interest saying:

"It really does force you to distill down what you want to think and say about whatever it is, down to really fine point instead of you get 20 pages and you can fill however you want. You really have to think about what you want to say and how you want it to come across."

One area of improvement for the project is creating, facilitating, and encouraging student need to share and create about their interests. In examining student response, the researcher found that 57% of students surveyed were neutral on how important it was to create GIFs about their personal interests and 50% of students were also neutral on how important it was to share GIFs about their personal interests. While no surveyed students described these acts, sharing or creating GIFs about interests, as being not important, more improvement is needed in creating interest-based learning, a main facet of Connected Learning, for students.

One issue that may have led to interest suffering in the competition is the theme. The competition's theme of "Carolina Stories," was described by some interview participants and confusing and unclear. While the theme was created to encourage students to share and create a diverse range of GIFs about their life at Carolina, some students felt their GIFs might not meet the criteria of being academic or community-based enough. In describing GIFs, they would like to make in their personal lives based on interests, students described GIFs from extracurricular activities, pop culture (particularly television shows like *FRIENDS* and *Gilmore Girls*), and video games. Itō et al. (2013) do describe pop culture as a "learning site" among other learning sites like

home and school "(Itō et al., 2013, p. 41-42). Perhaps further expansion into pop culture would benefit student interest engagement. In discussing how broad or narrow a theme should be, Cleo shared in her survey, "Sometimes it's hard for me if someone just says, 'Make a GIF!' that's hard. You know in class when they say 'Do a presentation! It can be on anything.' I'm like 'No! Help me narrow this down." Whether a future competition theme is made more narrow or broad towards student interest, it's clear that more specific direction is needed to encourage student's need to create and share.

One design principle aspect that the competition lacked was gates or levels of advancement. While GIFs were sorted into groups of finalists for voting in categories decided by committee vote, these groups were not made public. Students also had some opportunities to build social capital. The online gallery for the competition allowed anyone to vote, or "heart," GIFs so students could see their work being supported by community members. The gallery received over 500 votes by the end of the competition (University Libraries, 2017). Community support will be discussed further in New Media Features. Cleo shared that for her motivation went beyond just winning:

"I am not really that competitive, so the competition wasn't really a drive for me. The drive was to learn how to make GIFs, but I am sure that there were people who entered because they thought they could win but for me it was more of just something to participate in for fun."

Ginny shared that prizes were not a major factor in participation, but that the university supporting the work was:

"Prizes not super much, I didn't expect to win anything so...that would have been cool, but it wasn't a huge consideration. I did like that they would be in the archives, and the University was thinking about how you would go ahead and archive digital medias that might seem a little more ephemeral..."

Rachael on the other hand, saw prizes as a fun reversal of the normal grading system of academia saying, "GIFABLE is definitely the fun [side]. No one has to do it. No one is making you do it. There's motivation behind it and it's not making an 'A,' it's the prize that your offered for the winner."

Everything is Interconnected

The CL framework summarizes 'Everything is Interconnected" as, "Young people are provided with multiple learning contexts for engaging in connected learning—contexts in which they receive immediate feedback on progress, have access to tools for planning and reflection, and are given opportunities for mastery of specialist language and practices" (Itō et al., 2013, p. 78). Evidence of this principle can include interconnected structures, mentors acting as "bridge-builders," and different forms of recognition (Itō et al., 2013, p. 80). For this study and this specific criterion, the researcher was looking for evidence of multiple contexts – professional, academic, or personal – being engaged by the competition.

This is the most comprehensive design definition for the framework and the one with which this competition struggled to provide the most. "GIFABLE UNC" staff noted that attempts to build connections in the competition's first iteration were met with excitement, but not the high numbers of collaboration they expected. For example, the

competition provided materials for instructors to implement GIF-making in the classroom and event staff reached out to instructors hoping to integrate the contest across the library context into the classroom. The competition staff also reached out and invited on-campus groups to participate and offered to bring special instruction or events to those groups. "GIFABLE UNC" only partnered with one on-campus group, one additional library, and one class during this first run of the competition. The competition also sought to help students move across two contexts in the Library, between the Undergraduate Library's Design Lab and University Archives by providing archival material and offering a prize for best GIF created with archival material. Of the 49 GIFs turned into official competition, only two GIFs were created using archival material.

Students seemed split on how much overlap there was between the competition and other areas of their life. When asked if the competition overlapped with any extracurricular activities, 40% of students said it overlapped with their social lives, while another 40% said it did not overlap at all. For those who found overlap with their social life or with a job (13%), 38% reported moderate overlap and 25% reported only a little overlap. Data was again spread in relation to academic contexts. Students reported that the competition overlapped with class lectures (14%), assignments (21%), and their major/minor (21%). Another 21% reported no overlap. Of those who found overlap, 45% reported a moderate amount of overlap and another 45% reported a little overlap. None reported having a great deal of overlap Students did find some overlap with hobbies and interests with 64% reporting having overlap and of that group 22% reported that great deal of overlap. This was the only area of overlap to report a great deal of connection.

Another 66% reported moderate overlap with hobbies or interests. Warren noted:

"I was able to make GIFs in like my social setting and do things I'm doing on a daily basis. It kind of overlapped, giving people a picture of what I see in 5 or 10 seconds, you know? It's kind of cool...It meshed into my social life and what I was already doing. I didn't have to go out of my way to make any of them. They were for the most part natural."

Value

The ultimate question of this study alongside its connection to the Connected Learning framework is whether the experience was of value to students. The Connected Learning framework is a pedagogy that seeks to bring value to student's lives and even if "GIFABLE UNC" presented CL attributes and functions, without value it may not service students as intended. For the purposes of this study value is being perceived as a positive value.

Of students surveyed from the competition, 100% reported that overall, they found GIFs to be a valuable medium to work with and that GIF-making was valuable learning experience, with 62% of reporting that it was extremely valuable for learning. Going even further, 54% of students also found GIF-making to be an extremely valuable way to connect to others. The lowest value attributed to "GIFABLE UNC" was value was connection to community resources. When asked about the competition as a connection to community resources, 31% of students found community connections through the competition to be extremely valuable, 46% said slightly valuable, and 23% reported being neutral. Ginny and Ronnie both spoke about connections to community being one of the most valuable parts of their experience:

"It was interesting to see outside of this class. What people thought of as what UNC was. What they define as their experience of being on this campus was. It wasn't all what I expected to see which was nice. You see different people's opinions of going to class or being in the dorms or being the Wilson ghost or whatever, thoughts of different things... It kind of broadened what my view of what UNC can be and mean for people and I thought that was valuable." — Ginny

"I think it was valuable because it gave me chance to see how other people in UNC took the competition in their own way or tried to find something interesting to make a GIF of, especially things around UNC. It was beautiful to see place at UNC like 'Oh! I've been there. I've seen that place before."" – Ronnie

Warren also mentions the student perspective as being valuable, alongside the skills he developed, and the larger cultural context GIFs exist in. Cleo and Rachael shared similar themes, with Rachael mentioning that even though her GIF wasn't accepted into the competition she learned about issues surrounding copyright.

"It's an interesting take on what the day in the like of a Tar Heel is, it's cool...It was mostly valuable. It was a good way to learn a new skill. You never really think about it when you're using GIF, like how do you actually make one of these or at least I didn't. It was a new skill to learn, especially you know it's the digital age. GIFs are everywhere. So, it was cool to actually see the process that's behind it and also like appreciate the people that make GIFs, like how much work can go into it to make it beautiful. It's an art, literally...I would say the contest was pretty valuable. Stressful at times, but valuable." - Warren

"I would definitely say it was valuable, even though my GIF didn't get to entered. I learned more about internet and free domain." – Rachael

"[GIFs] are valuable as a communicative tool and as an outlet." - Cleo

New Media Attributes

Foster Engagement & Self-Expression

CL defines the first feature of new media as, "Interactive, immersive, and personalized technologies provide responsive feedback, support a diversity of learning styles and

literacy, and pace learning according to individual needs" (Itō et al., 2013, p. 82). Evidence for this feature might include self-directed learning, flexible literacies, and gaming" (Itō et al., 2013, p. 83). For this study and this specific feature, the researcher was looking for evidence of student engagement with GIFs, positive interactions with the medium as one of self-expression through sharing and feedback, and an adaptability of learning style.

When asked about engagement, 50% of students surveyed said they found the GIF-making process very engaging, with 36% going beyond to say they found the process extremely engaging. All students surveyed said they felt GIFs were a medium in which they could express themselves. This sentiment was heavily supported in interviews. Students were quick to express the merits of how the GIF medium champions self-expression.

The medium, which is known for reaction and emotion, appeared to ring true with students:

"They are definitely a good way of expressing emotion. Like I said earlier about Twitter. You look at a GIF you know how someone is feeling and it's usually the GIFs I see are of other people, like TV shows and movies. You can like read their facial expressions, but some of them are not and you can still kind of interpret how they feel or how they interpret the situation." – Warren

"I think they are good [tools for self-expression] like reaction GIFS because they kind of give an inside look at someone's sarcasm or way of communicating is, based on what GIF they might choose" – Ronnie

"Sometimes they are funny, sometimes I think that they are very representative of emotions in a way that pictures and videos say things that words can't. It's just a different way to communicate and can sometimes replace or enhance your message." – Cleo

All students surveyed shared that they thought GIFs were adaptable to their creative style, 36% found GIFs extremely adaptable and 64% found them very adaptable. Numbers were slightly lower for GIF's adaptability as a tool in student's learning style with 35% of students reporting that they found GIFs to be extremely adaptable which is comparable to creative style, but 21% reporting that they were neutral on the subject.

GIFs as a file do not have built in feedback capabilities as mentioned in the new media attribute, but they primarily exist on social media or messaging platforms were feedback through conversation, engagement, and sharing is possible. Feedback was available by voting, or "hearting," on the "GIFABLE UNC" website gallery. Feedback will be further discussed in "Expand Social Support for Interests".

Increase Access to Knowledge and Learning Experiences

CL defines this new media capability as, "Through online search, educational resources, and communities of expertise and interest, young people can easily access information and find relationships that support self-directed and interest-driven learning" (Itō et al., 2013, p. 82). Evidence for this feature might include lower access barriers, a "linking" of learning spheres, and locating knowledge or interest rich communities (Itō et al, 2013, p. 84). For this study and this specific feature, the researcher was looking for evidence of increased access and knowledge about campus, community resources, and personal interests.

Interestingly, learning new things about the library (19%) and UNC programs, services, and communities (19%) were two of the highest reported learning aspects of the

competition, almost as high as design skills (25%). When asked if students discovered any new interests during the competition 62% said they did not and 69% also reported that GIF creation did not help them find or engage with any new communities. For resource location, 79% of students reported locating resources as being on the easier side of the spectrum, with 66% reporting that it was extremely easy to locate resources on how to make a GIF. When it came to where resources were located or from whom, 32% reported using the "GIFABLE UNC" website and 36% of students surveyed reported using a librarian, friend, or other type of mentor. Students also reported that finding help was relatively easy with 55% of students reporting that finding a mentor to help with GIF creation was extremely easy and 45% reporting somewhat easy. Warren shared how competing in the competition introduced him to on campus events:

"It's kind of a different perspective on culture. Were like a little community here and being able to put what I see what I see out there and being able to see what other people see...If they had not been public I would have sent in a lot less. It was nice to have that competitive factor and it was nice to see what other people are producing and see what they're doing and their take on it. I also learned a lot. I was able to learn about different things going on on-campus. I never really thought about, "Oh we can just GIF everything or like a silent disco or whatever. It was just cool."

Ronnie shared this quote on the benefit of having "GIFABLE UNC" staff at an outreach event she attended saying:

"I think it was helpful to get a basic rundown on how to do everything and obviously when they are on the GIFABLE team they have a little more experience on how to do things. They were giving good tips on how to make them and they had an iPad on a stand and that is better equipment then me trying to make one on my phone."

Expand Social Support for Interests

The CL framework defines this feature as "Through social media, young people can form relationships with peers and caring adults that are centered on interests, expertise, and future opportunity in areas of interest" (Itō et al., 2013, p. 82). Evidence for this feature might include locating communities, engaging in feedback, and a mixture of mentor and peer interaction" (Itō et al., 2013, p. 84-85). For this study and this specific feature, the researcher was looking for evidence of positive interactions from sharing interests, engaging with the community, and gaining feedback.

When it came to interests, 92% of surveyed students reported that making GIFs helped them to share their interests with others and 59% of students said it was extremely likely that they would to continue to share GIFs with their community. Another 39% of students said sharing with their community was somewhat likely. However, only 39% of students reported finding new interests while making GIFs. As little as 31% of students surveyed said GIF-making helped them engage or find new communities.

When asked about sharing GIFs out to other communities, 77% of students reported sharing their GIF on a platform other than the "GIFABLE UNC" website. This could include other social media platforms, websites, or messaging systems. In general, 42% of students reported receiving feedback on their GIFs from others and of students who received feedback, 58% said that feedback was very valuable. However, 33% of reported being neutral on feedback. Within the event, 79% of students surveyed voted in the competition and 100% reported looking at GIFs in the gallery other than their own.

In interviews, students shared that whether someone would be interested in their interests was a factor in what they wanted to make and share. Rachael points out that GIFs can often be more about general emotion than specific interests:

"You can definitely, back to relatableness, a lot of times people find them relatable because [the GIF] ties back into their personal lives. It doesn't have to be passions. People will always tweet GIFs about staying in bed all day, which is not a passion per se, but it's something that each and every one of use has a deep emotion for, staying in bed all day! But ones that directly speak to or are related to my passions definitely stand out and I am more likely to interact with those, retweet, favorite, reblog, or whatever..." – Rachael

Cleo similarly shared that GIFs about one's interest or life can be fun, but that creating something that is accepted by the community is a consideration:

"I think that for now I think when I make GIFs I want to make something that people are going to relate to and think is cool which usually pop culture is a good way to do that, but I feel like I can see myself making GIFs that are more about my life and are more meaningful, but it just depends on what sort of message I want to put out." — Cleo

Another interviewed student shared what it's like to see a GIF spread out from beyond the competition into other contexts and how outside support can feel:

"[My partner and I] put it on Twitter...We kind of expected it to just stay within in [the community], but it didn't. My friends will just use it now...friends who don't go to UNC will just use it as a reaction GIF...Which is hilarious for me. It works in so many contexts. It's a good metaphor for what can happen on the internet when you post something for a specific purpose and it goes and has a life beyond that that you maybe didn't intend. When I posted it, I lost control over what happened to it. I saw someone use it who I didn't know the other day... Actually, seeing it was weird, but good, but weird." – Ginny

Expand Diversity and Build Capacity

The last feature of new media in the CL framework, "Expand Diversity and Build Capacity" is defined as, "New media networks empower marginalized and non-institutionalized groups and cultures to have voice, mobilize, organize, and build economic capacity" (Itō et al., 2013, p. 82). Evidence for expanded diversity and built capacity can include democratic and equitable structures, multiple entry points that respect and support diverse groups, and community's building capacity from the "bottom up" (Itō et al., 2013, p. 85). For this study and this specific feature, the researcher was looking for evidence of empowerment, skill-building for the future, and students actively witnessing diversity in the competition.

Student opinion on witnessing diversity was varied with 23% sharing that they witnessed or engaged in a great deal of diversity in the GIF sharing process. Another 38% said they saw a moderate amount of diversity, 23% a little, and 15% said none at all. Similarly, 15% of students said they witnessed or engaged with a great deal diversity in the GIF-making process, 31% a moderate amount, 38% a little, and again 15% said none at all. Despite this split for the competition, 100% of students surveyed said they think GIFs are a viable medium for sharing diverse stories. GIFs were seen as a very strong medium for diverse stories by 61% of students and 31% said they see GIFs as a moderately strong medium. No surveyed students reported feeling htat GIFs were a weak medium for diverse stories.

Beyond what was directly witnessed in the competition, 92% of students reported that they see GIFs as an empowering medium and 100% of students surveyed said

creating and sharing GIFs was empowering to them. In tandem, 92% of students also reported that creating, sharing, and viewing GIFs did not take power away from them and 76% of students said viewing GIFs empowered them. Interview students echoed these survey results, sharing that while they didn't really see diversity in the competition, they felt the medium could be powerful for diverse stories:

"I did see some good diversity in the people who were in the GIFs which I thought was good, knowing very little about how diverse the campus is versus other campuses in the UNC system. But I do think there is an interesting line that can be walked. GIFs can certainly be a good way to express I don't know, like equity issues...It can be tricky just like anything else. You have to think about what you are doing and why you are doing it and all those kind of things but as long as you're are thinking about those things I think GIFs can be a good medium for that." – Ginny

"I probably did witness diversity, but nothing is coming to mind immediately...I think [GIFs] would be good for sharing a diverse story. I am thinking about all kinds of diversity. They're totally visual so that's the only thing, people with visual impairments it might affect their experience of GIFs." – Cleo

"You can create any kind of GIF of something that you like. People are probably going to use your GIF and not even know the context behind it. It's definitely a place, it's a free expression format." – Warren

"I think I saw diversity within the event, but I didn't notice as much in the competition and I didn't really look for it... I guess the way you present something, it could potentially reach a bunch of people since it's a very short amount of time. You can get right to the topic of something and it's not like a 15-minute interview of something, things that might take time and people might be deterred by how long it is. It's really short and to the point. In that way it could be used in that way." – Ronnie

The second part of this attribute concentrates on skill building for students which for this competition included, but was not exclusive to, design and digital literacy skills. Of students surveyed, 9 out 14 students reported learning design skills during the competition. The most popular skills reported during the process where timing/motion (30%), framing (22%.), and design apps (30%). Only 14% of students surveyed used

Photoshop for their designs, while 46% used a GIPHY application and 23% used GIPHY's online GIF-making tool. When asked if they think they will continue to use skills they learned during this competition, 100% of students agreed.

In line with the interconnectedness of the CL framework, 62% of students reported that it was extremely likely that they would use GIF-making again in a personal context, with 31% reporting it was somewhat likely. For a professional context, 46% said it was extremely likely that they would use GIF-making again and 39% reported it was somewhat likely. Students were less sure about whether GIFs would be used again in an academic context with 23% reporting it was extremely likely, 46% reporting somewhat likely, and 23% neutral.

Warren shared that he sees himself as a future content creator saying, "I think the pop culture GIFs are really important, but I also think that maybe like in the future I will end up making some because someone's gotta do it. You know, now that I how to a lot better, I think that I probably would." Ronnie also shared that she sees a future of GIF-making, "The opportunity to think of something and recreate it to the best of my abilities and like even though it wasn't perfect it was a new experience and I got to learn these things so I can do it again in the future." One student, Rachael, pointed out that making GIFs can help combat issues with information retrieval of GIFs and staying relevant in online social groups. She shared, "If you go on GIPHY and search [something] like 10,000 results show up and some of them aren't [your search] and some just aren't good GIFs and of course the good ones are used. The really good ones I've used before."

Interview participants also discussed some of the design skills they learned during the competition. Staging, placement, and timing emerged as common skills similar to the survey data:

"Staging something, especially if you are filming for a GIF or Boomerang or something, staging and moving so that you can fit it within that short frame of time and make it look good would be the filming aspect. Other than that...captions are pretty straightforward" – Rachael

"Yeah, I think the skills to making a GIF like all the video skills are important if you want to video yourself or someone else - positioning, lighting, like background and everything. I think it's important to know and be aware of those things." - Cleo

"Trying to position myself in the right place, getting the right background, and trying to even like rehearse what to do to make sure what I anticipated and wanted to have in the GIF was actually happening, and trying to time it right needed to be taken into consideration." – Ronnie

"[Good GIFs are] relatable and have good lighting, a lot of people will make GIFs off their phones...with terrible lighting. Good lightning, good presentation, and it just looks good. It looks good and it's organized to an extent so if there are captions it looks good, it all fits together and has an aesthetic and I feel like all of that relates back to relatableness and whether someone likes it or not and can relate to it because if I see this badly formatted GIF I'm not going to go 'Oh yeah, I relate to that' and I am not going to want to associate with that." – Rachael

Interestingly, despite most students reporting value about the competition and GIF-making, 69% of surveyed students said that they still prefer sharing GIFs created by someone else rather than themselves. Only 23% of students preferred sharing GIFs they created after having competed in the competition.

Additional Themes

Teamwork

While survey students were not asked about collaboration, teamwork came up during interviews as a way to create comfort and fun during the GIF-making process. Ronnie spoke about creating GIFs in group setting at an outreach event saying, "It was nice to have the help, but it was cool to come up with an idea and try to execute. And having people who like the idea as well is exciting because people are being excited by something that was part of your creative thought process..." Ginny also spoke about working with someone and how for some partners work was not optimal, "... having a partner worked well because [my partner and I] work well together, we knew we worked well together because we had done projects together, but some other people struggled with it a little because either they were unfamiliar with the technology or they weren't gelling with their partner as well." Cleo spoke about her experiences working alone and with a partner:

"Well I think creatively it was probably helpful to have one person where you are both working together to create a GIF. Where in a big group of people, it was harder sometimes to flesh out my ideas in my head because of conversation or like walking around. So, having a focus with a partner was helpful..."

Anxiety

Two students brought up anxiety during discussions of self-expression and community sharing. Cleo shared:

"There was some apprehension. I am one of those people who will write a post for something and then send it to like...one of my friends to say 'Is this actually funny? Or just funny to me?' Or do you think, if I feel like its controversial, "Is

there something here that I am overlooking or like do you think my message is coming across?' So yes, I guess I was nervous because I have those sorts of anxieties, so I wanted to make GIFs that other people would like and could relate to."

Ronnie also felt some anxiety over privacy saying, "I think I would rather use GIFs made by someone else because there are more of them, also I might feel self-conscious..."

Copyright

Copyright and fair use was addressed by one of the interview participants, Rachael. A GIF Rachael submitted into "GIFABLE UNC" was not entered into the official competition because it used content from a copyrighted source. Rules for the competition stated that materials had to be either self-created, copyright free, or from University Archives. As previously mentioned in discussing value, Rachael felt the competition was still of value for her and she learned a lot about fair use through this experience. However, Rachael also raised the question of how closely the competition should resemble the environments this media traditionally exists in. GIF culture is, as previously discussed, one of sharing economy. When asked how she would improve the competition Rachael said a possibility might be a competition not attached to academia or the library because these groups are so closely tied with rules of copyright and attribution which acts against the established environment and spirit of the GIF medium.

Technology Access

Two students also raised questions in interviews over student familiarity or access to technology for the contest. One of the core properties of CL is open-networked tools " (Itō et al., 2013, p.12). To create easy access and unburdened learning for students, tools should be easy to access and use. Cleo mentioned, "I think it might be hard for people

who don't have a good smart phone..." As previously mentioned, Ronnie also spoke about technology quality in discussing mentorship, "[The "GIFABLE UNC" staff] had an iPad on a stand and that is better equipment then me trying to make [a GIF] on my phone." Ginny spoke about familiarity with software as a potential problem, "but some of the people in the class who had never used something similar to [GIPHY CAM] struggled with how to create a GIF."

Technology access is a concern of Connected Learning as set out by Itō et al. (2013) especially in K-12 environments where students may have different levels of access away from school. In a university setting like UNC-Chapel Hill students may be required to own a laptop and may also have access to numerous libraries and hubs for production technology. The "GIFABLE UNC" website listed places to find production technology such as cameras, green screens, and design software. An Apple iPad was also present at most competition events for students. While technology access, as seen through resources at UNC-Chapel Hill, may be high in a university setting, it is still important to offer multiple points of entry around technology and support to facilitate participation, comfort, and creativity in GIF-making for students.

DISCUSSION

Design Criteria

The first research question of this study is: did participants feel that the competition effectively incorporated Connected Learning's design framework? The first of these criteria was "Everyone Can Participate." One restriction of this research is that users surveyed and interviewed were those who had already participated in the event. While their response to the engaging and interesting nature of the competition is valid, the question remains of who is not being reached and who does not feel comfortable, interested, or engaged by this event? More research is required on how students responded to this competition or would respond to a future or comparable event.

Another question raised by both the competition results and research results is how to define and track participation in the event. While the event saw only 49 official entries, an estimated 100 GIFs were created over the course of the competition. The question then becomes "What prevented or discouraged students from turning in GIFs for competition?" It's possible that students were not happy with the GIFs they created or went on to create better GIFs for eventual contribution, but it also possible that students were apprehensive or apathetic about participation in the official event. It's also possible that the structure of the competition was not clear to participating students.

While "GIFABLE UNC" had some success in student participation numbers, it may have had more success by drawing attention to the multiple roles of creators. GIF-making is a design project, but it can require multiple acts of production completed by different actors. Consider a student teaming up with friends to create a GIF where one student is the recorder, one the actor, one the in-app designer, and one the promoter. Each of these roles is creative, engaging, and beneficial for learning. Promoting and supporting multifaceted participation might encourage increased and deeper engagement by students.

Student engagement was also high at many outreach events where the "lurk and leech" principle may have been at play. As previously mentioned, some students found teamwork, mentorship from "GIFABLE UNC" staff, and library technology to be helpful in facilitating creation in way that solitary work didn't always provide. Outreach events also offered an opportunity for students to focus in on specific interests rather than the broad theme of the overall competition, like the Harry Potter mini-event. It's possible that by designing and running more compact events, educators could facilitate better opportunities of student interest to grow, provide more "lurk and leech" situations, and research who is not participating and why. The open invitation of "GIFABLE UNC" to all students at the university makes investigation into lack of participation a question beyond this study's scope, and the scope of most projects. By decreasing the size of participant group to that of a class or single outreach event, it might be easier to learn which anxieties prevent students from multiple levels of participation.

The principle of "Learning Happens by Doing" is constructed of two core properties, experiential learning and meaningful pursuit. It appears that students found

the competition's experiential learning to be successful as students in the survey and interviews shared experiences of the full design process. Students engaged in planning, testing, and reflecting in making their GIFs. Students also reported that mentors and resources were generally findable and helpful.

However, the majority of students found help from library employees and friends. The CL agenda describes mentorship as a relationship that often involves community members and experts in specific areas (Itō et al., 2013). As will be discussed further with "Everything is Interconnected," this competition may be too siloed in the library environment for students to fully engage with productive mentors. While the value of library staff is important, students and the competition could benefit from an increased effort to provide a wider array of mentors during the GIF-making process. More purposeful and widespread mentorship could increase both "learning" and "doing" for students. Imagine students being able to interact with faculty or experts from areas of communication studies, journalism, social activism, media production, digital art, and animation during their GIF-making process. Increased diversity in mentorship means students are being exposed to more ideas and ways of thinking and being presented with more contexts and communities where they can put their knowledge to work.

The question of the meaningful nature of this competition for learning will be discussed further regarding the competition's value, but it is important to note that the invitation for GIF entries into the University Archives was an appreciated by students, but seemingly not a primary drive. Students were interested chiefly in learning a skill or participating in a community event. In this case, the meaningful nature appears to be

connected to other primary facets of CL (Social Support and Building Capacity) as will be explored. Overall, it appears that "Everyone Can Participate" and "Learning Happens by Doing" were areas in which the competition found some success, but for which there is still areas in need of strong growth and exploration. More research is also needed to better understand participation barriers for students and the ways in which mentorship can be better implemented. In the future, "GIFABLE UNC" should also prepare and promote the act of GIF-making not as a one-student to one-GIF project. The GIF-making process, and the competition appear to be at their best when students are working in collaborative settings and engaging with multiple points of the design process.

While "GIFABLE UNC" appears to have found some success with these first two criteria, the competition struggled with the final two design principles, "Challenge is Constant" and "Everything is Interconnected." For constant challenge, the competition needed to induce a feeling of necessity for knowing and sharing. In interview and survey results, students appeared to find the competition interesting and "cool" or "fun," but a need to know and share work was not present. This could be caused by a break between the competition's theme and student interest. Within CL, students should seek to grow through challenges because of an inherent motivation from their interest or shared purpose (Itō et al., 2013). Without that prime motivation, the challenge of the competition is mitigated. While students expressed some challenge with composition or technology, overall the consensus was that the competition and act of creating GIFs were relatively simple and fun as one student put it, "just for the hell of it."

To succeed as a CL environment, the competition must create better contexts for students to engage their interests. This engagement will lead to increased acceptance and overcoming of challenges in design and technology for student GIF makers. One way to put this into motion would be adding gates or levels to the competition. By challenging students to share more specific interests, test out new skills or software, or gather more votes from their communities, gates could increase challenges on multiple fronts.

Interconnection was also a struggle for the competition. Students reported moderate to little overlap with the competition and other areas of their academic, personal, and professional lives. The competition in its first iteration was unsuccessful or unable to create the collaborations needed for a structure capable of connecting students with multiple contexts, groups, and mentors. Perhaps with more time and growth, the competition could begin to build those connections with on-campus and off-campus groups and individuals. Another approach, as previously mentioned for participation, is to scale back the size of the competition to a more manageable class size. A smaller group of creators would allow for easier access to other contexts for expertise and exploration. Smaller group sizes would also increase staff's ability to facilitate immediate feedback and custom fit opportunities for students for expertise and resource support.

Overall, students appear to feel that the competition was engaging and experiential. It presented some overlap with other areas of their lives and moderate challenges but did not induce a necessity for creation and sharing nor an environment of overlapping learning contexts. However, with an alteration of or experimentation with

size and structure of the competition it may be possible to better implement these design principles or at the very least test how they could be better presented to students.

Value

This question ties back into the principle of "Learning Happens by Doing" and begs the question of why this competition matters for students at a university level. The results of value are extremely encouraging. Students reported that this competition was valuable to them as a personal and professional endeavor. In this way, the competition supports some of the primary goals of CL, to strengthen community and to build capacity. Students saw GIFs as a way to feel connected in large university setting. Multiple interviewed students spoke about the impact of seeing UNC through the eyes of their fellow students. In her interview Ronnie shared, "If I saw things that I related to campus, I was like, 'I'm not the only person who feels the way.' ... It's cool that people might think the same way."

Students also saw GIF-making as a useful way to connect to personal communities or build professional skills. Students felt that making their own GIFs allowed them portray ideas and emotions that other creators had yet to portray or create GIFs that they simply could not find. The competition offered a chance for students to create media that is easily shared and used outside of the traditional classroom or library context. Cleo shared, "I never put together, 'Oh I can make some content *and* use it." Overall, students found value in this competition as a community connector and skill building exercise. Student value for "GIFABLE UNC" is encouraging and supports continued testing of this type of competition.

New Media Attributes

The final research question of this study is how students felt the GIF acted as a new media type within the competition. For this question, the study used the attributes of new media as listed in the CL agenda. The first of these attributes, "Foster Engagement & Self Expression" was the strongest of those presented in the competition. The GIF medium has increasingly become known as a platform for reaction and expression and students expressed awareness of this facet of the medium and an excitement for engaging with it. Students also shared that GIF-making was an adaptable skill to the way they learn and create. This response beyond being one of the most successful, is also one of the most exciting.

High levels of student engagement with the format make GIFs a viable medium for encouraging student participation and excitement in many forms of library outreach and educational activities. Students are interested in learning more about this medium which opens a door for librarians and educators to start further conversations and activities around design, copyright, expression, media, and more. Their adaptability for students also encourages further exploration in how GIFs can be used both for supporting individual learners and restructuring large scale competitions like "GIFABLE UNC". Students also appear to be favorable of their exposure to knowledge and learning experiences through the competition. Students were excited to learn about GIF-making and reported learning about what was going on in the community, specifically at libraries, through the competition and the GIF gallery.

For "Accessibility to Knowledge and Learning Experiences," students also reported that mentors were generally easy to find and that online resources were helpful in GIF creation. However, like expanding social support, there appears to be much room to grow in how effectively event staff can help students to access information and find relationships. Mentorship is a key facet to Connected Learning environments and as previously mentioned in discussing the design of CL in "GIFABLE UNC," mentorship was reserved almost exclusively to library staff. For "GIFABLE UNC" to succeed on this front, access to mentorship and resources must expand more into and outside the UNC community to encourage further diversity, creativity, and capability in student work.

"GIFABLE UNC" was able to "Expand Social Support for Interests" through its online presence, but students expressed that they were more interested in winning or gaining social acceptance from their GIFs rather than gaining support for their interests. The online gallery was also limited in what it could offer student creators and the community audience. For GIFs to succeed as a medium, the social interaction contexts surrounding them must allow for conversation and remix to occur. The competition's gallery allowed users to vote on GIFs and download one another's creations. However, student names were not posted with their GIFs and "hearting" a GIF was the only form of reaction built into the interface. Social media sites and messaging platforms offer spaces for students to share work with peers and mentors, but as Itō et al. (2013) point out it is vital to create spaces that are "...centered on networks of interest and expertise that have high standards for good work and credible information" (p. 60). By creating an online gallery specific to the competition, students have a more structured environment for feedback and shared purpose. However, for "GIFABLE UNC" to provide support and

continue to deepen and increase the value of that support, the online interface must allow for better interactions among creators, audiences, and mentors.

The final attribute of GIFs for the competition arrives in two parts, "Expanding Diversity" and "Building Capacity." The consensus among students was that they did not actively notice diversity in the competition, but they believe this medium is primed for diverse stories. Students appear to draw parallels between the self-expression of the format and its capabilities for diverse stories and communities. The next question is of course, "Why is diversity not being witnessed?" Was it not present in the GIFs of the competition? Are students not actively looking for diversity in the gallery and at events? If it is absent, how can that be changed? The first approach to better diversity is to return to the beginning of this competition and analysis and ask, "Who is participating?" In tandem with the interconnected nature of this pedagogy, the library should continue efforts to seek out diverse student, academic, and professional groups to participate and facilitate GIF-making in the competition.

"Building Capacity" as previously mentioned, was another one of the strongest elements of the competition. Students reported learning many design skills in the competition and feeling like those skills will be used again, possibly in other contexts, including personal and professional. Developing design skills is one of the ultimate goals of the program that created this competition and building skills for the future is an ultimate goal of the university setting and library as a whole.

CONCLUSION

As the world continues to become more digital, social, and visual in its communication and community practices, it will become increasingly imperative for students to have exposure to and skill building around developing digital literacies. Itō et al. (2013) describe this burgeoning media environment as:

"...media ecology does not just describe the world of leisure and entertainment...Like the distribution of water or electricity, the media and communication system underpins the spheres of work, education and commerce...The ecological metaphor illuminates our understanding of the digital media landscape by focusing not on the learning potential of individual media, but, instead, on how young people's actions, individually and collectively, intersect with key institutions in their lives and a wider array of media and communication possibilities open to them." (p. 41).

GIFs represent an engaging way to introduce students to valuable design concepts and digital community practices. They have also proved their value as a way for students to engage in self-expression and community understanding. By collectively documenting the community in a stimulating format like GIFs, students can see their world through new eyes and both learn about and confirm their place in a much large university environment. And while GIFs are a viable format, it is important to remember that they are representative of current trends in communication and community and could be replaced or become obsolete. Itō et al. (2013) points out that, "it is important to

recognize that the media are themselves a product of society, and thus are shaped by fundamental processes of social change. The same technologies can be taken up for progressive or more traditional educational goals" (p. 40). GIFs today are an evolving, engaging, and educational format, a fact which could and will almost certainly change in the future. As media objects develop to reflect cultural, social, and communicative change, educators must adapt research on CL and new media to fit each developing media and possibly discard past objects. Lessons gained around the GIF may come to inform future media objects remerging from old formats or developing in ways none have yet to predict.

And while this competition concentrated on student response, it might also hold value for the educators and staff acting as mentors. Itō et al (2013) propose that "understanding youthful perspectives on digital networking opportunities is crucial if [educators] are to enable connected learning." (p. 31). Just by engaging with students in new digital spaces and events, educators may gain insight into and be inspired to create new and engaging connected learning opportunities. Itō et al (2013) also believe that CL not only exists to benefit the health and education of the individual, but also the community. Further research is need on how CL environments, for example a competition like "GIFABLE UNC", effect university communities in the long term.

GIFs are likely in the short term to continue growing in popularity and permanence, just as Connected Learning is also likely to grow as a pedagogy both in reach and in depth. Itō et al (2013) describe the creation of CL environments by saying, "connected learning environments are a complex alchemy of designed and emergent

elements in a process of experimentation and flux. The frameworks for understanding key components of connected learning environments are presented in this spirit of experimentation and iteration" (p. 62). This competition's experimentation with CL design and new media marks an early step in testing the structures and impact of these developing facets and encourages further experimentation and study.

Warren may have described GIFs best in his interview when he said, "[GIF's are] a good way of conveying a short message. It's a useful little file. It does a lot. It's like a picture is worth a thousand words, but a GIF is worth a million." GIFs are often a large message in a short frame and Connected Learning is an ever-growing pedagogy and in an equally as evolving framework. The design criteria and new media attributes of CL were moderately successful in the competition, but overall showed a need for continued work and restructuring. However, in the eyes of students participating in "GIFABLE UNC", this necessary growth is not without potential. In summing up the Connected Learning framework, Itō et al. (2013) shared, "The whole is far greater than the sum of its parts" (p. 78). Just like a student creating a GIF, educators can experience great joy and value in the whole project, in this case a large-scale library design competition, but by working to ensure quality and creativity in every frame (photographic or pedagogical) educators and students can learn, create, and share in increasingly new and dynamic ways.

NOTES

¹ Where necessary, participant quotes were edited to remove identifying information and filler words (e.g. "uhm," "like")

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APPENDIX

Appendix 1: Survey

This survey is collecting information about participants' experience in the "GIFABLE UNC" project. The estimated length of the survey is 15-20 minutes.

The first 10 participants to complete the survey will receive a \$10.00 Amazon gift card. The first 10 participants to complete the survey AND complete a follow up interview will receive another \$10.00 Amazon gift card. Combined, participants can receive up to \$20.00 in Amazon gift cards.

We appreciate your participation.

What year are you at UNC?
O First Year (1)
O Sophomore (2)
O Junior (3)
O Senior (4)
O Graduate Student (5)
O Doctoral Student (6)
Other (7)
What is your area of study? (Major, minor, program, etc.)

Do you identify with any minority groups?			
○ Yes (1)			
O No (2)			
If you feel comfortable sharing, which groups do you identify with?			
On average, how often do you send or post GIFs?			
O Daily (1)			
○ 4-6 times a week (2)			
2-3 times a week (3)			
Once a week (4)			
A couple times a month (7)			
A couple times a year (8)			
O Never (5)			
Unsure (6)			

On average, how often do you view or receive GIFs?
O Daily (1)
4-6 times a week (2)
2-3 times a week (3)
Once a week (4)
• A couple times a month (7)
A couple times a year (8)
O Never (5)
O Unsure (6)
How did you first hear about the "GIFABLE UNC" competition?
How did you first hear about the "GIFABLE UNC" competition? O Social Media (1)
O Social Media (1)
Social Media (1) Flyer/Poster (2)
Social Media (1)Flyer/Poster (2)Email/Listserv (3)
 Social Media (1) Flyer/Poster (2) Email/Listserv (3) Workshop/Event (4)
 Social Media (1) Flyer/Poster (2) Email/Listserv (3) Workshop/Event (4) Librarian (6)

Did you view GIFs in the "GIFABLE UNC" gallery other than your own?		
O Yes (1)		
O No (2)		
Did you vote in the "GIFABLE UNC" contest?		
○ Yes (1)		
O No (2)		
How did you feel about the prospect of making GIFs for the competition?		
Extremely comfortable (1)		
O Somewhat comfortable (2)		
O Neither comfortable nor uncomfortable (3)		
O Somewhat uncomfortable (4)		
Extremely uncomfortable (5)		
How did you feel about the prospect of entering your GIF into the competition?		
C Extremely comfortable (1)		
O Somewhat comfortable (2)		
Neither comfortable nor uncomfortable (3)		
O Somewhat uncomfortable (4)		
Extremely uncomfortable (5)		

Did you invite or encourage others to participate in the competition?
○ Yes (1)
O No (2)
Were you invited or encouraged by others to participate in the competition?
O Yes (1)
O No (2)
Overall, how did you feel about participating in the competition?

Which of the following did you learn during the competition? Mark all that apply		
	Design Skills (1)	
	Research Skills (2)	
	UNC History (3)	
	UNC Present (current programs, services, communities/etc.) (4)	
	Community (learned new things about city/state/region/etc.) (5)	
	Interpersonal (learned new things about friends/peers/mentors/etc.) (6)	
	Library (learned new things about staff, spaces, materials, services, etc.) (7)	
	Other (8)	
	I learned nothing new (9)	

Which of the following design skills did you learn during the competition? Mark all that apply		
	Timing/Motion (1)	
	Framing (2)	
	Color/Transparency (3)	
	Figure Placement (Background/foreground) (4)	
	Layering (5)	
	Design Software (Photoshop, After Effects, etc.) (6)	
	Design App (GIPHY CAM, Boomerang, etc.) (7)	
	Other (8)	

Which of the following research skills did you learn during the competition? Mark all that apply		
Searching Strategically (1)		
Seeing Connection Among Sources (2)		
Formulating Questions (3)		
Creating Keywords (4)		
Valuing the Work of Others (5)		
Evaluating Information (6)		
Other (7)		
How much experimentation did your process involve?		
O No experimentation (1)		
O Not a lot of experimentation (2)		
O Neither a lot of experimentation nor not a lot of experimentation (3)		
O Some experimentation (4)		
○ A lot of experimentation (5)		

How meaningful to your academic education did you find this experience?	
O Not meaningful (1)	
O Not very meaningful (2)	
O Neither meaningful nor not meaningful (3)	
O Very meaningful (4)	
Extremely meaningful (5)	
Overall, how do you feel about what you learned by participating?	
Did you explore your own interests in creating your GIF(s)?	
O Yes (1)	
O No (2)	
How important was it to you to create GIF(s) about your personal interests?	
C Extremely not important (1)	
O Not very important (2)	
O Neither important nor unimportant (3)	
O Very important (4)	
Extremely important (5)	

How important was it to you to share GIF(s) about your personal interests?		
O Extremely not important (1)		
O Not very important (2)		
O Neither important nor unimportant (3)		
O Very important (4)		
O Extremely important (5)		
Did your GIF creation process overlap with any of the following academic experiences? Mark all that apply.		
Class lectures (1)		
Class assignments (2)		
Major/Minor subject area (3)		
Undergraduate Research (4)		
Other (5)		
None (6)		

How much did your "GIFABLE UNC" experience overlap with your academic experiences?		
O A great deal (1)		
O A moderate amount (3)		
O A little (4)		
O None (5)		
Did your GIF creation process overlap with any of your extracurricular activities? Mark all that apply.		
Clubs (1)		
Athletics (2)		
□ Job (3)		
Activism (4)		
Religious Organization (5)		
Social Life (6)		
Other (7)		
None (8)		

How much did your "GIFABLE UNC" experience overlap with your extracurricular activities?
O A great deal (1)
O A moderate amount (3)
O A little (4)
O None (5)
Did your GIF creation process overlap with any personal hobbies or interests?
O Yes (1)
O No (2)
How much did your "GIFABLE UNC" experience overlap with your hobbies or interests?
O A great deal (1)
O A moderate amount (3)
O A little (4)
O None (5)

that

Did you receive feedback from any of the following groups on your GIFs? Mark all apply.		
Mentors (professors, librarians, supervisors, etc.) (1)		
Peers (classmates, co-workers, etc.) (2)		
Friends (3)		
Family (4)		
Other (5)		
None (6)		
How valuable was the feedback you received?		
O Not valuable (1)		
O Not very valuable (2)		
O Neither valuable nor not valuable (3)		
O Very valuable (4)		
C Extremely valuable (5)		

Which tools did you use to make your GIFs? Mark all that apply.	
Ph	otoshop (1)
GI	PHY App/Mobile (2)
GI	PHY Online (3)
Во	pomerang (Instagram) (4)
Liv	ve Photo (Apple) (5)
Oti	her (6)
Un	nsure (7)
How easy was it to make GIFs?	
C Extremely easy (1)	
O Slightly easy (3)	
O Neither easy nor difficult (4)	
O Slightly difficult (5)	
O Extro	emely difficult (7)

How easy were GIF tools to use?	
O Extremely easy	
O Slightly easy (3)	
O Neither easy nor difficult (4)	
O Slightly difficult (5)	
O Extremely difficult (7)	
O Unsure (8)	
How challenging did you find the competition?	
O Extremely challenging (1)	
O Very challenging (2)	
O Neither challenging nor not challenging (3)	
O Not very challenging (4)	
O Not challenging at all (5)	
Do you think you will continue to use skills you learned during this competition?	
O Yes (1)	
O No (2)	
O I didn't learn anything (3)	

How likely are you to continue making GIFs?
C Extremely likely (1)
○ Slightly likely (3)
O Neither likely nor unlikely (4)
O Slightly unlikely (5)
○ Extremely unlikely (7)
How interesting did you find the prospect of a GIF making contest?
O Extremely interesting (1)
O Very interesting (2)
O Neither interesting nor uninteresting (3)
O Very uninteresting (4)
O Extremely uninteresting (5)
How engaging did you find the GIF making process?
○ Extremely engaging (1)
O Very engaging (2)
O Neither engaging nor unengaging (3)
O Very unengaging (4)
Extremely unengaging (5)

How engaging did you find sharing GIFs?
O Extremely engaging (1)
O Very engaging (2)
O Neither engaging nor unengaging (3)
O Very unengaging (4)
O Extremely unengaging (5)
How adaptable were GIFs to your learning style?
O Extremely adaptable (1)
O Very adaptable (2)
O Neither adaptable nor not adaptable (3)
O Not very adaptable (4)
O Extremely not adaptable (5)
How adaptable were GIFs to your creative style?
O Extremely adaptable (1)
O Very adaptable (2)
O Neither adaptable nor not adaptable (3)
O Not very adaptable (4)
O Extremely not adaptable (5)

Do you feel GIFs are a medium where you can express yourself?
O Yes (1)
O No (2)
Which do you prefer
which do you prefer
O Sharing GIFs, you created (1)
O Sharing GIFs created by someone else (2)
O Neither (3)
Can't decide (4)
Overall did you find GIFs to be a valuable medium to work with?
○ Yes (1)
O No (2)

Which materials did you use for your GIF creation? Mark all that apply.		
	Self-created video (1)	
	Video from a source (Student television, YouTube, etc.) (2)	
	Self-created photos (3)	
	Photos from a source (UNC Archives, Daily Tar Heel, etc.) (4)	
	Self-created illustrations (5)	
	Illustrations from a source (GIPHY creator, UNC Archives, etc.) (6)	
	Other (7)	
How easy was it to locate or create materials for your GIF(s)?		
C Extremely easy (1)		
O Somewhat easy (2)		
O Neither easy nor difficult (3)		
O Somewhat difficult (4)		
Extremely difficult (5)		

O UNC Archives (1)
O Personal Materials (2)
Other Library Resources (3)
O Social Media (4)
○ GIF making app (5)
O Print Media (6)
Other (7)
Which resources did you use to learn how to make GIFs? Mark all that apply
"GIFABLE UNC" website (1)
Online guides (2)
Online videos (3)
Online communities (4)
Online communities (4) Mentor (librarian, friend, etc.) (7)

How easy was it to locate resources on how to make GIFs?
O Extremely easy (1)
O Somewhat easy (2)
O Neither easy nor difficult (3)
O Somewhat difficult (4)
O Extremely difficult (5)
How valuable was GIF making as a learning experience?
O Extremely valuable (1)
O Slightly valuable (3)
O Neutral (4)
○ Slightly not valuable (5)

How valuable was GIF making to connect to others?
C Extremely valuable (1)
O Slightly valuable (3)
O Neutral (4)
O Slightly not valuable (5)
O Extremely not valuable (6)
How valuable was GIF making to connect to community resources?
How valuable was GIF making to connect to community resources? Extremely valuable (1)
Extremely valuable (1)
Extremely valuable (1)Slightly valuable (3)

Which types of mentors did you engage with for GIF creation? Mark all that apply.
Librarian (1)
Professor (2)
Teaching Assistant (3)
UNC Staff (4)
Peer Mentor (co-worker, classmate) (5)
Friend (8)
Other (6)
None (7)
How easy was it to find help from mentors for creating your GIFs?
○ Extremely easy (1)
O Somewhat easy (2)
O Neither easy nor difficult (3)
O Somewhat difficult (4)
O Extremely difficult (5)
I did not find any help from mentors/peers (6)

How valuable was the help from mentors in your GIF creating process?
O Extremely valuable (1)
O Very valuable (2)
O Neither valuable nor not valuable (3)
O Not very valuable (4)
O Extremely not valuable (5)
O I did not receive help (6)
Did you share your GIF(s) on platforms other than the "GIFABLE UNC" website?
Yes (1)
□ No (2)
Did GIF creation help you find or engage with new communities?
O Yes (1)
O No (2)

How likely are you to continue sharing GIFs with your community?
O Extremely likely (1)
O Somewhat likely (2)
O Neither likely nor unlikely (3)
O Somewhat unlikely (4)
O Extremely unlikely (5)
Did making GIFs help you to share your interests with others?
O Yes (4)
O No (5)
Did you discover any new interests while making GIFs?
○ Yes (4)
O No (5)

How much diversity did you witness or engage with in your GIF creation process
O A great deal (1)
O A lot (2)
O A moderate amount (3)
O A little (4)
O None (5)
How much diversity did you witness or engage in your GIF sharing experience?
O A great deal (1)
O A lot (2)
O A moderate amount (3)
O A little (4)
O None (5)
How strong/weak do you feel GIFs are as a medium for sharing diverse stories?
O Very strong (1)
O Moderately strong (2)
O Neither strong nor weak (3)
O Moderately weak (4)
O Very weak (5)

	Yes (1)	No (2)
Creating (1)	\circ	\circ
Sharing (2)		\circ
Viewing (3)		\circ
ıs power taken away from yo	ou by GIFs in any of the follo	wing ways?
	Yes (1)	No (2)
Creating (1)	0	\circ
Sharing (2)	0	0
Viewing (3)	0	\circ
you see GIFs as a viable me	edium for sharing diverse stor	ries?
○ Yes (1)		
O No (2)		
you see GIFs as an empowe	ering medium?	
O Yes (1)		
O No (2)		

How valuable are the skills you learned while creating GIFs?
O Very valuable (1)
O Somewhat Valuable (2)
O Neither valuable nor not valuable (3)
O Somewhat not valuable (4)
O Not valuable (5)
How likely are you to use skills you learned while making GIFs in a professional context?
O Extremely likely (1)
O Somewhat likely (2)
O Neither likely nor unlikely (3)
O Somewhat unlikely (4)
Extremely unlikely (5)
How likely are you to use skills you learned while making GIFs in a personal context?
C Extremely likely (1)
O Somewhat likely (2)
O Neither likely nor unlikely (3)
O Somewhat unlikely (4)
Extremely unlikely (5)

How likely are you to use skills you learned while making GIFs in an academic context?
C Extremely likely (1)
O Somewhat likely (2)
O Neither likely nor unlikely (3)
O Somewhat unlikely (4)
C Extremely unlikely (5)
How likely are you to use skills you learned while making GIFs in other design contexts?
C Extremely likely (1)
O Somewhat likely (2)
O Neither likely nor unlikely (3)
O Somewhat unlikely (4)
Extremely unlikely (5)

If you are willing to participate in an interview about your experience, please enter your name and email below and press the next button at the bottom of the page.

The first ten participants to be interviewed will receive a \$10 Amazon gift card in addition to a gift card for completing the survey. Note, by agreeing to an interview and entering your name below, your survey answers will no longer be anonymized.

Name (1)		 	
Email (2)			

Q118 Note: If you do not hit the Next button at the bottom of the page, your name and email entry above will not be recorded by the system.

Q105

If you are not interested in participating in a follow up interview, head to the following form to share your name and email so you can be recorded for the chance to receive a \$10.00 Amazon gift card for completing the survey.

If you have any questions about this survey, please contact Kelsey Hammer at [email].

Appendix 2: Interview Guide

This study is for the School of Information and Library Science and is seeking information about student experience in the Undergraduate Library's "GIFABLE UNC" competition. All information from this interview with me anonymized and there are no right and wrong answers to any questions that will be asked. The information from this survey will be used in a master's paper on the possible value or impact this type of competition might or might not have to a university community. You are free to stop this interview at any time and free to ask me questions after this introduction or any time during the interview. The interview will last about 30 minutes and at the end you will receive \$20 in Amazon gift cards for your participation in the survey and interview for this research project.

Is it okay to record our session? This recording will only be used to create a transcript of your words. After the transcript is created, the recording will be deleted, and the recording will only be accessed and analyzed by me.

I may also be taking notes or referring to my interview guide during our session. So, you may see me look down at times, but I am listening and just making marks and notes of what you share. This interview is also free form, so while I have prepared questions we can go where the discussion takes us.

- 1. Tell me about the GIFs you made for the competition?
- 2. Had you made GIFs before the competition?
- 3. How do you normally interact with GIFs outside the competition?
- 4. How did you find out about the competition?
- 5. What do you like about GIFs?

Participation is for Everyone

- 1. How did you feel about participating in the competition?
- 2. Did you think it would be easy, hard, fun?
- 3. Do you feel that this competition is something any student could do? Why?

Learning Happens by Doing

- 1. What types of skills did you learn during this competition?
- 2. Did you find yourself experimenting a lot while recording?
- 3. What types of products did you use to create your GIFs?
- 4. What were affordances or challenges with those tools?
- 5. Did you know right away what you wanted to you do or did the possibilities seem vast?

Challenge is Constant

- 1. What was your process for deciding which GIFs to make?
- 2. Did you feel a need to share your GIFs or would creation be enough?
- 3. Do you feel GIFs are something you need to know how to do?

Everything is Interconnected

- 1. How did the GIFs you made line up with your life in anyway?
 - a. If so, how?
- 2. What type of support did you use for learning to make GIFs?
- 3. Did you receive feedback on your GIFs?
- 4. Did that help you in creating the next GIF?

Foster Engagement & Self-Expression

- 1. Tell me about your creative process in making GIFs?
- 2. Did you find that GIF making worked well with your learning style and creative style?
 - a. How could it have been better?
- 3. Do wish the competition time frame had been different?
 - a. Shorter or longer?
- 4. Do you think GIFs are good tools for self-expression?
 - a. Why?

Increase Access to Knowledge and Learning Experiences

- 1. Did you use any library or community resources to help with your GIF making?
- 2. Did you feel community support during the competition?
- 3. Did you wish there had been more or less support?
- 4. Were there any resources (community, materials) you wish you could have had access to?
- 5. Did this competition introduce you to anything new about the Libraries?

Expand Social Support for Interests

- 1. Do you use and share GIFs on social media outside the competition?
- 2. What do you like about social media?
- 3. Do you find social media to be a place where students can make connections?
- 4. If not, where do find support for your interests?
- 5. Did you enjoy sharing your GIFs with the community online?
- 6. How did you feel about the feedback you received?
- 7. Do you think GIFs are good for connecting?

Expand Diversity/Build Capacity

- 1. Did you think GIFs are an empowering medium?
- 2. Did you witness any diversity in the competition?
- 3. Do you think GIFs are good media for diverse storytelling, why or why not?
- 4. Do you think GIFs are a valuable skill for future professions or for school?
- 5. Do you think the skills are applicable?

Final

- 1. Overall did you find this competition to be valuable? Why or why not?
- 2. Is there a GIF you wish you could create that you weren't able to?
- 3. If you had unlimited resources, what is a dream GIF you would make?
- 4. If you learned something during this experience will you continue to use that knowledge in other areas of your life?
- 5. How likely are you to continue to make GIFs?
- 6. Would you rather use GIFs made by you or someone else?

Appendix 3: UNC IRB Approval



OFFICE OF HUMAN RESEARCH ETHICS
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Chapel Hill, NC 27599-7097
(919) 966-3113
Web site: ohre.unc.edu
Federalwide Assurance (FWA) #4801

To: Kelsey Hammer School of Information and Library Science

From: Office of Human Research Ethics

Date: 9/11/2017

RE: Notice of IRB Exemption

Exemption Category: 2. Survey, interview, public observation

Study #: 17-2081

Study Title: Case Study: GIF Making as a Microcosm for Connected Learning for University Students

This submission has been reviewed by the Office of Human Research Ethics and was determined to be exempt from further review according to the regulatory category cited above under 45 CFR 46.101(b).

Study Description:

Purpose: To examine "GIFable UNC," a GIF-making competition held at the University of North Carolina in the Fall of 2017, and how effective the creation and sharing of GIFs (animated, looping image-based media) is as a microcosm for Connected Learning. The pedagogy of Connected Learning is multifaceted and developing, but many of its foundational principles, including the power of self-interest, open networks, shared purpose, and production-centered activity, align with GIF culture and the capabilities of library research and design services to provide tools, support, and material. This competition represents an early step in observing GIF making as a threshold for connected learning practices.

Participants: Study participants will include undergraduate and graduate students who acted as participants in "GIFable UNC" in the Fall of 2017 by submitting official entries into the competition.

Procedures (methods): This is a mixed-methods, design based study that will include surveys and interviews as the primary means of data collection.

Investigator's Responsibilities:

If your study protocol changes in such a way that exempt status would no longer apply, you should contact the above IRB before making the changes. There is no need to inform the IRB about changes in study personnel. However, be aware that you are responsible for ensuring that all members of the research team who interact with subjects or their identifiable data complete the required human

subjects training, typically completing the relevant CITI modules.

The IRB will maintain records for this study for 3 years, at which time you will be contacted about the status of the study.

The current data security level determination is Level II. Any changes in the data security level need to be discussed with the relevant IT official. If data security level II and III, consult with your IT official to develop a data security plan. Data security is ultimately the responsibility of the Principal Investigator.

Please be aware that approval may still be required from other relevant authorities or "gatekeepers" (e.g., school principals, facility directors, custodians of records), even though the project has determined to be exempt.

CC:

Casey Rawson, School of Information and Library Science