

Playing with LEGO®, Learning about the Library, & “Making” Campus Connections: The Rutgers University Art Library Lego Playing Station, Part One

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Article begins on next page

Title: Playing with LEGO®, Learning about the Library, & “Making” Campus Connections: The Rutgers University Art Library Lego Playing Station, Part One

As libraries continue to grow and change in the 21st century, we are seeing an increased emphasis on outreach, engagement, creativity, and innovation for academic libraries. The author of this article believes that these ideas are crucial to the future of academic libraries and that makerspaces are one way for academic libraries to realize these ideas. Makerspaces can be affordable, don't need to take up a lot of space, and have potential to be catalysts for creating partnerships within one's community (Lotts, 2015). Engaging making events can help stimulate broader conversations among library patrons and library employees about the values of academic libraries. Further, makerspaces can be a way for library liaisons to connect with their faculty, students, and staff.

In April 2015, the *State of America's Libraries Report*, released by the American Libraries Association, noted that academic, public, and school libraries are changing and experiencing a shift in how they are perceived by their communities. Also noted the trend for makerspaces provide evidence that libraries are continuing to evolve the traditional focus on collections (Morales, 2015). In an article *Making Room for Informal Learning*, by Greg Landgraf, Sarah Winchowsky states, “Not all learning comes out of a book, and libraries looking to have the maker movement flourish need to embrace the informal learning that's taking place. Making is not always quiet or orderly or clean. You also don't need big fancy equipment in a dedicated space to have a successful program. It's being on the floor with library patrons” (Landgraf, 2015). Makerspaces are a place that provide an opportunity for individuals to experience hands-on learning in a community-based setting.

The Rutgers Art Library Lego Playing Station was installed to stimulate creativity within the Rutgers University Libraries as well as be a means to more broadly connect with the Rutgers community. This article will discuss makerspaces in academic libraries, how they can be created with little money or space, and how the Art Library Lego Playing Station has created unexpected partnerships throughout the Rutgers campuses.

The following activities and research were presented at the *ACRL Creating Sustainable Community* conference in Portland, Oregon, 2015 (see Lotts, 2015). In part two of this article the author will continue to look at the impact of makerspaces in academic libraries and discuss the project *#LeGOMAKE*. For the *#LeGOMAKE* tour, the author will visit 20 academic libraries to facilitate workshops, which engage library faculty and staff about the power of creative play and team-building. These workshops will look at how engaging activities and pop-up making spaces can benefit academic libraries that are looking to create change within in their own organizations as well as the great university community.

Literature Review

Authors currently writing on makerspaces, such as Moorefield-Lang (2015), and Rich (2014), acknowledge the dearth of established scholarly literature when it comes to makerspaces in academic libraries. This is most likely because makerspaces are a fairly new idea, believed to have emerged in 2005 as an offshoot from the do-it-yourself (DIY) movement (Fisher, 2012). Also this could be because makerspaces seem to have been a movement that was first embraced in public libraries. As early as 1873, making-centric spaces began in New York with the Gowanda Ladies Social Society, which was initially formed as a sewing, knitting, and book-discussing social circle, and which later became the Ladies Library Association, receiving a state library charter as the Gowanda Free Library in 1900 (A History of Making, 2013). Although it is

unlikely that the Gowanda free library had a 3D printer, it is important to note that this library came to fruition over the act of making; in this case, a sewing and knitting circle (Lotts, 2015). The lack of scholarly literature on makerspaces in academic libraries is also evident in John Burke's 2013 web-based survey of library makerspaces, in which only 36% of the 109 makerspaces covered were located in academic libraries, and 46% were less than a year old (Burke, 2013). Alternately, libraries have always had making-centric programs and activities. What's different now is that the perception of these programs is changing and expanding (Landgraf, 2015).

What is a Makerspace?

There is no formal definition of a makerspace. When searching the Merriam-Webster dictionary online, the author was unable to find a definition for makerspace. Wikipedia has no definition for makerspace, but re-directs individuals to the term hackerspace, which is defined as a community space where people with common interests in technology come together to collaborate ("Hackerspace"). According to Makerspace.com, "[M]odeled after hackerspaces, a makerspace is a place where young people have an opportunity to explore their own interests, learn to use tools and materials, and develop creative projects. It could be embedded inside an existing organization or standalone on its own. It could be a simple room in a building or an outbuilding that is closer to a shed. The key is that it can adapt to a wide variety of uses and can be shaped by educational purposes as well as the students' creative goals" (Hamilton, 2012). Library as Incubator says, "[M]akerspaces are collaborative learning environments where people come together to share materials and learn new skills...makerspaces are not necessarily born out of a specific set of materials or spaces but rather a mindset of community partnership, collaboration, and creation (Hamilton, 2012). To put it more simply, Mark Hatch, (2014) CEO

of TechShop (a leader in commercial makerspaces) states, “A makerspace is a center or workspace where like-minded get together and make things” (Hatch, 2014, p.13). Another interesting definition or perhaps clarification of the differences between makerspaces, fablabs, hackerspaces, and TechShops can be found in an internet posting by Ellyssa Kroski (2014). She notes that Fablabs are a type of makerspace that focuses on providing access to electronic equipment such as laser cutters, routers, and milling machines. Hackerspaces are places where computer programmers congregate to socialize and collaborate. TechShops are a chain of for-profit spaces that charge membership fees to use their high tech industrial tools. Lastly, “Makerspaces are creative, DIY spaces where people can gather to create, invent, and learn” (Kroski, 2014). Makerspaces are places where individuals come to solve problems with hands-on learning.

What’s in a Makerspace?

When discussing what can be found in a makerspace there seem to be two different camps. Many feel as though makerspaces are a place where a 3D printer and other technology is housed. However, this author sees a deeper meaning of makerspaces; being it’s not about what’s in the space, but about what’s happening in the space. In a blog post, *Your Curriculum is Not About 3D printers or Zombies*, Swanson interviewed Justin Hoenke, who believes, “if libraries want to get into the maker movement, they don’t really need a 3D printer. They really just need a roll of duct tape and some raw materials to use in building” (Swanson, 2014). From Burke’s survey of makerspaces in 2013, we see a variety of materials that can be found in makerspaces, including computers, 3D printers, video and photo editing software, other computer software and programs, arts & crafts, digital music recording, scanning, and more (Burke, 2015). Although Burke’s survey points to the idea that makerspaces in academic libraries are more about digital

creation, this author strongly believes that it's not what's in a makerspace, but the principles of making that are crucial to the success of these spaces as well as of the community and the individuals using the space.

Makerspaces in Academic Libraries

There are very few studies on makerspaces in academic libraries. As noted previously, this is most likely due to the newness of makerspaces, particularly in academic libraries. This author believes the biggest questions facing the making of makerspaces in academic libraries is where they fit in the mission of an academic library, and how can a makerspace “work” for or in a library?

Makerspaces are important because they give individuals the opportunity to learn with one's hands and to play, which are generally activities that are encouraged only when studying art, theatre, music, and dance (Fisher, 2012). Critical thinking skills and working with one's hands can be seen as important skills for individuals undertaking scholarly research. In addition, we are beginning to see more of our patrons and scholars think about the ideas regarding information, from creation to consumption. Information creation is a process that involves problem-solving and critical thinking, which are also skills that are crucial to makerspaces.

Fisher also believes that currently there is a shift in the academic landscape, as we are moving from a traditional teaching culture to more active learning techniques (Fisher, 2012). Perhaps one of the reasons we see academic libraries embrace makerspaces is because we are moving to a culture of self-directed student learning, which is similar to the learning experience of many individuals currently facing scholarly research. Makerspaces can also have a great significance for academic libraries as a place to learn more about open access and copyright, which are topics

that are on the tips of many research librarians' tongues. But perhaps one of the most prominent reasons why academic libraries are embracing makerspaces is that they are both centered on growth, learning, and exploration through cross-disciplinary collaboration (Fisher, 2012).

At the Association for College & Research Libraries 2015 Conference in Portland, Oregon, Burke presented a paper entitled, *Making Sense: Can Makerspaces Work in Academic Libraries?* Burke believes that makerspaces are a “mechanism for encouraging students to experiment and learn beyond the classroom and outside the normal structure of their assignments.” (Burke, 2015, p. 497) Burke also states that makerspaces can be venues for learning specific skills relating to science, technology, engineering, and mathematics (STEM). Although this is true, the author of this article is concerned that Burke is missing the aspect of Art & Design (STEM to STEAM), which is a crucial concept in makerspaces, particularly considering the ideas of information from creation to consumption.

In his survey of makerspaces from 2013, Burke notes that academic libraries tend to lean towards digital creation when it comes to makerspaces, while excluding activities that involve physical making such as arts and crafts, as well as Legos (Burke, 2015). Although this author has no reason to doubt Burke's findings, she has concern that Burke's research is missing a large part of the “making culture” because he chose to limit his survey by studying makerspaces, thus leaving out much of the making programming already happening in academic libraries. Burke's (2015) work as well as Caitlin Bagley's *Makerspaces: Top Trailblazing Projects* (ALA, 2014) are both worthy studies of how to create a makerspace in an academic library. In her book, Bagley discusses nine libraries that have makerspaces, including three that are in academic libraries. She also provides tips on what questions and concerns to think about when creating a makerspace.

An idea that is prevalent when it comes to making in academic libraries is the pop-up making space. In the article entitled, *Implementing a Culture of Creativity: Pop-up Making Spaces and Participating Events in Academic Libraries*, this author, discusses the idea that makerspaces do not need to be located in a permanent space. Makerspaces can be ephemeral events or spaces that can be taken down, easily put up, and in some cases be mobile, and sent from one library or space to another. Pop-up making spaces can be affordable, engaging, fun, as well as a way for library faculty and staff to engage with library patrons (Lotts, 2015). Also in this article the author provides three in-depth examples of pop-up makerspaces in academic libraries including Edible Books, Holiday Card Making, and Polynomiography, as well as a list of additional making events happening in academic libraries across the United States. Pop-up making spaces do not need to be expensive or involve technology to build community or highlight the scholarship being created on college campuses (Lotts, 2015).

In a 2015 study, Moorefield-Lang interviewed 12 librarians about makerspaces. Four of these interviews discuss makerspaces in academic libraries. Moorefield-Lang notes that there were multiple concerns about staffing and sustainability of makerspaces, which is not surprising as many makerspaces are found in dedicated spaces that include expensive technology that can break own, require maintenance, or need assistance to use (Moorefield-Lang, 2015). Moorefield-Lang also notes that the common themes makerspaces emphasize are peer-to-peer learning, as well as the opportunity to learn, create, use, and share in new ways. One respondent from the interviews noted that being willing to be an innovator, problem-solver, and collaborator is necessary for a librarian to find success employing a makerspace (Moorefield-Lang, 2015). Each library makerspace has its own story, and as noted in many aspects of the library world, what works at one library might not work at another.

In *A Survey of Makerspaces in Academic Libraries*, a master's thesis by Samantha N. Rich, the author sent out a survey of 10 questions about the role of makerspaces in academic libraries. The author's intent was to learn more about how makerspaces relate to a libraries mission, how makerspace are used as a pedagogical tool, and why academic libraries are good locations for makerspaces. The author received responses from 12 academic librarians in 8 different academic library makerspaces (Rich, 2014). From her research, similar to that of Burke, the author confirmed that makerspaces in academic libraries are fairly new. Some of the librarians surveyed also noted that accessibility to technology was an important part of makerspaces; this was unsurprising, as 90% of the makerspaces housed 3D printers. One respondent noted, that he or she was tired of seeing makerspaces as a separate room, and that one should view the library itself as a makerspace (Rich, 2014). Perhaps if academic libraries as a whole began seeing the library itself as a makerspace, library personnel could begin to engage on a deeper level with students, faculty, and staff from all disciplines.

Concerns about Makerspaces in Academic Libraries

Some of the biggest concerns about makerspaces are, will this space be messy? Will it be noisy? Will it take up a lot of space? Who will run the space? How expensive is this going to be, and will we need sustainability funding? These are all valid concerns about makerspaces. It is crucial for a library creating a makerspace to figure out what works best for that individual library or community.

Makerspaces can be messy in a variety of ways. The machines, technology, or supplies found in these spaces can break down and produce waste materials, or leave a dusting of unwanted materials floating about the library. They can also produce unfamiliar or unwanted smells, which can mean that one needs proper ventilation when using some machinery.

Further, these spaces can be dangerous and include materials and supplies that many individuals are not familiar with using. Who, then, can use this space? Can any student, faculty, staff, or member of the public use the space? Does one need to have some type of makerspace certification to use the space? Or does a makerspace need dedicated staff members to monitor for safety issues or to repair machines when they break down? These two questions must be answered based on the types of materials and machinery one has in the space.

Most likely, at some point a makerspace will be noisy. This noise may come from the activities available in the space or from the individuals using the space. Whether one works with a dedicated makerspace or with a pop-up making space, it is wise to have appropriate signage and be prepared for complaints. Although times are changing, it's important to remember that many individuals visit the library for a quiet space and can easily be irritated by unexpected noise.

Makerspaces can be expensive to build, and maintain, and they take up valuable space in a library. Technology and machinery for these spaces can be expensive to repair or replace, and sometimes comes with maintenance fees. However, depending on how the library choose's to run the space, makerspaces do not have to be expensive or take up a lot of space.

Creation and Implementation of the Rutgers Art Library Lego Playing Station

The Rutgers Art Library Lego Playing Station came to fruition after the author was introduced to a Lego® Serious Play® workshop at the “i2c2, Innovation, Inspiration, and Creativity Conference” in Manchester, UK. At this workshop, individuals used Lego bricks to work together to solve real world challenges and problems faced by librarians within their organizations and everyday work lives. During the workshop individuals were asked about the

successes and challenges within their libraries; the final task was to work together to build the library of the future. Lego states that LEGO® SERIOUS PLAY® methodology is “based on research which shows that hands-on, minds-on learning produces a deeper, more meaningful understanding of the work and its possibilities” (LEGO, 2015). Active learning workshops can help individuals and libraries look further at how hands-on learning, community building, and play can benefit their organizations.

Upon returning to the United States, the author began brainstorming about the possibilities of Legos and LEGO® SERIOUS PLAY® workshops in an academic library and began collecting Legos. The author knew acquiring these toys might be a challenge, as there would not be money in the library’s budget for Legos. The author is fortunate to have a connection to an international commercial junk removal company; since starting this project in 2014, over 150 pounds of Legos have been rescued from the dumpster, in addition to 125 pounds of Legos donated by Rutgers alumni and library staff.

To learn more about the possibilities of using Legos in an academic library, the author began running workshops based on the principles of LEGO® SERIOUS PLAY® methodology. During the months of May and June 2014, the author hosted three workshops in the Art Library, which included 15 participants recruited from the Rutgers University Libraries faculty and staff (see Figure 1). Following the completion of the workshops, the author drew on the experiences at the events and on feedback from participants to think further about how the method of creative play could benefit the Art Library.

[INSERT Figure 1. Rutgers faculty & staff working with Legos photo by Megan Lotts.]

In the article, *Implementing a culture of creativity pop-up making space and participating events in academic libraries*, the author discusses makerspaces as inexpensive and easily moved spaces for cross-disciplinary collaboration and engagement (Lotts, 2015). Based on the ideas of this paper and the research from the workshops, the author realized that installing a Lego Playing Station within an Academic Library is the perfect intersection between her life as an academic librarian, curator, and installation artist. In August of 2014 the Rutgers Art Library Lego Playing Station was installed (see Figure 2).

[INSERT Figure 2. Rutgers Art Library Lego Playing Station photo by Megan Lotts.]

Upon installing this makerspace, the author worked with Patti Verbanas, Principal Public Relations Specialist from *Rutgers Today*, local campus media, to help with publicity. In September 2014, Cameron Bowman, Video Producer, and two undergraduate employees from *Rutgers Today* created and publicized the video *Lego Building Fosters Creativity on Rutgers Campus* (Bowman, 2014). The video was featured as a top story on *Rutgers Today*, the university-run campus news source that highlights events and happenings on the RU campuses. Following the video circulated by *Rutgers Today*, the local campus newspaper, *The Daily Targum* unexpectedly came to the Rutgers Art Library to shoot images of models made at the table and further share news of this new space and collection.

Since its installation, the Rutgers Art Library Lego Playing Station has been a catalyst for many events, contests, course assignments, and workshops. These events include a Block Party, a “Create your own Lego Character” coloring contest, a “Create your ideal Lego Library” contest, a project with 18 School of Arts and Sciences (SAS) Honors colloquium students, a workshop with academic coaches from the Rutgers Learning Centers, a Rutgers Geek Week event, an NJ Makers Day event, Rutgers Day, and a collaborative project with 100 freshmen

from the Rutgers Landscape Architecture department, who experienced the Rutgers Art Library Lego Playing Station as a means to connect to their library liaison and to learn more about the libraries (Lotts, 2015). These events have provided new ways for individuals to engage with, and learn more about the Rutgers University Libraries. Further these events have provided a new understanding of what can or might happen in an academic library.

Impact, Assessment, and Discussion

Ephemeral experiences such as making and action-based research can be difficult to quantify. When the author began this project, there was neither certainty of outcome nor a distinct plan of how the Art Library Lego Playing Station would come to fruition. There was no idea of the kind of impact the station might have on the Rutgers University Libraries, if any. The author wanted to create a low-cost making space that was easy to install, would not take up much space, and would engage students for whom she is a library liaison.

Mason Gross Printmakers

The Art Library Lego Playing Station has been used unexpectedly to engage with Rutgers students, faculty, and staff. In one notable instance, an introductory printmaking class from the Mason Gross School of Visual Arts stumbled across a poster about the “Create your Ideal Library” contest while visiting the Zimmerli Art Museum. Upon learning about the Lego Playing Station and contest, the class made a special trip to the art library to create a model to enter and win the competition. Because of the group’s enthusiasm – in other words, they were being loud – the author approached them casually to find out more about them. After introducing herself as the art librarian and their library liaison, the author and participants engaged in a 20 minute conversation about how the art library could benefit their lives as artists. In Figure 3, you can see

an image of the printmaking class and model created for the contest. Multiple students mentioned during the conversation that they had never been to the Art Library, but they would most certainly be coming back (Lotts, 2015).

[INSERT Figure 3. Mason Gross Printmaking Class Photo by Megan Lotts.]

SAS Honors Colloquium Students

In another instance related to the Rutgers Art Library Lego Playing Station, the author worked with 17 undergraduates from the School of Arts & Sciences (SAS) Honors program colloquium course to further explore the theme of their course, “starting over”. For this assignment, the 17 students were split into seven teams of two students each, and one team of three students. They were then asked to visit the art library to create a model, on which they would then write a 100-word reflection. The theme of the course was “starting over”, which was based on the book *World Made By Hand* by James Howard Kunstler, so it made sense that the students were not only exploring the theme with lectures and readings, but would also create a model made with their own hands. After reading the essays written by the students and viewing the images of their models, it was clear that many of them were able to use the Legos to create sophisticated models that further explored the ideas of the course and “starting over”. This assignment also encouraged the students to work together in teams, as well as to go to a library on campus that most of them had never visited. One student who turned in the assignment for his group wrote, “Thank you so much! My partner and I were playing with the Legos for at least 2 hours. I even snapchatted my Lego model to all my friends.” When this author spoke to the group of 17 students after the assignment, she found all of them were very enthusiastic about their experience of visiting the art library and making a model at the playing station. Many of them were excited that they had found out about the art library, which is a 2-minute walk across

Voorhees mall from the SAS Honors house, and a close location for them to retrieve materials and study. Most importantly, however, all of them enjoyed working in teams, and appreciated being encouraged to learn by playing with toys, which is not something common in many university curricula. In Figure 4, you can see two students from the course taking a break to pose for the camera while working on their model.

[INSERT Figure 4. Students from SAS honors course photo by Megan Lotts.]

Learning Center Academic Coaches

In the fall of 2014, the author was connected with the Rutgers Learning Centers' Academic Coaches. At the time, the author was not familiar with this group of individuals based at the learning centers but suspected that there was potential for collaboration. In January 2015, four academic coaches and their administrative leader visited the art library to participate in a Lego workshop (see Figure 5). The objective of this experience was to teach the coaches more about the Rutgers University Libraries and to learn about how we could partner together to bring a richer experience to the students with whom they work. The coaches spent 2 hours learning about the libraries, working with Legos, and thinking about how the libraries could help them further engage with the students they coach. The author gave a presentation that included 16 instances of experiences one might have in the Rutgers University Libraries, including checking out a book from the recreational reading collection, finding information about stress-busting events and using the scholarly resources within the library. All of the academic coaches present for this workshop appeared comfortable finding scholarly resources and materials in the libraries. The author assumes this was partly because all the Coaches' present that day were graduate students. However, the author was surprised to find that most of them had no idea about many of the services, collections, or events the author highlighted in her presentation.

[INSERT Figure 5. Academic Coaches photo by Megan Lotts.]

The author left the last 15 minutes of the workshop for reflection on the participants experience and to brainstorm ideas of how academic coaches and RUL might work together. A common issue all of the coaches faced was the initial meeting with the student, which needed an icebreaker, or a way to quickly connect. One idea that the group came up with was to take the 16 images that the author had shown as examples of experiences that one might have in the libraries and turn these into posters. The academic coaches would then hang these posters in their workspaces where they met with students. Ideally, the posters would catch the student's attention and be a way to break the ice and talk about the interesting things going on in the Rutgers University Libraries that might benefit the students' academic success. Following the workshop, the author worked with the art library intern to create a series of "Did You Know" posters featuring 20 experiences that one might have in one of the Rutgers University Libraries. These posters include experiences from meeting the Scarlet Knight, the university mascot, to checking out a recreational reading book, decorating you own pumpkin at Halloween, and learning about the Hathi Trust. In addition, after this workshop the author met with one of the academic coaches, who had scheduled a follow-up session with the author, to learn more about how she, as a graduate student, could take full advantage of all of the resources that the Rutgers University Libraries have to offer.

Landscape Architecture EDA Course

When the art library's Lego Playing Station was installed, the author sought innovative ways to engage with the departments to whom she is a library liaison. The author was having difficulty connecting with the Landscape Architecture Department and Mason Gross Visual Arts Department partly because they are both located on a different campus than the art library. Often,

when talking with students from the departments, the author would hear of the challenges of conducting research in inter-disciplinary and art-related fields as well as having to commute a long distance to the art library. Because of the author's personal experiences as a student in Art & Design, she was concerned that students in these departments were not fully aware of the possibilities that the academic library had to offer (Lotts, 2015).

In the planning stages of the art library Lego Station, the author knew she would need "buy in" and saw the Lego Station as an innovative way to connect more closely with students. The faculty at the Landscape Architecture department understood the importance and value of the library, and the author reached out to the chair, Dr. Laura Lawson, for a potential collaboration. After a brainstorming session, the author and Dr. Lawson came up with the idea of an active learning assignment that would incorporate the art library Lego Playing Station as well as get the students into visit the art library in person. The objective of the assignment was to introduce 100 incoming freshmen in the Landscape Architecture program to the author, the art library Lego Playing Station, and the resources the Rutgers University Libraries have to offer. In September 2014, the author was introduced to the Environment Design Analysis (EDA) course and gave a 30-minute lecture that included a conceptual overview of the physical space of the art library, the kinds of resources available in the Libraries, introductions to the Art Library Research Guide and to the Art Library Lego Playing Station, and ways of contacting the author (their library liaison) to seek research assistance (Lotts, 2015).

Following the author's presentation, Dr. Lawson introduced the assignment, "Exercise 2: Public Landscape Analysis: Traces, Behavior Analysis, Mapping, and Imagining." Students were asked to read chapters 7 and 8 from John Zeisel's *Inquiry by Design*, and to visit the Gateway Transit Village, Voorhees Mall, and the art library, all located on the College Ave campus, to

analyze the spaces and address the directions for the assignment. For their visit to the art library, students were to observe and analyze the role of public space and to explore the role of the library in a world where information is increasingly available online. Students were encouraged to walk around the interior and the exterior of the art library and to casually observe the activities as well as the people in both spaces –other students, faculty, library staff, and the general public. The students were asked how they might improve the space to fit the changing role of libraries in a multi-use learning and working space. They were also required to visit the art library Lego Playing Station and to make a model inspired by the three locations they visited for the assignment. The students were encouraged to work with a friend on this part of the assignment, as well as take a picture of and write a paragraph about their Lego model (see Figure 6). For the final part of the assignment, each student was asked to write about their experiences with their fieldwork, including what they had learned and how their perception of previously known or unknown spaces had changed (Lotts, 2015). Following the author’s presentation and the introduction of the assignment, the art library saw an immediate increase in play and model making at the art library Lego Playing Station. The author believes this was due to the collaboration with Dr. Lawson and incorporating visiting the art library as part of the assignment. In Figure 6, one can see four students from the Landscape Architecture EDA course smiling and working collaboratively on making their models.

[INSERT Figure 6. Students from Landscape Architecture EDA Course photo by Megan Lotts.]

Since the implementation of the art library Lego Playing Station, the author has seen an increase in reference questions from the Landscape Architecture Department. The author believes this is in part due to her work with Dr. Lawson and using the Art Library Lego Playing

Station as a way to connect with the design students (Lotts, 2015). In response to the increase in reference questions, the author implemented an embedded librarianship program in the Landscape Architecture Department, located in Blake Hall, in the spring of 2015. Weekly, for 2 hours, the author brings a laptop to Blake Hall and provides on-site reference assistance to students, faculty, or staff who may need help. Through the embedded librarianship program, the author has become more involved and educated about the Landscape Architecture Program as well as the students, faculty, and staff that are part of this department. The author was also invited to serve as a committee member for a faculty search in the Landscape Architecture Department in the spring of 2015. Serving on a search committee can be an important activity in learning more about incoming faculty research needs as well as an opportunity to educate current faculty about what the Rutgers University Libraries have to offer. The author also believes that she may be seeing this increase in reference questions because “making” is a language that Visual Artists and Design Students speak, and therefore she is gaining more “street credit” within that department through the use of Legos (Lotts, 2015).

Documentation

Because of the author’s experiences as a working artist, one objective was to make sure the Lego Playing Station was thoroughly documented. Since August 2014, the author has collected and taken over 650 images of models created at the table (see Figures 7 and 8). From analyzing these images, the author has noticed that many of the models created at the Lego Playing Station include multiple Lego persons, as seen in figures 7 and 8. This may be in part due to the way in which one plays and relates to Legos. From the author’s experience Legos are used as a tool for personal narrative storytelling. The author wonders if playing with Legos can be used to see

heightened awareness of the social aspects of learning. In a recent Lego workshop run by the author, many participants built models that reflected ideas of who they are and how they fit into the model. It could also be that in modern times one can find Lego characters in every flavor. In the fall of 2014, the author visited a Lego store in New York City and created a character to represent her own likeness, which the author is now using in her own work as an artist (Lotts, 2015).

[INSERT Figure 7. Image of Models made at station photo by Megan Lotts.]

[INSERT Figure 8 model made at the Lego Playing Station photo by Megan Lotts]

The author also noticed from the collection of 640 images that roughly 20% of the models included the model maker(s), as seen in Figures 3 and 4. Where the photos included humans, most humans were smiling and appearing to be having fun, as seen in Figures 3,4, 5, and 6. This could be in part because participants were feeling relaxed or happy from playing at the Lego Playing Station. Alternately, they could have been smiling because Legos are not something one expects to see in an academic library. However, this also could be that smiling occurs often when photos are taken (Lotts, 2015). From the author's own experience with Legos and experiences with this project, it's possible to conclude that for most people playing with Legos is a pleasant experience.

As the art library Lego Playing Station was an innovative project that was not the norm for an academic library, it was important to provide an opportunity for patrons to leave feedback and suggestions. Upon installation of the playing station, the author placed a comment box with paper, pens, and a note on the box inviting individuals to leave a comment or email the author with any questions or concerns. Table 1 shows that the comments were largely positive, with a

few negative comments in particular due to the noise factor. It is true that Legos can be noisy, and even more so when someone knocks a bin off the table and 500- plus Lego pieces tumble loudly onto the uncarpeted floor. In addition, playing with Legos can cause noisy behavior and conversation, which is not the normal quiet behavior one expects to experience in a library. One graduate student in particular was irritated by the noise and suggested that the table be moved, or at least put on carpet. She also suggested that covering the table in felt might help reduce the noise. The author has considered moving the Lego playing station because of noise; however, due to the overwhelming positive feedback, she has received, the author decided to leave the table in its current location. However, the author is looking into obtaining a carpet to place under the table. Apart from the comments in Table 1, there were a few objects submitted to the comment box, which included two drawings that were maps of locations on campus – obviously from the Landscape Architecture EDA course – an ink drawing of Bugs Bunny, an abstract pencil drawing, and a purple rubber bracelet in support of the Rutgers Undergraduate Programming Association (RUPA). The author assumes, from her personal experiences with comment boxes, that the non-comments were meant in fun, and that one never knows what one will get after leaving an open box with pen and paper in a public space (Lotts, 2015).

[INSERT Table 1]

When the Lego Playing Station was installed, the author created the Rutgers Art Library Facebook page as a virtual space for individuals to post images of models made at the station. The author hoped participants would submit images to the Facebook page to create a crowd-sourced collection of images. The Lego station itself had signage inviting individuals to send an image of their model to the art library Facebook page, with a QR code to make it easy. Unfortunately, the crowd-sourced collection of images for this project was unsuccessful, with

only six images of models posted to the library's Facebook page. The author posted images in hopes of starting a trend of these Lego model images, but, as noted, this was not the case. Because of the failure of the crowd-sourced collection of images, the author questioned her choice of social media tools. For future projects, the author may try a different tool, such as Instagram or Twitter, which do not rely on an individual having to first "like" the Rutgers Art Library Facebook page before posting an image. However, the author has noticed that when she posts images of Lego models or information about Lego-based contests, these posts tend to get more "likes." So perhaps the Rutgers Art Library Facebook page is helping more with publicizing of the Lego Playing Station, instead of its intended role as a tool for creating a collection of crowd-sourced images (Lotts, 2015).

Publicity

Publicity was a key factor for the Rutgers Art Library Lego Playing Station. In part, because it's not the norm of what one might find in an academic library, and the author wanted the Lego Playing Station to be used. Since installation, the author has seen increased involvement from the local community. Following the release of the video, *Lego Building Fosters Creativity on Rutgers Campus* (Bowman, 2014), the author noticed a spike in the "likes" at the art library's Facebook page. In addition, the author immediately began receiving questions and comments about the Lego Playing Station via email and phone. One of the most unexpected phone calls received about the Lego Playing Station was from a woman asking if it would be appropriate to bring her children to the library to play with the Legos. This caught the author off guard, as we do not see many children in the art library, probably because we are an academic library and many individuals do not realize that a publicly funded university is open to the public. Alternately, maybe the art library doesn't see many children because most individuals don't

expect or think that playing with Legos, or other activities children might enjoy, can happen in a research library. The author and the art library Branch Manager discussed the idea of children in the art library, and we did not see a problem with this, assuming they followed the RUL policy of children being accompanied by an adult at all times in the libraries. The art library also participated in the first annual NJ Makers Day, which was a state wide initiative on Saturday March 23, 2015 the event included over 125 libraries who invited the public in for a day of making and play. There were children present for this event, and it was even noted by two parents that this was one of the few events that was appropriate for younger children. The author hoped for this event was that children would come to the art library to make a model as well as get a taste of the life they may one day lead as a student at Rutgers, the State University of New Jersey (Lotts, 2015).

On April 24, 2015 the Rutgers University Libraries participated in Rutgers Day, an all-campus event that is open to the public, and in 2013 drew 83,000 people. (Rutgers, 2015) The theme for the Rutgers University Library tents was “Building Knowledge Through Imagination.” For this event, the libraries had hundreds of pounds of Legos in all sizes available for individuals to play with, in addition to installing a photo booth area (see Figures 9 & 10). For the latter, individuals had multiple READ poster backgrounds, as well as multiple props, including 30 character heads created by the author, to choose from when posing for a picture (see Figure 9). Throughout the event, the libraries gave away hundreds of Rutgers University Library branded prizes, and over 300 individuals posed for photo-booth shots. From this event the author concludes that Legos can be a learning tool that is fun and engaging for all ages, as well as a great way to connect with individuals who might not see a need to visit an academic library. If you would like to view

more of the publicity or events surrounding the Rutgers Art Library Lego Playing Station, please visit the *Storify* page created by the author (Lotts, 2015, July 29).

[INSERT Figure 9. Rutgers Day 2015 photo by Megan Lotts.]

[INSERT Figure 10. Rutgers Day 2015 photo by Megan Lotts.]

Conclusion

In short, established ideas of what happens in an academic library are changing at the Rutgers University Art Library. The art library's Lego Playing Station has served as a tool in helping to build a new brand, as well as a new culture of creative learning and making for the Rutgers University Libraries. In addition, the art library's Lego Playing Station has created a stronger connection to the art and design students to whom the author is a liaison. Further, the implementation of the playing station has had an impact on the art library by being the catalyst for many new innovations for use of the library's space, including the Art Library Photo Booth and the Art Library Making Cart. The author believes innovative projects and ephemeral experiences in the library can help draw in a new audience of patrons that may not have seen the value or need for the libraries (Lotts, 2015).

The art library Lego Playing Station has explored and expanded the conventional research functions of an academic library through encouraging creative problem-solving techniques associated with art and design and makerspaces (Lotts, 2015). The author has shown that Legos can be a three-dimensional language that uses hands-on active learning to communicate and build critical thinking skills, in addition to being an activity that makes people happy (Lotts, 2015). Further, as in the case of the Rutgers Art Library Lego Playing Station, makerspaces do not need to be expensive or take up a lot of space to make an impact.

At a time where library budgets are dwindling, perhaps academic libraries should reconsider focusing so much of their time, money, and efforts building the monographs collections and start thinking more about library spaces and how they engage with students in these spaces as part of their collections (Bagley, 2014). The Art Library Lego Playing Station has been a catalyst for building bridges and connecting with students, faculty, and staff on the Rutgers campuses. These connections have led to a greater understanding of the possibilities of an academic research library and how the act of making and implementing a culture of creativity can influence library patrons (Lotts, 2015).

“For the author, one of the most interesting parts of this project is coming into the art library every day to see what has transpired at the table. Some days it appears that a group of grubby young children have been let loose at the table and Legos strewn everywhere, including some on the floor. Other days the author finds elaborate models that tell stories about the students, their lives, their imaginations, and their dreams” (Lotts, 2015).

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