Digital storytelling: A tool for social connectedness

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S. Sehrawat, C.A. Jones, J. Orlando, T. Bowers, A. Rubins. Digital storytelling: A tool for social connectedness. Gerontechnology 2017;16(1):56-61; doi:10.4017/gt.2017.16.1.006.00 This participatory-action research recruited college students from various academic disciplines to design and implement an intergenerational storytelling project. This research used digital storytelling (DS) as a mechanism for social connectedness with older adults. After training students in the DS tool, intergenerational teams were formed consisting of students and older adults. These teams met twice to prepare and bond prior to an intensive daylong DS workshop. Students shared their digital story with their project partners, providing a medium for connectedness among each team. The workshop allowed each team to co-create the older adult's digital story. This story focused on a moment in the life of their older adult partner. The final products, i.e. Digital Stories along with the process of this project allowed older adults to record 'a moment of time' and share that moment with others. A questionnaire was used to gather the older adults' experiences with this project. Older adult participants reported an increase in social connectedness and network size through sharing their digital story with friends, family, and project participants. It was through this sharing that provided an avenue to connect with others. This project created a connection and ripple outside the boundaries of this study as participants shared their stories with intergenerational audiences outside of this study. More investigation is needed to explore the radius of a digital story as the vehicle of social connectedness, and the intergenerational bond.

Keywords: digital storytelling, social connectedness, older adults

Stories help find meaning in life events and are an important mechanism for transferring information and documenting culture from one generation to the next[1,2]. Digital storytelling (DS) is a continuation of classic storytelling methods combined with technology e.g. computers, smart phones, etc. Technology creates lasting stories that can be shared with friends, loved ones, and the public. DS provides the opportunity for community members to identify shared social history, increase an individual's social network, and can "transcend age gaps"[3p11].

Many older adults are faced with finding meaning and understanding their life's purpose. Often, older adults retain a sense of purpose through sharing their story and insight to younger generations[4]. On the other hand, older adults who have not found the sense of purpose have experienced isolation and loneliness, thus reporting negative impacts on their health and wellness[5,6]. Further, an older adults social network is altered with the loss of a partner or friend and challenges the older adult in remaining active and socially engaged[7]. Bondevik & Skogstad[8] found interconnectedness between loneliness and depression resulting in a shrinking social network. Intergenerational relationships improve quality of life[9] and increase social engagement among older adults[10]. Intergenerational relationships also benefit youth in increasing self-esteem and understanding the aging process[9].

CONCEPTUAL FRAMEWORK

The DS process is a convergence of learning that enhances participant engagement, builds upon their lived experience, and enables deep learning through technology integration and reflection (see figure 1)[11,12]. DS is a method of telling a story in a digital format. A digital story is usually 3-5 minutes long and revolves around a moment in a person's life. Knowing the benefits of social engagement and intergenerational collaboration[13], the researchers
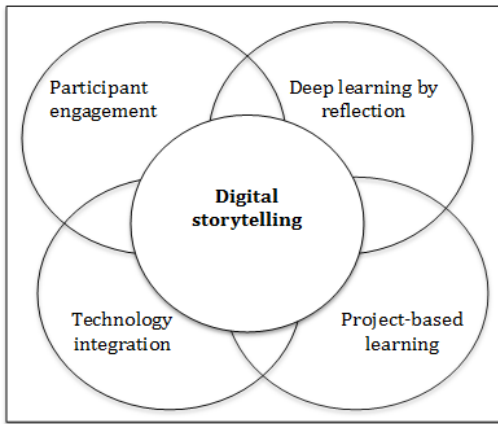
Figure 1. Convergence of participant-centered learning methods[11]

used DS as a mechanism to enhance student engagement in research and social connectedness among older adults.

This Intergenerational Storytelling Pilot Project (ISP) was designed to provide college students with an opportunity to partner with older adults through the use of digital storytelling. Digital storytelling provided the needed framework for team building. Before the project began, students were selected, trained in the DS process and randomly paired with an older adult partner to form intergenerational teams. As a part of training students on the DS, students went through a daylong workshop facilitated by faculty researchers and created his/her digital story.

Ten students responded to the campus postings and submitted their resume and writing samples. After careful review of resumes and their writing samples, five students were called for interviews with faculty researchers. The five students were chosen for the interviews because they either had taken a research course or had advanced technology skills. Finally, four out of five students were chosen for this project based on their comfort with technology and strong writing skills. All four-college students were from varied academic disciplines (sociology, psychology, social work and communication design). The four older adults were recommended by our local Area Agency on Aging (AAA) and when approached to participate in this study, they all agreed.

The overall sample size was eight participants, i.e., four college students and four older adults. This sample size was intentional because of lack of funding to pay for student assistants. Furthermore, the ideal size for a digital storytelling workshop is no more than eight to ten participants due to the intensive nature of fa-

cilitator's involvement in the story creation process. Generally, digital storytelling workshops can last from three to four days and this pilot study was experimenting with condensing the workshop to a seven-hour process. Therefore, due to limited funding, intensive and unknown aspects of the pilot, only four teams were intentionally formed.

The methodology for this study was participatory-action research. Students, under the direction and supervision of the faculty researchers, conceptualized and designed the study, collected and analyzed the data to evaluate the project. The project time commitment for older adults was six weeks. The four teams met once every week in a public place, such as a coffee shop, park, etc. The first two-weeks focused on establishing relationship and trust within teams. The third week focused on exploring ideas for the older adult partner to create a digital story. The fourth week focused on older adults participating in a daylong workshop on DS, which was held at the university. The workshop consisted of outlining the day, story circle (informally sharing story with others and seeking feedback), script writing and recording, and using WeVideo.com (cloud-based software) to assemble digital images/video and voice recording to create the digital story. The faculty researchers facilitated this workshop with students assisting their older adult partner. The fifth week focused on students helping their older adult partner in fine-tuning their digital story using WeVideo.com. A final celebration occurred during week six to view the digital stories created by older adults with the help of their student partners.

An open-ended questionnaire was created to explore students and older adults experience with this innovative pilot project. The student questionnaire included questions about experience with older adults (such as, have you ever worked with an older adult on a project or activity?, what do you think was the greatest learning experience/challenge while working/helping your older adult partner?, what are your overall thoughts about working with older adults after this experience?), and experience with the project (such as, what are your overall thoughts about working as a participatory researcher?, what do you think your greatest learning experience was?, what do you think your greatest challenge was?).

The older adult questionnaire included components of the Social Disconnected and Perceived Isolation Scale developed by Cornwell & Waite[6]. Questions were how often do you feel left out, isolated from others and/or lack companionship; how often do you open up and rely on friends,

family, spouse, and loved ones. Also, Geriatric Depression Scale (GDS) was incorporated this questionnaire[14]. Both questionnaires also included basic demographic questions and questions about health and mental health. Unstructured interviews were used to obtain feedback from participants about their overall expectations and experiences in this intergenerational exchange.

Results

Three out of four older adults who participated in this pilot project were women. The age range of the older adult participants was 73-82 years. Two out of four were Caucasian, one African American and one chose not to disclose ethnicity. Three out of four older adults had a college degree and one had 1 year of college. Further, three out of four had 1 or 2 chronic conditions and one had none. All older adults reported their physical and mental health being good to excellent. On the GDS, all of them related not being depressed. They also reported staying active by attending at least one meeting a week, socializing with friends and volunteering weekly in the community. When asked about feeling lonely, all older adults reported having more than 3 friends. However, one reported lacking companionship and sometimes feeling left out. When asked about their social support, all older adults indicated they rely on friends and family.

The age range of students in this study was 18-41. Three out of four students were female. All students were at different stages of obtaining their college degree, ranging from freshman to graduate level work. Three out of four students have never been married and one reported being divorced. Three students reported their ethnicity as Caucasian and the fourth as Ukrainian. They reported their physical health ranging from very good to excellent and reported their mental health as 'excellent'. Similarly, two reported having 1-2 chronic conditions and two having none. Further, only two students reported having worked with older adults in the past.

Open-coding was used to analyze response patterns[15] and content analysis aided in the identification of themes, codes, and categories within the text[16]. The data analysis revealed overlapping themes of expectations, student experiences and older adult experiences after the DS process, DS as a powerful tool, and intergeneration appreciation.

Expectations

Before the project began, students were asked to share their expectations. Students related they hoped to learn about a different generation, culture, challenges, and compare perspectives on life. Students expressed their excitement about learning what life was like for the older adult growing up. They were eager to learn how to listen better, practice compassion, and patience.

In the beginning, older adults were not sure of the whole process. Comments included, "questioning and looking forward to something new" and "uncertain what it entailed". However, all four older adults related that they were extremely satisfied with their final product, i.e. Digital Story. They all found the process and product better than they expected. For example, one older adult stated that the project "wasn't work—it was fun".

Student experiences after the DS process

Students related that several meaningful conversations took place during the first three weeks within teams. Students have expressed that most of the time was spent listening to numerous stories about their partner's life, including friends and family. On a similar note, one student related, "learned how much I love hearing about their lives".

Students shared that they were much more comfortable than they expected working with older adults. They reported that, "working with my older adult partner was incredible and life changing". Students also related that they liked the randomness of being assigned their older adult partner and appreciated the participatory action research process.

The students discussed feeling vulnerable about showing her/his own digital story. However, several students reported that it was relieving to have the story no longer "…inside anymore, it is outside…" Another student indicated that they felt a personal growth through reflection.

Older adult experiences after the DS process

Older adults expressed their appreciation for their digital story, one calling it "a valuable memento of my life". Some commented that because the stories were so powerful that it seemed longer than three minutes. All were very impressed with their student partner.

Similar to the students' responses, the older adults indicated that having a student partner who valued their time together was critical. They stated, "For one I think you have to get to know each other [intergenerational team]. I do not think I realized how precious, how important the story is". Another indicated that "You had to trust the person who you are partnering up with". The ability to build trust with the students was an important aspect for the older adults.

DS as a powerful tool

Both the older adults and the students felt that DS

was a powerful way to learn about each other and connect on a deep level. One older stated, "it far exceeded my expectations. It is amazing to me that for 5 minutes you can put in so much". Being able to capture their stories was important and they all hoped that this research project would continue.

One student said, "during the storytelling workshop I felt not only more connected to the people around me but also to my story". One student reported that "It was a great experience to create something that affected my life". Several students discussed that it was not only the creation of the digital story but also viewing it with others that felt powerful. One indicated that "showing my story to others was impactful and filled me with a sense of pride and belonging". And as with the older adults, students felt that the digital story was "something I can show people for the rest of my life".

An unexpected outcome that the research team noted was the impact on individuals telling their story. One student related that their older adult partner was not able to sleep after their conversation about life over coffee. However, during debriefing the same student related, "when he saw the video and I walked him downstairs he turned to me and he goes, "I can actually sleep tonight".

Intergenerational appreciation
All older adult participants were appreciative of their student partner helping them. One older adult summed it by stating "I met a wonderful friend who is working hard on his education". Other older adults felt as though they were so lucky to have been part of this project and to meet the students. The older adults were very impressed with all aspects of the student's technology skills.

Students discussed their admiration for their partner's involvement in community activities and volunteer work. One student said, "She is like in 4 different organizations and she is a caretaker and she was in the senior Olympics and she is really incredible". Another student stated that their older adult partner "…was like a big inspiration, so you know, the way she lives now, um and I know we kind of talked about college and stuff, so we met again at XXX (at a public place, name of place removed for maintaining confidentiality), um, and she had like this big album of pictures, because, she does softball. I think she is a pitcher". Being active and dismissing the stereotype of feeble older adults made an impact on the students. One student reported that their older adult partner "… showed up on her bike, it is so cute that she bikes everywhere". This project allowed students an opportunity to

work closely on script editing with their older adult partner. Hence, as a learning outcome, students discussed learning negotiation skills. Further, one student had never travelled out of the US and was fascinated with the travels of her older adult partner. She stated, "Pakistan, yeah and I asked her if she was ever scared in other countries and she said no, she was never worried about her safety which was really interesting to hear because I know I would be constantly worried".

This project was not designed to have therapeutic benefits. However, students and older adults commented about this process being cathartic and therapeutic. Further, it also allowed students to gain exposure, shifting their views about working with older adults. In sum, this project-based approach provided students and older adults with experiences, increased intergenerational appreciation, and explored DS as a powerful medium for student and older adult engagement.

DISCUSSION
Intergenerational relationships
Youth and older adults can benefit from intergenerational relationships. The literature suggests that college students need education and experience with older adults in order to develop positive attitudes and that increased interaction with older persons can positively influence one's feelings about his or her own aging process[17]. The pilot project supported the literature with the students reporting having a positive experience with their older adult partners. Exposure to older adults is critical for young adults as the demand for a gerontology workforce is increasing with the larger number of older adults living longer.

This project research simultaneously focused on the delivery and design of an innovative approach in creating an intergenerational connection through the use of DS. Students attended a daylong workshop on creating digital stories so they could help their partner in creating a digital story. Through this process, students gained insight in storytelling and creating digital stories. Reflection allowed students to engage quickly through this intense process. It was apparent after conducting the student workshop that time management and flow of the workshop was critical. Although the students were very techno savvy, it remained challenging for the students to complete their final product in a daylong workshop. Scheduling another time for viewing student's digital story allowed the students to view each other's work without feeling rushed. This feedback resulted in some modifications to the workshop with older adults and highlighted the balance of task completion and process. The students suggested sev-

eral shifts to the older adult workshop. Such as, include scheduled breaks and have digital media uploaded beforehand. Technology acquisition was not a goal of the older adult workshop. It was emphasized for students to focus on all the technology and production aspects. It is important to note that students use social media daily, yet this project introduced older adults to a new way of engaging through technology.

Strengths of the study

The intent of this pilot project was two-fold. One aspect of the project was to explore the use of DS as a tool for intergenerational collaboration and student engagement in aging research. The other aspect was focused on assessing the feasibility of the organizational structure, practicality, and delivery of the research design so that the researchers could implement it at a larger scale. Pilot projects help researchers in obtaining preliminary information regarding the feasibility and design of a project[5]. This study did shed light on several aspects that needed modification before replication of this study at a larger scale. First, during the DS workshop with older adults, the story circle presented a challenge for older adults to stay within their allotted time. In the future, more time needs to be allotted for story circle with the older adults. Second, telling these stories can bring emotions and those emotions can be positive or negative. For future research, a debriefing process for participants and researchers needs to be added. Third, a daylong workshop was tiring for everyone, especially for the older adults and hence the workshop with older adults needs to be broken down into two half days.

During this project, students experienced a broader understanding and connection with older adults. Icebreaker questions were developed to help the students engage with their older adult partner. However, older adults might have strong opinions about different lifestyles, cultures, religion, and/or political view. Knowing how to avoid discussions that can be difficult or uncomfortable is an essential part of student training. In conclusion, intergenerational programs with college students can address critical social connections across generations and bring together the young and the elderly to develop community responses to human issues.

An added benefit of this pilot project was the opportunity for student participation in research. Student research assistants were chosen and trained on DS. Students helped in the development of the questionnaires, data collection, analysis, and dissemination of the results. This project allowed students to gain skills and experience that supported their entry into careers in research and work with the aging population. The culminating student activity was a joint presentation with the researchers at an international gerontology conference.

Limitations of the study

There were several limitations to this study. The sample size was much too small for us to conclude whether this collaborative relationship impacted students' educational outcome. The students and older adults indicated that the relationships were valuable but we do not know if this translates to an educational outcome. Additionally, the pilot study sample was not a random sample but a sample specifically recruited for this participatory action research. Further, anonymity of the student research assistants was not possible due to the sample size and shared experience of being both a researcher and participant. A random sample of student volunteers without the participatory action research and salary component might have different results. Another limitation was the older adult sample. All the older adults in the sample were relatively healthy and stable community dwelling individuals and were selected because they were actively engaged in the local AAA. Although the literature indicated that intergenerational relationships improve quality of life and are beneficial for both the youth and older adults[9], there was minimal to no change in the student or older adults physical and mental health. As with the student selection process, the older adults would need a different and random selection process.

There are additional limitations with the design that must be considered. The daylong workshop was very tiring for all the participants, especially the older adults. As the day progressed, all participants were experiencing exhaustion and attention spans were shorter. Possible two half days would allow for more time to recover and would be a more feasible and amenable design[18]. Additionally, it would allow for participants to focus more on the task of creating the DS with a stronger attention span. Finally, with resources and funding being a limitation, this type of research design could be incorporated into a class as an assignment. This would eliminate the need for funding and will substitute monetary gain for a grade incentive. This could create other dilemmas but it would be an option to explore.

CONCLUSION

Overall, this research project used DS as an innovative mechanism for intergenerational collaboration to enhance student engagement in aging research. Providing opportunities for generations to exchange meaningful life experiences can have valuable impact on both generations. Loe[19] found that intergenerational partnerships commonly es-

tablish meaningful relationships as well as provide intrapersonal development opportunities. Both older adults and students commented on the value of the relationship that had formed throughout the life of the study.

The older adult participants reported an increase in social connectedness through sharing their digital story with friends, family, and project participants, producing what we are calling a 'wave of connectedness'. This project created a connection and ripple outside the boundaries of this study as participants shared their stories with intergenerational audiences outside of this study. Months after this project, one older adult participant contacted the researchers and shared that she has shown her video to many groups that total over to over 1,000 people! The final products, i.e. Digital Stories along with the process of this project allowed students to become an 'insider' and experience 'the moments' with their older adult partners, hence, enhancing their desire to explore careers in aging. For this study, DS was proven an excellent medium to promote student engagement in research and enhance intergenerational collaboration. In summary, more investigation is needed to explore the radius of a digital story as the vehicle of social connectedness and the intergenerational bond.

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