

MAKING DIVERSE VOICES HEARD

BUILDING COMMUNITY-BASED CO-DESIGN PROJECTS WITH OLDER ASIAN COMMUNITIES IN PHILADELPHIA

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PAPER ABSTRACT: There is a lack of studies that focus on the needs and voices of older Asian adults in design research. Anti-Asian hate crimes, especially towards senior Asians, have increased across the country after the breaking out of the Covid-19 pandemic. Educators have a responsibility to utilize empathic design and co-design methods to help raise awareness of this population’s specific needs and create solutions with their lived experiences in mind. This paper talks about the creation and preparation of a community-based co-design study and relevant Aging + Design course connecting interdisciplinary college students from Drexel University with older adults in Philadelphia’s Asian Community. It focuses on the strategy of community-based collaboration during Covid-19 and approaches used to enhance cross-cultural communication despite language barriers. The paper provides insights on how to bring the lived experiences from diverse communities to the academic environment, increasing students’ awareness and understanding of inclusive and empathic design in the real world, as well as bringing diversity, equity, and inclusion to the design course pedagogy.

Keywords: co-design, aging, Asian, community-based participatory design, storytelling.

1. INTRODUCTION

The structure of the world population is shifting unprecedentedly. The proportion of older people is growing each year due to increased life expectancy, improved health care, and decreased fertility. Globally, by 2050, the older population aged 65 years and above will increase to 16% compared to 9.3 percent in 2020 (United Nations, 2020). However, ageism and prejudice towards older people are still highly prevalent in our current society (Officer et al., 2016). Ashton Applewhite (2019) in her latest book *This Chair Rocks: A Manifesto Against Ageism* calls ageism “oppression” (p. 13) towards older people. World Health Organization (WHO, 2021) identifies ageism as a global challenge and leads to “poor health, social isolation, earlier deaths”, calling for immediate actions to fight against ageism.

According to the Center for the Study of Hate and Extremism, anti-Asian hate crime increased by 339 percent in 2021 compared to 2020 in the US, with metropolitan cities including New York, San Francisco, and Los Angeles exceeding their record numbers in the previous year (Yam, 2022). Among these crimes, many have involved “senior Asians across the country, with many being beaten, kicked, shoved or stabbed” (Yang, 2021). American Psychological Association concluded that “Early research has linked the

uptick in anti-Asian discrimination to increases in anxiety, depressive symptoms, and sleep problems among those who are targeted” (Abrams, 2021). Although the Stop Asian Hate movement has increased the awareness of anti-Asian bias and discrimination significantly, it cannot effectively stop the incidents from happening repeatedly.

Older Asian adults face both the risk of ageism and anti-Asian discrimination. As educators, how might we create an educational experience to include and support them? How might we make their voices heard on a regular basis by using design thinking and co-design methods? How might we better understand their dreams, aspirations, and fears by creating channels for communication?

This study aims to develop a community-based co-design pedagogy that celebrates cross-cultural communication and inter-generational dialogue. The learning objective for students is to gain knowledge of the community, develop empathy with the local older adults, and use co-design methods to provide solutions and resources to the community members. The goal for older adults from the communities is to benefit from socializing and unleashing creativity with young people. Ultimately, both older adults and the students will contribute to the creative process, and hopefully increase the awareness of ageism and anti-Asian bias.

Everyone has an empathic horizon, “a boundary to their knowledge, experience, and awareness” (McDonagh & Thomas, 2010). As we grow older, constant learning experiences push our empathic horizon further, breaking our boundaries constantly (McDonagh, 2008). In this *Aging + Design* course, a community-based co-design (i.e., participatory design, co-create) methodology is used to pair students with participating older Asian adults. This approach uses the collective creativity of collaborating designers and people untrained in design to create solutions together (Sanders and Stappers, 2008). Instead of *Design For*, students *Design With* older adults, maximizing the time and opportunities they immerse themselves with older adults. Because of the language barrier, cultural differences, and age gap, co-design activities provide innovative platforms for students and older adults to engage design research process, including observation (face expression, body language, gesture, etc.), concept visualization, storytelling, prototype making, and many other ways that transcend traditional design process. By sharing lived experiences and bouncing insights with each other, the hypothesis is that students will enhance their empathic capabilities to understand older Asian adults’ situations, thus creating bridges for cross-cultural communication and reducing bias.

Most of the literature on older Asian adults in the United States concentrates on health-related studies. One example is the PINE study, a community-based epidemiological study of Chinese older adults in the Greater Chicago area (Dong et al., 2014). Another example is to study the correlates of perceived mental health needs and variables such as English proficiency (Nguyen, 2011). The literature on co-design with older adults primarily represents non-Asians or Asians not living in the US. Therefore, the impact and

benefits of co-designing experience by pairing English-speaking college students with older Asian adults within the US is a knowledge gap to fill.

2. REACHING OUT TO THE COMMUNITY

Drexel University has formed a great number of collaborations across the Philadelphia region. However, to date, it has not established ongoing projects with older Asian communities in the area. According to U.S. Census Bureau (2021), Asian Americans make up 8 percent of the entire population in Philadelphia. Thirty-eight percent of Philadelphia's foreign-born population is from Asia, making Asians the largest group of immigrants among all (U.S. Census Bureau, 2020). The lead faculty of the project June He started the collaboration by identifying a list of local community leaders and non-profits to gauge interest and begin the dialogue, including but not limited to Philadelphia Chinatown Development Corporation, SEAMAAC, On Lok House, Penn Asian Senior Services, Lotus Program, and Philadelphia Senior Center. Due to the Pandemic, all the initial meetings were conducted in the form of virtual meetings. Leaders in the communities expressed a need for their community members to engage in social activities. They facilitated the collaboration by distributing multi-language fliers and organizing Zoom meetings for community members and the research team. The fliers were in 3 languages: English, Chinese and Vietnamese, designed and translated by the faculty and research assistants. Professor June He and one research assistant Vanessa Xie are of Chinese descent, and another research assistant Khue Dao is of Vietnamese descent. They share similar cultural backgrounds and language skills as the targeted older Asian adults.

Several older adults showed interest when seeing the fliers along with the support of the community facilitator. The fliers were a very effective communication method where these adults could physically see their language being represented by an academic institute. Furthermore, the notion of the language solely standing alone on the flyer and not a translation to another language was powerful in the sense that it put the community members center stage and showed them respect.

At the initial stage, the community facilitators talked to both potential older participants and the research team. Despite the pandemic, some older adults were comfortable meeting in person, while others preferred virtual meetings due to Covid-19. One community leader invited the team and interested community members to meet up through Zoom. In the Zoom session, June He introduced the project, talked through the agenda, and encouraged older adults to ask questions directly. After two sessions of Zoom discussion, interested community members created a group chat with June to facilitate timing and topics for the incoming workshops. Tangible toolkit materials were arranged through the group chat to be delivered to each participant before the first Zoom workshop.

3. METHODS USED TO CREATE AN EMPATHIC EXPERIENCE

It could be intimidating for students to join an intergenerational and cross-cultural workshop for the first time. Therefore, the instructor introduced a variety of tools and techniques to prepare students to adapt to the collaborative environment before they participate in the workshop with older adults.

4.1 EMPATHIC MODELLING

Empathic Modeling was introduced in the second week of the course *Aging + Design*. It is a technique to simulate the situations of the users, especially users with disabilities, to help students better understand users' circumstances. In this course, aging simulation costumes, goggles, and gloves were given out during the class for students to try on and discuss their experiences in small teams. Students Jouri Abdulmajeed Ghazi and Amjot Kaur tried a pair of arthritis simulators (Figure 1) and later reflected: "When using the arthritis knuckles, our hands were limited to movement... Actions such as writing and tying shoes were significantly more difficult since they required hand-eye coordination. Writing required much more focus and effort to effectively control the pen. And tying shoes was close to impossible." "It was difficult to develop empathy for someone dealing with arthritis through visual observation... I was not able to fully empathize until I tried it myself." The purpose of the empathic modeling exercise was to stimulate students' senses and observation skills before their real encounter with older adults. It enabled them to understand how difficult it could be to see life from another angle, as well as prepared them with the appropriate mindset before entering the co-design session.

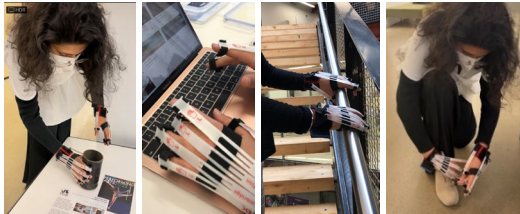


Figure 1. Student Jouri Abdulmajeed Ghazi was trying on a pair of arthritis simulators.

4.2 MAKING A PARTICIPATORY TOOLKIT

Before meeting the older participants in the workshop, making a participatory toolkit was an important assignment for students. The toolkit is a collection of materials and instructions that students can use to engage older participants. Michael Zhu, a graduate student in interior and architecture design developed a collage set as a toolkit for older participants to visualize their dream house in mind. Figure 2 shows the collage materials the student prepared, including images from interior design magazines, glue, scissors, and a blank baseboard for the participants to glue on. Other students developed toolkits ranging from guided painting sets, mixed media social tree development, culturally relevant collage materials, etc.



Figure 2. Toolkit materials from student Michael Zhu: a collage set.

Students also designed semi-structured research questions to engage older adults. A few sample research questions leading to the co-create session included: “What do you miss most about the place you grow up in?” “What are your favorite items in your home?” “Are there any items you wish you had in your current personal space?” “What are things that make you happy?” These interview questions supplemented the visualization process, improving the accessibility of communication.

Michael Zhu wrote later in the reflection about this co-create session: “To better explain the collage technique to older participants, I demonstrated some of my work...I tore down plenty of pieces of inspirational images from interior design magazines and asked them to use whatever images they could resonate as elements of their dream house. At the beginning of the workshop, I guided them to start with simple steps, such as looking for the furniture that attracted them. They tended to only use 2-3 big images that contain lots of concrete elements. However, a fabulous collage contains beautiful abstract elements such as texture, organic objects, etc. To help them understand this theory better, I advised them to recall the way they dress daily since lots of Asians, especially the older ones prefer dressing decoratively. After telling them about the connection between the pattern of their clothing and the abstract elements in a collage, they understood it immediately and finished the rest of the co-create collage work” (see Figure 3).

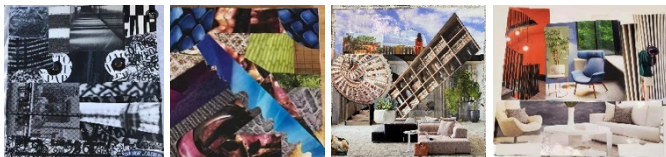


Figure 3. The left two collages are from Michael Zhu. The right two collages are the co-create work of two older participants.

4.3 MEETING WITH OLDER ASIAN PARTICIPANTS IN THE COMMUNITY CENTER

During the co-design workshops, both in-person and online, thirteen interdisciplinary students from Drexel University (2 graduates, 9 seniors, and 1 sophomore) and around six older Asian participants in each workshop, joined the *Aging + Design* co-design activities side-by-side (refer to Figure 4). We conducted four workshops and one final joint public-facing exhibition during the course period.



Figure 4. *Aging + Design* co-design activities with students and older participants side-by-side.

While reflecting on the co-create experience, graduate student Theresa Jordan said: “I thought it was quite heartwarming to interact with a group of people I would have normally not had a chance to

interact with...It was interesting hearing older participants' stories and seeing the world and Philadelphia through their eyes for a few hours. The interview portion of the workshop was also very enjoyable. Even though I was a little worried about how well the translation process would work out at first, we ended up having an insightful conversation, and I learned a lot about her story and who she is as a person."

4. CHALLENGES

One of the major challenges in this co-create project was the language barrier. Most students enrolled in the *Aging + Design* course speak English. The older participants from the communities speak Mandarin and Cantonese. Before the semester started, Professor June He emailed all the enrolled students to identify their language skills to help assess how much support they need working with the participants. During the team forming process, she made sure that each team had individual support from interpreters while working with older participants. Two of the enrolled students have the language skills to speak Mandarin, so does the professor, and one research assistant speaks Cantonese. Still, there were not enough personnel to speak the target language of the participants. To make sure the cross-cultural and intergenerational communication happens smoothly, Professor June He created fliers to distribute to a variety of organizations to recruit volunteer interpreters. These organizations and personnel include the president of GCC (Global China Connection) at Drexel University, lead faculty in the Chinese program at the Department of Global Studies and Modern Languages, Vice Provost of Global Engagement, and more. Eventually, the program enrolled volunteers from different sources.

5. PROJECT OUTCOMES

Inter-disciplinary students in small groups co-designed with older participants from the two local communities during the three-month spring quarter term in 2022. Together, they developed a variety of products and solutions, which were showcased in the final *Aging + Design* exhibition at Drexel University at the end of May 2022. One project idea was a service design for older Chinese adults to request translation assistance from volunteers. During the research session, students and older participants realized that their main pain point was to communicate in English in everyday life. Therefore, they created a website named *Connect*. It's a platform for older Chinese adults to schedule a translation/interpretation service any time for free, helping them communicate efficiently in scenarios such as shopping in a grocery store, visiting a doctor's office, reading mails in English, etc. It is also a great way for them to connect with caring local volunteers.

Another product idea was a *subscription box* model that partners up with non-profit organizations serving older adults. During the design research, students learned that older Asian adults spend a large amount of time taking care of family members. However, they crave creative activities in their leisure time to reconnect with their individuality. This group proposed a series of subscription boxes to engage older adults: learning a new craft, developing a hobby, and forming new relationships with like-minded

people. Depending on the content of the activity, each box provides materials and instructions to guide them.

Other design ideas include an origami-inspired planter to be built with family members, a D.I.Y. birdhouse to engage nature with limited space, a public park catering to the needs of older adults living in Chinatown, a guided journal book with writing, drawing and collaging elements, a raised flower bed as a community gathering and planting place (refer to Figure 5).



Figure 5. Co-design concepts and prototypes.

6. LEARNINGS

Most older adults took pleasure in co-design activities. The toolkits were a great method that allowed them to associate with personal relationships, hobbies, routines, life stories, and more. It also gave them freedom of creative expression. Everybody was excited to present what they accomplished. As we learned from the whole process, effective translation was a key point to successfully facilitating the initial community engagement and co-design workshops. Older Asian adults in the Philadelphia area generally need assistance in language translation, are eager to engage in nature, want to have safer public transportation services, and have a passion to explore creative activities on various levels.

After each collaborative session, older adults were provided feedback forms. Scaled options and open-ended questions were two ways to access their satisfaction with the event. Students were provided mid-term and final evaluation forms to give their feedback and suggestions. Based on the data from students' final evaluation (n=12), overall course satisfaction out of 5 was rated 4.5, and overall instructor satisfaction out of 5 was rated 4.75. 75% of students highlighted working with older adults in the community as one of the best things they liked about the class. As to the feedback from the older participants (n=13), interest in the content of the co-design activities was rated at 4.75 out of 5, the effectiveness of communication with students was rated at 4.89 out of 5, and the possibility of introducing this event to other older adults was rated at 4.46 out of 5. While asking about the things they like the most during the workshops, 77% of them specifically mentioned that they enjoyed communicating with young students. The rest expressed that they love seeing different creative ideas, talking about memories of youth and hometown, and everything else about the event. 100% of the older adults answered yes when asked if they would participate in the following event, with three of them preferring to attend virtual workshops because of COVID-19 concerns.

7. REFLECTIONS

By the end of the term, many older participants and students wrote personal reflections on the co-design experience, where they discussed learnings, challenges, emotions, and future applications. Students described the class as “a unique experience and an amazing learning opportunity”. They gained “new perspectives and skills” and “new insights that we did not expect”. A few students mentioned that they gained more respect for older adults. The major learnings from students were “the relationships I was able to make”, “understanding the struggles of an immigrant”, and learning “how to transcend cultural, lingual, and technical barriers to design something simple and impactful”.

The most prominent challenge students faced was the language barrier. Although the instructor invited volunteer interpreters on-site, one student group said they “struggled with the language barrier” and “some tone may have been lost in translation”. However, students generally expressed that they were able to build “social connections despite the language barrier”. The second challenge was the technical barrier while conducting workshops through Zoom. One student mentioned in his reflection “contrast of comfort between in-person and online”. Comparing in-person events to virtual workshops, we realized that in-person activities were still a much more efficient way, especially when there were various barriers between students and older adults: age, culture, and language.

Older participants expressed in their reflections that the experience “inspired my creativity”, “ignited my passion”, “enriched our lives”, and “enhanced our memories” One participant gladly admitted that she “felt like I was back to my youth, to the days when I was a student”. A few of them appreciated the experience that brought them “confidence and joy”, with a focus on “heartwarming communications”. Same as the students, older adults also mentioned the language barrier. But they have a more positive attitude towards it. One participant cheered that she “conquered the language barrier by using creative activities such as drawing and using body language with students”. Another participant gladly embraced “Surprisingly good results”. Other older participants emphasized their positive learning experiences. “I learned so many things about design,” one said, “my mind was blank at the beginning of the class, but I became more and more interested and happier along the way...so proud of our work.” Another beamed “I learned photography, collage, and other skills for creative activities!”

8. MEANING AND SIGNIFICANCE

Through the co-design experience, both students and older adults developed unique ways to conquer various barriers, especially the language barrier, to achieve final goals. Without a community-based co-design mindset and methods, the creative problem-solving process would be much more difficult to navigate. As we see from the above learnings and reflections, both students and older adults benefit from this unique learning experience.

Effective communication helps to break barriers and stereotypes, as well as gain mutual respect and confidence. Using co-design as a platform, the faculty facilitated the two groups to listen to diverse voices which normally would not be heard. The design process pushed both groups to be out of their

comfort zones and embrace the unknown with an open mind. In students' reflections, they recognized that older Asian adults are usually “overlooked” and “counted out in American society”. After the collaboration, they concluded that “they (older participants) are so kind, encouraging and passionate”, “they know more than they will admit”, and “I have a newfound respect for them for how much knowledge they have and the experience that they are able to pass down.” Conclusively, the learning objectives for this course, as we mentioned earlier in this article, have been achieved. Furthermore, the experience has increased the awareness of ageism and anti-Asian bias. Many students expressed their willingness to continue the efforts for the older Asian community moving forward.

One limitation of this study is the sample size. But this is an ongoing course. Hopefully, after future development and funding opportunities, we can collaborate with more communities and partners to bring this cross-cultural and intergenerational experience to a broader audience.

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