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Here's What we Really Want your Class to be about! A Design Thinking Class Responds to the Pandemic

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Abstract

This case study describes many changes to the curriculum of a design thinking for social innovation class at a private university in New Orleans that were prompted by the COVID-19 pandemic. The pre-COVID version of the course offered a practical, experience-based introduction to design-thinking (DT) tools and methods. Students learned to apply these tools to social innovation for collective impact through discussion, studio and fieldwork, and close collaboration with colleagues and members of the New Orleans community. The challenge during the COVID-19 pandemic was how to re-create this experiential learning while working remotely. The paper aims to demonstrate how the pandemic-related changes such as the all-remote delivery of instruction, community involvement, as well as a change in philosophy due to the racial unrest in the United States in 2020 led to a re-design of the class. The theme of the class, Sustainable Development Goal #3, "Good Health and Well-being'' was requested by residents of New Orleans, in light of the impact of the pandemic on communities of colour in the city. Despite being a remote class, the residents were also present in the class regularly throughout the semester. The remote delivery of the class forced a need for intentional and empathetic community building among the students and with the community members. The redesigned class included conversations about race, periodic drop-in visits from community members, guest lectures from professors in other cities, feedback sessions via social media, and critiques by panels composed of community members and visiting designers from around the world.

Keywords

remote learning, design thinking, emancipatory community-based learning, critical pedagogy,

Introduction

> *"You people are always coming here and telling us what you want to do in our community, well it's 2020. Here's what we really want your class to be about!"*

The COVID-19 pandemic and the social unrest in the United States prompted many changes to the Fall 2020 version of the Design Thinking for Collective Impact course, a course within the Social Innovation and Social Entrepreneurship minor at Tulane University.

In summer 2020, the world seemed to be falling apart. Students, faculty, and the residents of the city, like people in other parts of the world, were living through collective trauma. What content could make sense considering the chaos that the COVID-19 global pandemic had caused? 2020 was also marked by many protests against racism in the United States in the wake of the murders of George Floyd, Breonna Taylor, and Ahmaud Arbery. The setting for this case study is New Orleans, which is a majority-minority city in the southern United States, and,

although almost 60% of its population is African American, Tulane University is a predominantly white institution in New Orleans (Williams, 2021). The unrest of 2020 brought these racial tensions into the classroom. How could the students sensitively and respectfully engage with the residents given the impact of both incidents on communities of colour? How could the structure of the class honour the experiences and knowledge of the community partners? Could a design class in Fall 2020 just be 'business as usual' given the context?

Background

Design thinking is generally thought of as a creative problem-solving process that borrows processes and mindsets from the field of design, such as thinking intuitively, recognizing patterns, expressing ideas through means that go beyond verbal and traditional methods. (Razzouk and Shute, 2012). Many institutions have created design thinking programs for non-design students, as a way of exposing them to core design thinking abilities. For example, the UVA Medical Design program exposes medical students to clinically relevant design thinking skills such as empathetic interviewing with patients to deeply understand their motivations. Some UVA medical students indicated that the exposure to different approaches to problem solving through design thinking positively impacted their learning in medical school, and graduates have continued to apply design thinking approaches in their medical careers after graduation (Trowbridge et al., 2018).

The Design Thinking for Collective Impact (DTCI) course at Tulane University, assumes no prior background in design, graphic arts, or fabrication. It is open to admitted/declared undergraduate students of the Social Innovation and Social Entrepreneurship (SISE) minor who have passed the prerequisite courses. Though it is housed within the School of Architecture, the SISE minor at Tulane University is an interdisciplinary minor for undergraduate students from across the campus. Five, full-time undergraduate schools make up Tulane's Undergraduate College: The School of Liberal Arts, the School of Science and Engineering, the School of Architecture, the A.B. Freeman School of Business, and the School of Public Health. Therefore, the students in the design thinking class can come from any one of these schools. Most of the student population for the DTCI course in Fall 2020 comprised students who would not consider themselves designers.

Context

Design Thinking for Collective Impact at Tulane University

The DTCI course, as mentioned earlier, is located within the SISE minor at Tulane University. Both the DTCI course and the SISE minor build on Tulane University's strengths in civic engagement and service learning. Since 2006, students from Tulane University have contributed 2.5 million hours of service to the community of New Orleans (*Center for Public Service* |, n.d.). SISE courses introduce students to concepts of social innovation, mindsets of human-centered design, and frameworks for social impact leadership. Students in the minor develop an understanding of complex problems while developing a toolkit to create positive social and environmental change. This course, like several others at Tulane University aims to provide students with skills to create a more just and equitable society.

The city of New Orleans and Tulane University have an ongoing relationship through research. There are few studies about over-researched communities (Sukarieh and Tannock, 2012). New

Orleans, as a majority-minority city that experiences frequent crises and with its resilient residents. as well as the proliferation of academic institutions in such a small city, make it a prime location for having over-researched residents (Neal et al., 2015).

Provocation

Ms. C reached out to the professor during the summer of 2020 pointing out that the university would normally reach out to her and members of the community outlining what the research interaction would be in the upcoming semester. For the upcoming semester (Fall 2020), she wanted to have the community needs drive the direction of the class and the research, given the impact of the pandemic on communities of colour and the heightened awareness of racial injustice in 2020.

Ms. C's provocation or invitation hinted at over-research or 'research fatigue', which is a phenomenon that occurs when participants have had enough of the research engagement, impacting participant enthusiasm for future research (Clark, 2008). One benefit of over-research, however, is that it leads to experience and expertise in dealing with researchers (Neal et al., 2015), which Ms. C demonstrated as she gently demanded that the focus of the class meet the community needs. Ms. C. explained 'The COVID-19 pandemic has hit the African American community so hard. So, me and Ms. H. decided your class should focus on good health here in New Orleans, so after this pandemic, the people of New Orleans would know how to take better care of themselves after being hit so hard."

Ms. C., therefore, proposed a theme that was relevant to the crisis that everyone, professor, students, and residents, were experiencing. The proposal of the theme by the resident was one of the preliminary changes to the content of the course. In teaching design for social innovation, there is often tension between the needs of the community participants and the pedagogical needs and outputs of the class. Ms. C's allusion to over-research emphasized a need for attention to the process of research and how the outcomes are achieved over the resulting artefacts and outcomes (Kelly, 2020).

The pedagogical benefit of the provocation and the specific social context of 2020 was that it emphasized the need for situated and contextual learning for the learning to remain relevant for the students and the community participants. Situated teaching and learning is a feature of critical pedagogy. Teaching and learning that is situated learning in the context and culture of the students, shifts the focus from the teacher to the student, (Shor, 1992) creating a more student-centred environment and a more empowering and engaging educational experience.

The Pandemic Impact on Delivery and Content

The challenge during the COVID-19 pandemic was how to re-create experiential learning while working remotely. The in-person version of the class had a highly collaborative and relaxed studio atmosphere. The studio space included whiteboards, prototyping carts with post-it notes, markers, crafty materials, and tools. The class involved a lot of physical activities including physical warm-ups such as dance and games to get people moving when the energy was waning. Sometimes there would be music playing in the background while students worked. In-person classes in Spring 2020 were abruptly interrupted by the pandemic, and the

course content had to be rapidly modified to complete the semester. The summer break created space to build the online experience more intentionally.

The class had been designed with this relaxed studio atmosphere with games, music, and playful conversations, as regular components of the course delivery, not merely to entertain students, but to intentionally create empathic connections between them that would accelerate the group collaboration. Empathy is often noted as important to the design process, and this is often presumed to mean empathy for the users of the design solutions (Devecchi & Guerrini, 2017), empathic relations within the team are also needed for collaboration (Akgün et al., 2015). The recreation of the class online had to incorporate the social nature of the studio that promoted empathic and relational interactions.

The original class had been built around principles of critical pedagogy. While going through the design process, students also viewed material that 'problematized' the methods that they were learning to use, such as critiques of design thinking (99U, 2018; Ersoy, 2018; Martin, 2019; Wodtke, 2020), whiteness in design practice (Kelly, 2020) and resources that proposed improved ways of practicing design such as equitable design practice (Harrington, 2019), and a greater focus on systems (Joffres, 2020). The semester would end with their critical reflection on whether they agreed or disagreed with the perspectives that were oppositional to design thinking. In this Freirean way of analysing material that 'problematized' design thinking and proposing new models of design thinking, students would be more confident and empowered in their future design practice (Freire, 1973).

Given these considerations, the following were questions that informed the development of the SISE 3010 class in Fall 2020:

1. How to recreate the studio environment, conduct fieldwork and maintain engagement in a less flexible online space? (delivery)
2. How to build a class that would meet the social and affective needs of the students and promote empathic and relational collaboration between students who are collaborating remotely? (relationality)
3. How could the design class honour the collective pain and trauma of 2020 that impacted all of the stakeholders in the design project? (relevant and situated content)
4. How to build a participatory, community-engaged design class, despite the requirements of social distancing and or remote delivery. (community engagement)
5. How to ensure that the critical framing of the class would not be lost due to the revised delivery, or how to make best use of remote delivery to complement the critical framing of the class? (critical consciousness)

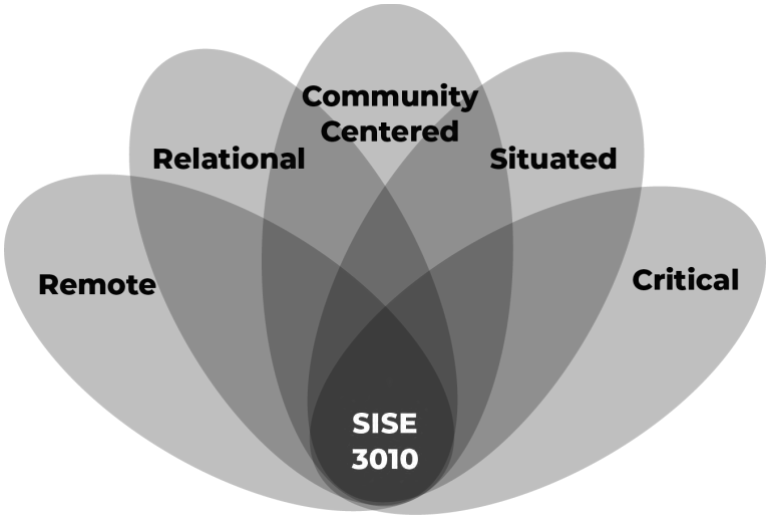

Figure 1. Conceptual Framework for the re-design of the SISE 3010 course. This image demonstrated that professor's mapping of the key issues to maintain in focus in the re-design of the course. The framework adds 'remote' to the previous core goals or concepts of the course of delivering a design education experience that is relational, community-centred, situated, and critical. Source: The author.

A Revised Class Design

The pandemic-related changes such as the all-remote delivery of instruction, community involvement, as well as a change in philosophy due to the racial unrest in the United States in 2020 led to the redesign of the SISE 3010 class. The new design sought to address issues of relationality, community centeredness, situated content, criticality and remote delivery. The overarching theme of the class, Sustainable Development Goal #3, "Good Health and Well-being'' was requested by residents of New Orleans, in light of the impact of the pandemic on communities of colour in the city. Even though the class was remote, the residents were also present in the class regularly throughout the semester. The emancipatory approach of making the class responsive to community interests and having residents present at each phase of the project, was a new approach that reflected a shift in philosophy towards centring the experiences and expertise of black people. This approach was developed as a response to the racial unrest in the United States in 2020, and the impact of the COVID-19 pandemic on black communities in the United States.

The remote delivery of the class forced a need for intentional and empathetic community building among the students and with the community members. The redesigned class included the warm-up and ice-breaker activities of the original in-person class, but also included conversations, readings, and reflections about race, privilege, and positionality, to help students understand their complicated position as students from a predominantly white institution doing research in a majority-minority city.

Though the class was all remote, students engaged with visitors and members of the public at each stage of the design research process. A guest lecturer who was a food anthropologist visited the class remotely to share strategies for building empathy and conducting interviews remotely to facilitate the remote research engagement that they were required to do with

residents. Students also practiced these techniques in class before doing the fieldwork. Students continued to engage with the public through the interviews, periodic drop-in visits from community members, feedback sessions via social media, and critiques by panels composed of community members and visiting designers from around the world.

Virtual whiteboards and video conferencing facilitated remote collaboration and learning throughout the semester. The video conferencing presented an unanticipated barrier to interaction with the residents. Audio and video challenges were experienced during the interviews conducted via video conferencing in Module 2. Students had to switch from internet-based video conferencing to cellular-based telephone calls to make the process easier. This however impacted their ability to record the conversations and save the auto-generated transcripts.

Description of Class

The 3-credit course was divided into six modules running from mid-August to the end of November. Some activities were module-specific while other activities continued throughout all six modules to provide rhythm and continuity. The class met virtually two times a week for 1hour and 50 minutes each session. Students worked synchronously and asynchronously in groups and individually responding to weekly prompts.

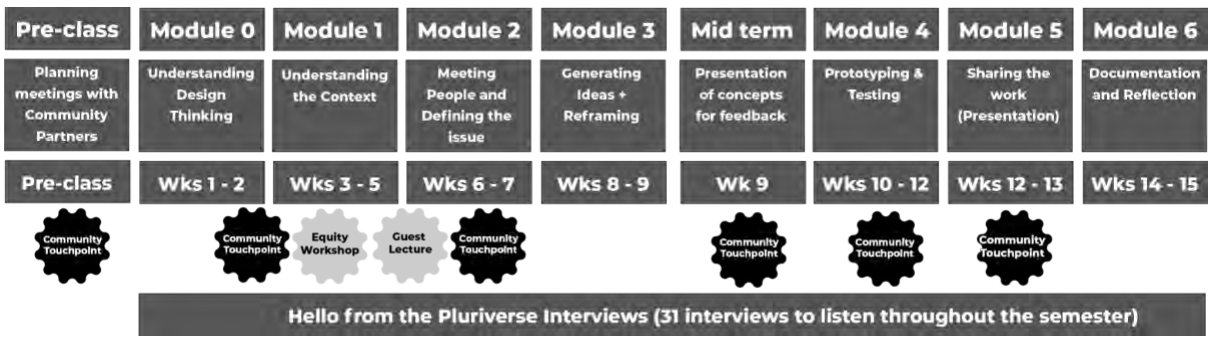

Figure 2. Week by week plan for the semester for SISE 3010 - Design Thinking for Social Impact. Source: The author.

Approach

This paper is a rich case study with reflection and lessons learned. The paper aims to describe, organize, and examine the many changes to the curriculum, that were derived from these two historical events, and understand how these changes impacted the delivery of the course and the student and community partner experience. The two main questions that were addressed in creating the course were: a) how to create relevant design thinking curricula situated in the public health and social justice crises of 2020, and b) how to create design curricula that despite the remote delivery, continued to focus on empathy, relationship-building, action research and fieldwork.

The Case

Actors

The theme for the class was proposed by two African American women from New Orleans, Ms. C. and Ms. H. There were fourteen students twelve of whom identified as female, and two of whom identified as male. Twelve of the students were white, and three were non-Black people of colour. Except for one student pursuing a bachelor's degree in Architecture, the students had no previous background in Design. Only one student was a native of the greater New Orleans area. Other students came from other parts of the United States. The professor was a Black woman who was not native to New Orleans or the United States.

Pre-Class

The professor and Ms. C and Ms. H met in person and virtually several times before the start of the semester so they could clarify the needs and expectations from the community participants and from the university. They also discussed the technical logistics of doing remote research. They considered spaces that residents and students could meet in a socially distanced way, as well as the technology that residents would have available to them for virtual communication. Due to the university's requirements, it was decided that all of the activities with residents would take place remotely.

Whole Semester Activities

Two activities took place during each session of the class to create some continuity in the experience. Each day either the professor or an assigned student led a short warm-up or ice-breaking activity to encourage students to feel more comfortable with each other. In this way, students also built their own skills as facilitators. This also created an environment conducive to co-learning, as the students designed their own warm-up activities, or built on games they had played as children, and everyone learned from each other.

The other activity that continued throughout the semester is that at the end of each class students had to listen to an interview between a designer and a student from a previous class. Design and design thinking can be perceived as very White, male, and Euro-American, just as the people they are designing for are also perceived as white, male, able-bodied and cis-gendered (Costanza-Chock, 2020). The 30+ interviews were recorded with designers from several different countries and with very varied positionalities, such as diverse racial and ethnic identities, native languages, gender identities and even professional backgrounds. The aim of these interviews was to broaden students' perception of 'who is a designer' and what is 'the design process'.

Modules

Module 0 - Understanding Critical Design Thinking

In this module, students were introduced to the remote platform Mural, a digital workplace for visual collaboration (Mural, n.d.). This module began with conversations about positionality so the students could reflect on their own identities and how they could impact the design research they were about to engage in. They used the Positionality Wheel pictured below, as a means of sharing elements of their identity anonymously and remotely. The Positionality Wheel was created by the author in 2019, and has been published previously (Noel & Paiva, 2021). The

Positionality Wheel was initially created as a tool for individual and group reflection in-person. The remote use of the tool allowed for greater anonymity which led to more sharing of identity features, which participants might have been inhibited to share in an in-person setting. The activity was followed by discussion and critical reflection. The aim was to help students see elements of their individual and collective identities that they might not normally consider so that they would also be able to recognize the subjectivity involved in the research and design decisions that they make. Students were introduced to the sustainable development goals and in particular SDG #3 Good Health and Well-being. They did a rapid design sprint to understand the process they were likely to follow over the next several months.

Figure 3. Group positionality using the Positionality Wheel. Source: The author.

Module 1 - Understanding the Context

Students were introduced to the question that had been suggested by Ms. C. and Ms. H. This question was "How Might we support New Orleanians to have better access to good health and wellbeing?" Students mind-mapped their understanding of Good Health and Well-being. External consultants provided a facilitated workshop about equity. A guest professor, who was familiar with New Orleans, gave a lecture about anthropology and strategies for understanding the research topic and connecting with the interviewee. He also helped the students craft possible research questions. Students met with Ms. C. to understand her view of the problem. She shared with them some pain points and points of joy about life in New Orleans. They listened for possible research questions in the open-ended interview. They also listened for possible desirable solutions being proposed by Ms. C. They noted additional questions which they would try to explore with the other interviewees (Figure 4).

Module 1 ended with preparation for the fieldwork which would happen in the next phase. This preparation took place by interviewing their classmates to understand hopes, joys, fears,

dreams, and Utopian ideals about good health and wellbeing. They asked three food-specific questions as ice breakers and as a means of collecting additional qualitative data. These questions were a) What food reminds them of home? b) How is a favourite meal cooked? What's the recipe? c) Describe how do the main ingredients get from the farm to the table.

Students worked collectively on their research at this phase. They collaborated by interviewing each other to practice interviewing skills, by researching the problem focus together, and finally by conducting the interviews in small groups.

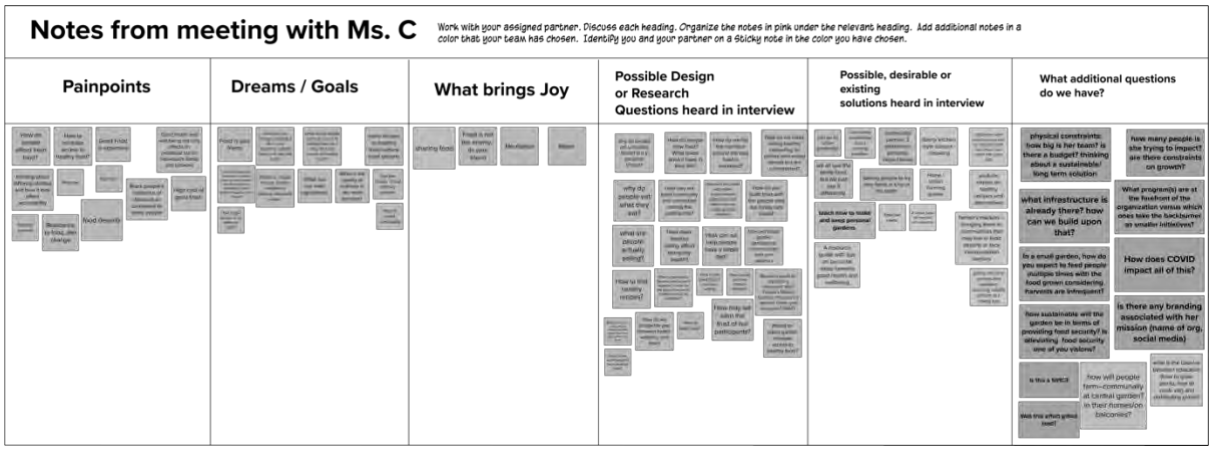

Figure 4. Group notes from the visit with Ms. C where students listened for pain points, dreams or goals, points of joy, possible solutions and other key points in the conversation that could impact the design process. Source: The author.

Module 2 - Understanding the People and the Main Issue

Students received additional coaching on conducting interviews. They conducted interviews remotely with three people. This was a difficult activity since it was evident that the varying bandwidths available to the interviewees impacted their participation in the interviews. The preferred interview method was to conduct the interviews via video platform since these could be easily recorded and would result in auto-generated transcripts. One person who had agreed to be interviewed, had to join via phone, because they needed to run errands during the scheduled interview appointment. They joined the video conference from their phone but eventually, the call dropped, and the person was unable to re-join. Another person could not join the video conference via their phone since they did not have enough data available on their telephone plan. The group conducting that interview had to switch to an interview via telephone instead. Finally, the third interviewee was able to join the video conference, but the sound quality was very bad, and this affected the students' ability to understand what she was saying. A fourth person had to be interviewed since the participant who was running the errands never completed their interview. Despite many challenges, all three student groups managed to complete their interviews. The class debriefed the difficulties of remote interviewing and was reminded that even in an in-person context, fieldwork can be difficult.

They translated the data from the interviews into personas as a way of anonymizing the information (Figure 5). The three personas they created were Beth, Megan, and Mark.

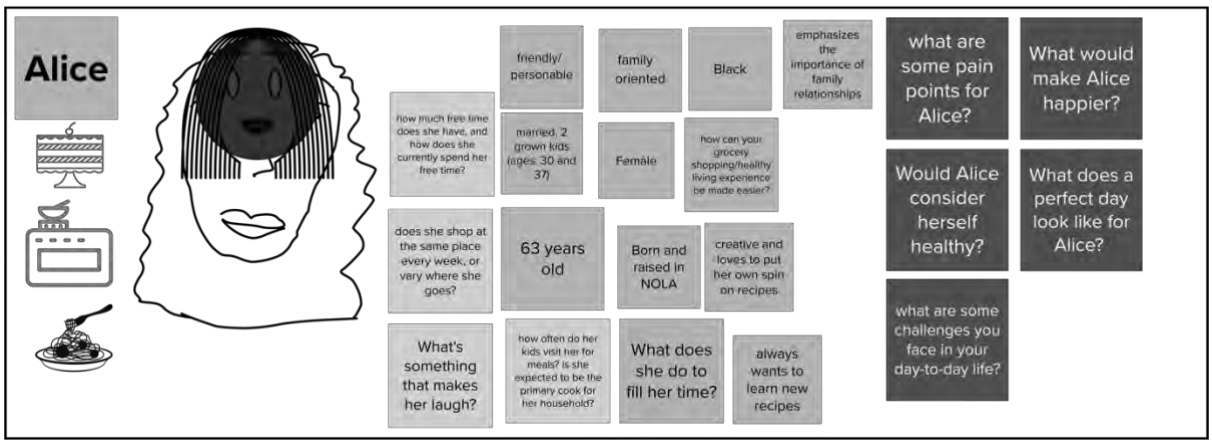

Figure 5. The group co-created a persona to represent the needs and concerns of the person that they interviewed. The students used the drawing tools and images available on the Mural platform. The illustration is not actually representative of a person, but drawing a person and using the emojis were part of the experience that helped them visualize the information that they had heard in the interviews.

Multiple Techniques for Problem Framing

In Module 2, after students had gained a better understanding of the context, there were many exercises to help students re-frame the problem. One of the activities was for students to brainstorm about "What if" questions and scenarios that could help reframe the problem and lead them to imagine new possibilities (Liedtka et al., 2014; Kimbell, 2019). They used the "What if dream space" to re-imagine the problem without many of the barriers related to poverty, time, access, among other factors. They created these questions and scenarios based on points that they heard in their interviews.

In another problem framing activity, students were asked to reframe problems through eight specific lenses (Table 1): Building networks, Activism and organizing, Knowledge sharing, 'Fixing', Making / Producing, Individual or public education framing, Agency and empowerment, Gathering or bringing people together.

Table 1. Alternative frames used for the class assignments.

Building networks	Activism and organizing
Knowledge sharing	'Fixing'
Making / Producing	Individual or public education framing
Agency and empowerment	Gathering or bringing people together

These eight reframes were intended to help students explore the same issue through several lenses. The "fixing" frame was borrowed from a workshop by Korsmeyer and Edwards (2020) in

which they posited that designers assume they must 'fix' problems and people. Designers can take on this default role and consider the problem from a 'fixing' frame, but then they should also actively reframe the problem through other lenses. Some of the other proposed frames, such as 'Activism' and 'Agency and empowerment' were introduced as they seemed even more relevant to the 2020 context, considering the protests that had taken place over the summer.

After reframing and exploring the problem in different ways, students selected the questions they thought best responded to the needs they had heard articulated by the different interviewees. They combined these questions into a slide deck to share with the community partners.

Module 3 - From Defining to Brainstorming

In this two-week module, students were presented with several different techniques for brainstorming.

Ideation Session 1: Inn'eaux'vation Jam

The first brainstorming activity was the Inn'eaux'vation Jam. The name plays off the common practice in Southern Louisiana of replacing an 'oh' sound by 'eaux' in written language, as a marker of their regional heritage. In this practice, for example, 'Go Saints', the local American football team is The Saints, would be spelled 'Geaux Saints' on local flags and banners. This was a way of making the brainstorming activity seem more local. In this activity, students took their selected question and explored brainstorming about this activity as different types of solutions e.g., as a behaviour, a product, a technology, a service, a policy, or something else. The default solution space for students is often an 'app', and therefore the aim of this activity was to encourage them to consider the solution in different modalities.

Ideation Session 2: "Adapting the Wheel but not Re-inventing the Wheel"

For the second brainstorming activity, students were encouraged to seek precedents from other contexts "adapting the wheel but not re-inventing the wheel". The professor found some existing precedents and then prompted the students to find others and to discuss what these solutions could look like in New Orleans.

Students then proposed incremental solutions that built on existing solutions but were modified for the local context.

Ideation Session 3: Smash - When Two Ideas Collide

"Smash" was the third brainstorming activity. Students were partnered with another student, and they had to combine ideas. Each original idea had to be evident in their new idea. This was derived from creative challenges for students that the author had created over many years. The unexpected combination of ideas has often changed encouraged students to examine the solutions they were considering through different lenses.

Ideation Session 4: What Would Curitiba Do?

In this activity, students got an introduction to innovative design solutions to their selected areas of focus that had been implemented in several non-North American cities around the world. The aim was to broaden both their understanding of the issue and their view of the

solution space. They had to explore city-level innovations in cities in the Global South such as Curitiba, Bogota, Kampala, and Nairobi in particular, and examine how people tackle the same issues. These cities were suggested since they are sites of innovation outside of the Global North. Curitiba has developed many innovative social programs such as exchanging recyclables for food, a program that has been in existence since 1991 (Connect, n.d.). Bogotá has been recognized for Excellence in Social Innovation by the Inter-American Development Bank (Wade, 2018). Uganda has been ranked as the most entrepreneurial country in the world, even though most business ventures in that country remain informal (Patton, 2016). Mobile money transfer systems, like M-Pesa, were created in Kenya around 2002, pre-dating US mobile money transfer systems like Venmo, which was created in 2009, by many years (Piper, 2020). The reality of a city like New Orleans is at times closer to the reality of life in these cities in the Global South with similar populations, culture, food, and living conditions. Therefore, it was important for students to explore many different precedents in both the Global North and the Global South as they did their research, and to recognize that examples of successful responses to the same issues can come from the Global South.

Ideation Session 5: Only in NOLA

For this activity, students explored the problem space while considering the specific location, culture, climate, and infrastructure of New Orleans. This meant the students had to consider the 'character' and reputation of the city. They also had to ask both the local students and the community participants about the interests of residents. This led the students to consider solutions around food, music, dance, hospitality and sharing, since these are related to the culture of New Orleans. Some of the proposed solutions at this stage included festivals, food trucks, community refrigerators and recipe sharing platforms. These solutions were only considered when students focused on creating solutions for the culture and context of New Orleans.

Ideation Session 6: Here's to the Future

For this future-focused activity, students considered three systemic issues related to good health and wellbeing. They created positive future headlines about how their innovations had impacted these issues, as well as negative future headlines anticipating that their innovations had caused many unintended consequences (Figure 6).

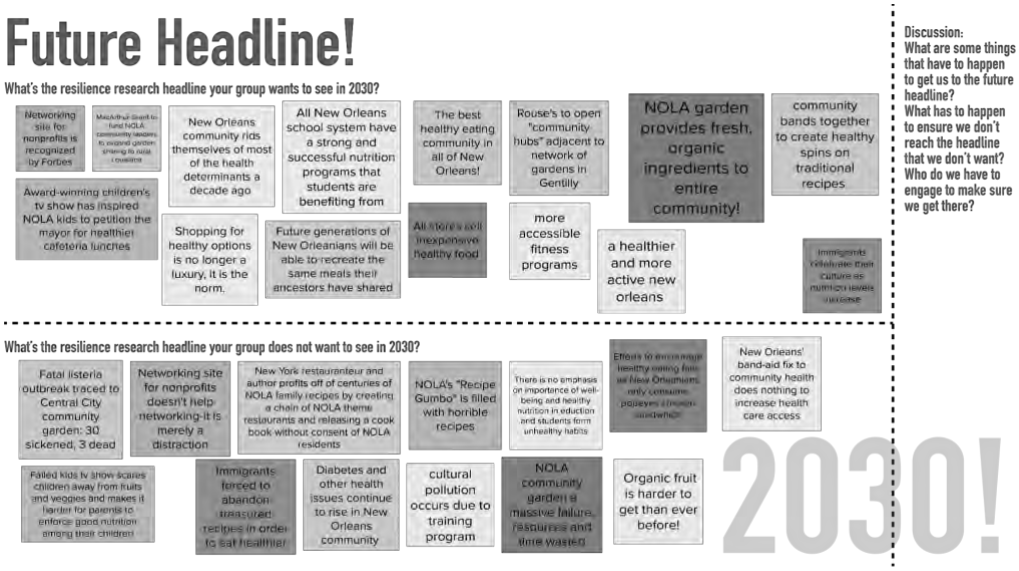

Figure 6. The Future headlines worksheet helped students consider potential good and bad impact of their design proposals.

Ideation Session 7: Mapping the Solutions

In this final activity, students collectively mapped their ideas to see how they were achieving collective impact despite the individual projects that they were each proposing.

At the end of this module, students had their mid-point presentations where they presented three concepts to a diverse audience that included Ms. C. one of the interviewees, visiting design professors from other North American universities, including two professors from the Caribbean, one from Puerto Rico, and one from Barbados, both of whom provided a lot of feedback given the similarity between New Orleans and the Caribbean

Module 4 - Prototyping and Testing

In Module 4, the students created two prototypes to share with audiences of people that they knew and people that they did not know.

The first prototype was a slide presentation which they shared with their colleagues on the whiteboard. Their colleagues had to offer both positive and negative feedback that would be generative and lead to the expansion of the initial idea. The “yes and” comedy and acting improvisation technique where actors build on the information provided by fellow actors (Bradford, 2020). They uncovered unanticipated issues through their colleagues’ negative feedback which was solicited through “yes, but” comments. They used the “What if” question to invite their colleagues to also be creative and generative (Liedtka et al., 2014), even though sometimes this led to negative feedback, and finally the “but why not” question encouraged the person giving the feedback to join the co-design process (Figure 7).

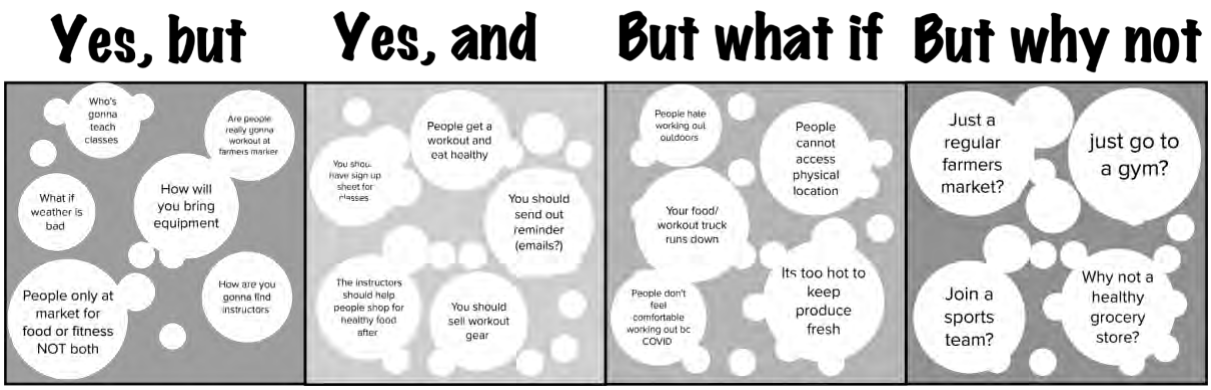

Figure 7. Students used the "Yes but, Yes and, But what if, and But why not" grid to help solicit critical feedback from colleagues that would lead to the generation of additional ideas.

The second prototype was a website landing page that described the way the proposed solution or service worked. The website was created quickly using a site with templates such as wix.com. The aim was not to create a perfect prototype, but rather to create a solution that would appear real so that they could begin to collect feedback (Knapp et al., 2016). Since they were going to solicit feedback from many diverse audiences a website would be an easy prototype that could be shared digitally.

First, they shared this prototype with people that they knew for feedback. This could include friends, family, colleagues etc., anyone from whom they thought they could elicit productive feedback. After responding to that feedback, the students were encouraged to bravely elicit feedback from residents of New Orleans via social media groups.

Module 5

In Module 5 the students presented their final design concepts via video conferencing. In the audience were Ms. C, one of the interviewees Ms. A, several other residents from New Orleans, and designers from New Orleans, from other cities and states around the United States, such as New York. The two design professors from the Caribbean also returned for the presentations.

Module 6

The semester ended with a reflectivity activity where students reflected on ‘design thinking’ i.e., a human-centred innovation process (Kimbell, 2019) and the ways that designers think. They examined popular models of design thinking. They also reflected on the process that they used to develop a design solution. They were asked to reflect on the models that they had seen, the process that they had used, and their own knowledge and life experience and identify what they each felt was missing from the existing design thinking models in a social innovation context. After discussion and reflection, they each wrote an article and drew their own model (Figure 8). The articles were shared via social media on a blog post with all fourteen articles.

New Models for Design Thinking

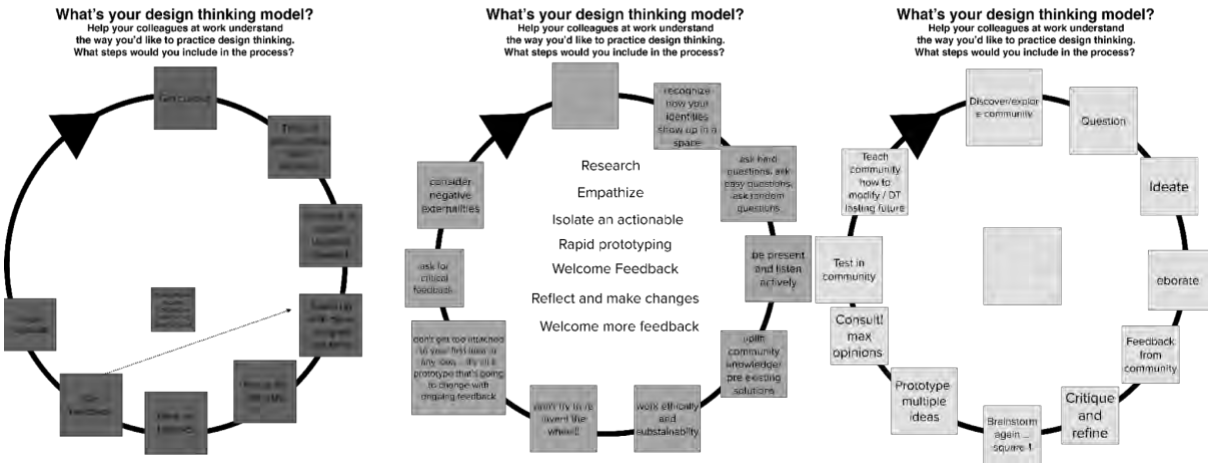

Figure 8. Students experimented with their own models for design thinking.

Discussion / Reflection

The COVID-19 pandemic created a pause and re-design. In this section, the key changes and their impact and effectiveness will be outlined and examined.

Course Delivery and Studio Experience

Though Tulane University had returned to in-person instruction by Fall 2020, this class remained remote. The all-remote delivery made it easy to have guest participants from around the city, the country, and even the world. The online whiteboarding platforms and shared presentations and documents made remote collaboration. Students were happier that the remote collaboration produced less waste than traditional in-person paper-based workshops.

Despite the remote delivery, the class was able to maintain some of the signature pedagogies of the design studio (Crowther, 2013), such as quasi-action research, problem-based learning strategies, experimentation, collaboration, and critique. Some signature design pedagogies were less visible in this course, such as there was more peer feedback and dialog between students and there was less dialog between the professor and individual student, as might occur in a desk crit. The professor created each class as a short, peppy workshop to ensure high levels of student engagement throughout the semester. The professor in the online version of the class assumed an entertainer-facilitator-type role to ensure high levels of student engagement, and to ensure the students did not remain as passive learners in the Zoom environment. This facilitator role required significant additional effort and planning by the professor than in the in-person version of the class.

Relationality

Significant effort was made to build empathy and relationships among the students despite the remote delivery of the course. Assigned students led an empathy-building warm-up activity at the start of each class. These activities were meant to help students get to know each other better despite the distance created from being a remote activity. Students worked in groups throughout the semester, conducting research and interviews together, even though they produced individual outcomes. The social nature of the design studio where students presented

their work to peers often was also maintained (Crowther, 2013) by including frequent 'share-out' activities in the class structure.

Content

The content of the class was situated in the crisis that was experienced by everyone, creating space for meaningful discussion and reflection among both students and participants.

At times there was a tension between the pedagogical aims of the class and the emancipatory aims of the class. An emancipatory agenda would seek more explicitly to empower the research participants (Reid et al., 2006), however in creating this version of the class it became clearer that the key stakeholders and beneficiaries were the students, and not the residents of New Orleans, even though the residents of New Orleans are involved in the creations and delivery of the class content. The course meets a Freirean goal of facilitating the development of critical consciousness (Shor, 1992).

Community Engagement

The in-person version of the class was created with an emancipatory focus. Ms. C's invitation prompted reflection on whether the emancipatory aim was being achieved originally. The invitation led to an acknowledgment that though the class aimed to be emancipatory, it could not authentically be such due to the 'outsider' statuses of both the students and the professor, and the distance from the New Orleans community. The research collaboration with Ms. C and Ms. H. made the class align more closely with its emancipatory aims.

The redesigned delivery of the course included many more interaction points with members of the New Orleans community than previous versions of the course. While remote delivery came with its own complications, it also made it easier to engage participants wherever they were located, such as in their homes but in a less intrusive way than a home visit. The remote access to participants also led to challenges, however, such as one interview took place while the participant was running their daily errands in their car, and the call dropped due to lack of internet connectivity.

The redesigned course attempted to include at least one touchpoint with non-university participants within each module. The touchpoint person was not the same within each module. They included Ms. C; Ms. H; a guest professor from another city, but who had lived in New Orleans; three residents who were interviewed; residents and non-residents, who were recruited via social media forums, and through the students' network of contacts, to give feedback on design ideas; and residents and designers who participated in the midpoint and final presentation. Though the class was remote, the students in this group were exposed to a more diverse range of external participants than previous versions of the class. In a future iteration, greater attempts could be made to engage community members in more in-class activities such as giving feedback on the problem statements and brainstorming activities. The active participation of community participants created a dilemma around remuneration for participation. Ms. C was compensated for her involvement in the class, since she was very present in several sessions, however, the budget that was typically allocated for the class could not cover the honoraria for all of the community participants. The university also had strict policies regarding the use of other forms of remuneration such as gift cards for interviews.

Much of the community engagement happened through the goodwill of the community members.

Critical Reflection

The in-person version of the class had the aim of provoking critical reflection on the design process. Previously these reflections would take place in class, in a more casual and haphazard way. The reflections in this online version were woven throughout the entire semester with more planning. Many of the reflections were shared publicly yet anonymously on the whiteboard. The students were vulnerable and open in their reflections and shared their discomfort with the design process, their creative growth, and their frustrations about education during the pandemic. They also were able to share the experience with their colleagues as they read their reflections as well. The final reflection and their proposal of a new visual design thinking model encouraged the students to think more deeply about the process that they were engaged in. The virtual learning environment and the intentional way in which it was created encouraged deeper reflections about the design practice and more creative responses by the students.

Conclusion

The conversion from in-person to remote delivery of the SISE 3010 Design thinking for social impact created an opportunity to re-design the course for optimum participation of residents and students. It also created space for reflection on the aims of the class. Even though the implementation of the image below demonstrates a more optimal version of this course. This version includes more community involvement within Module 3, during the idea generation phase, and a post-semester de-brief with the community partners to plan the next steps. This did not take place with the Fall 2020 class.

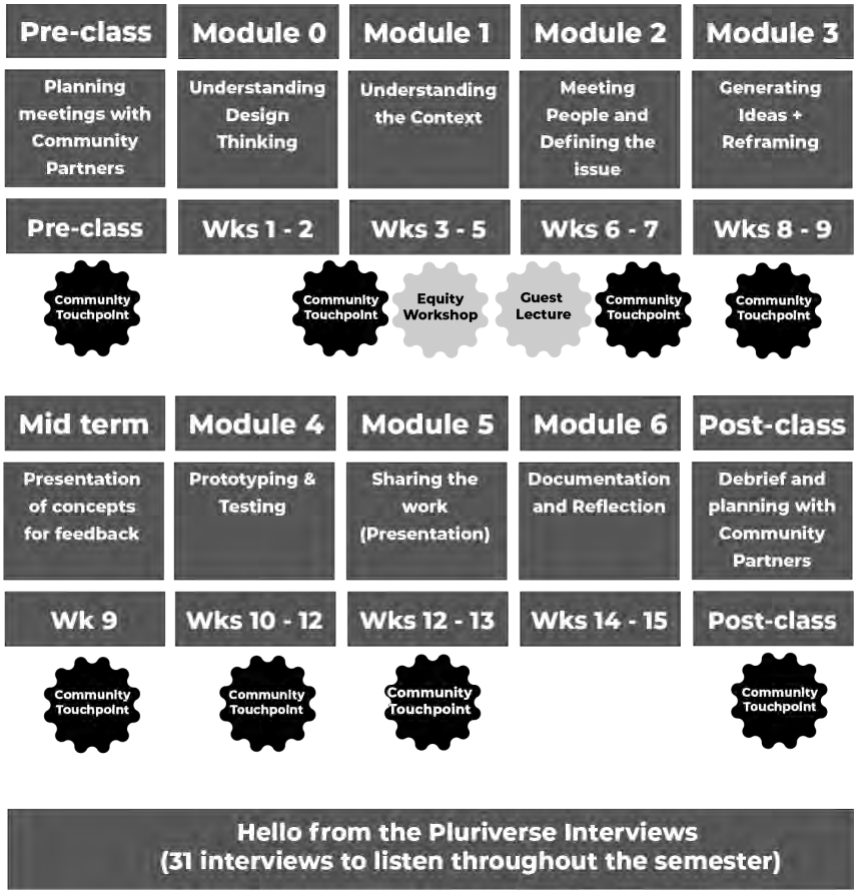

Figure 9. After reflection on the implementation of the course, this is the preferred structure.

The pandemic and the racial unrest in the United States forced a re-design of the Design Thinking for Collective Impact course at Tulane University. The instructor had to respond to the challenge of creating a pedagogical experience that was both situated in the challenging context of 2020 due to the pandemic, which added to students' anxiety and changed the delivery mode of instruction, and the racial unrest, which sparked greater awareness of social justice issues in the design studio. The demands of maintaining student and partner engagement in this new mode of delivery forced the instructor to create many new activities, and deliberately create reflection points in the design process. The new context forced a re-examination of the process of creating community among the students and building relationships with community partners. The resultant course demonstrated that despite the distance, it was possible to retain the values of relationality, community-centredness, and to create content that was situated in the lived and learned experiences of both the students and the community partners.

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