Maker Literacy Lesson Plan
Empathy through Design Thinking

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Instruction request

Requesting faculty: Juan Carlos Albarran

Course: LAS 315 - Latin American Diaspora

Instruction Date/Time/Length:

Additional request info: "I am writing this email because I was interested in bringing my LAS 315 Latin American Diaspora to the makerspace and working with the students to do a class activity. I was there recently with my Latin American SUSI students in coordination with Elias and it was a very successful experience for everyone involved. Now that we are done with the SUSI program and I am switching to my regular class here at Miami I would like to recreate a little bit of that experience with this class. I teach this class M-W (11:40-1pm) and would like to have one of the class sessions there. I like the idea of making buttons for the students or something similar to it. I have a class of 24 students. I do not have a clear project right now but I will be thinking on a way to make it work. I am also open to any ideas based on your experience working with students. I am looking forward to hearing from you."

Goals

Faculty's requested student learning outcomes: Juan Carlos would like students to better understand the experience of Latin American individuals living in the midwest.
Students will be conducting interviews of Latin American folks to better understand how LA students identify with pop culture/food/etc.

Enduring questions:
What is the role of empathy in the Design Thinking process?
How can Design Thinking (particularly empathy) be used in contexts outside of corporate design?
What are your assumptions about the experience of LatinX people living in the US?
How might those assumptions change when you practice empathy?

Relevant frames:
- Authority is constructed and contextual
- Information creation as a process

Final learning outcomes (2-3):

Students will be able to:
- Utilize the design thinking process of empathy to gain insights from interviewees.
- Identify the appropriate Makerspace machinery for a project and effectively use it.
- Design basic logos to represent arguments or concepts through color and iconography.

Logistics

Potential collaborators:

Supplies needed:
- Button-making supplies
- Sharpies
- Colored pencils
- Blank paper with circles
- Scissors
- Glue

Technology needed:
- USB converter
- Laptop
- HDMI cable

Prep needed:
- Set up button makers
- Prepare supplies
- Table setup

Lesson Outline/Schedule

Makerspace Tour/Overview (15 minutes)

Design Thinking Overview (5 minutes)
- **What is it? Steps, guiding principles**
    - Design thinking is an interactive design process based on empathy. While design thinking was created as a tool for designing objects and systems, it can also be used as a problem-solving tool in any discipline or work environment.
    - Design thinking is a tool created for the corporate design world. Some of the resources you may find are very product-design focused, meaning that the end goal is some kind of consumer product or system. HOWEVER, the tools and techniques

of design thinking can be used as a universal problem-solving tool. For this class, we are taking this design thinking process which originated as a profit-making tool and we're repurposing it with a social justice lens to help you better understand the LatinX experience in the midwest.
- **Divergent vs. Convergent Thinking**
- **Prototyping**
    - What is prototyping? This is the DEVELOP stage of your projects
        - Prototyping is where you take your theoretical idea and you start bringing it to life.
            - Make them tangible
            - Make them shareable
        - Don't wait to prototype! The sooner and more often you prototype, the less time and money you waste.
    - Why prototype?
        - Building gets your thinking going
        - A prototype can help you gather feedback from your stakeholders
        - Avoid expensive problems in the future
    - Types of prototyping
        - Physical
        - Digital
        - Environmental
    - Steps for prototyping
        - Rapid prototype - Build - quick, rough prototypes are best.
            - Tools include:
                - Sharpies
                - Post-its
                - Paper
                - Cardboard
                - Aluminum Foil
                - Scissors
                - Tape
                - Play Dough
                - Legos
        - Sharing your prototype
            - Sharing shouldn't be a pitch (not Shark Tank!)
            - The most important part of sharing is the feedback - this harkens back to that empathy aspect of the design thinking process.
            - LISTEN

- Don't be afraid of criticism - that is part of the process
- Don't be territorial of your ideas - the whole point of sharing is to refine and find out what will/won't work!
- Reflect
  - It's important to take all of that information with you in your future iterations.

All About Empathy (15 minutes)
- **Empathy - Gaining insights**
  - Why empathy?
    - Look beyond assumptions
    - Understand how people experience the world - You can read articles, watch videos, hear lectures and you may begin to understand someone's experiences. But practicing empathy will hopefully force you to put yourself in the shoes of LatinX folks and gain a deeper understanding of their lives.
    - What people mean vs. what they say
      - Empathy allows you to read between the lines - to understand body language, other forms of expression. Just someone's words may not be enough to understand them.
      - You will want to keep this in mind when performing your interviews. Remember from the handout one tip for interviewing is "Mind the Gap" - Pay attention to what your interviewee might not be saying. Look for gaps in what they're communicating and ask questions that prompt them to fill in the gaps.
        - If you feel your interviewee is leaving something out (they may not even be doing it intentionally), try asking open-ended questions to prompt a deeper response. Try leading questions such as "show me". If all else fails you can try to "why" trick - keep asking "why".
    - Design impactful objects and systems - Like I mentioned in the introduction to design thinking, this process usually ends with a product or system design. Your end product will be slightly different because we're using this process differently. The idea is that you will come out of this process with a deeper understanding of the lives and experiences of LatinX folks in the midwest.
  - Context is key! (show video)
    - In this project, your goal is to understand the experiences of others. Similar to the example of the sunny day - the things that you may love about living in the Ohio valley or going to Miami might be completely different for LatinX folks or anyone else.
    - Part of what you may want to focus on for your interviews or in your reflection is how your assumptions about LatinX folks' experiences line up

with your own experiences/preferences, and how those assumptions were challenged based on what you learned through your interviews.

Discussion - Assumptions (10 minutes)
- Take about 3 minutes to write down 3-5 assumptions about the person you plan to interview. If you haven't identified a specific person yet, make your assumptions based on what you've learned so far in this class about the LatinX community of the Midwest.
- Some questions to answer with your assumptions:
    - What are some good things about being an immigrant or of Latin descent living in the Midwest?
    - What are the challenges for Latinx/a/o folks living in the Midwest?
    - How are Latinx/a/o folks represented in pop culture? In what ways can that representation be problematic?
- Break into groups of 4. Share your assumptions with the group. What content from the class or your own life led to these assumptions?
- Each group shares back with the class.

Button Design Activity (30 minutes)
- Color theory
- Types of Logos
- Iconography
    - "Symbols are powerful representations of identity. Symbols carry significant meaning and suggest an idea, belief or action. A cross in a church. A flag at a courthouse. A red octagon at an intersection. Instead of just having them, symbols require an explanation of their meanings." Todd Brady, Symbols Represent Identity
- Design - your first iteration of your identity logo
    - Remember, the design thinking process is iterative. The more iterations you go through, using your empathy skills and incorporating feedback from the people you are designing for, the better your final product will be!

Outline for November 9th Class

Refresher - Empathy/Insights (10 min)
- Why empathy?
    - Look beyond assumptions
    - Understand how people experience the world - You can read articles, watch videos, hear lectures and you may begin to understand someone's experiences. But practicing empathy will hopefully force you to put yourself in the shoes of LatinX folks and gain a deeper understanding of their lives.
    - What people mean vs. what they say
        - Empathy allows you to read between the lines - to understand body language, other forms of expression. Just someone's words may not be enough to understand them.

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    - If you feel your interviewee is leaving something out (they may not even be doing it intentionally), try asking open-ended questions to prompt a deeper response. Try leading questions such as "show me". If all else fails you can try to "why" trick - keep asking "why".
- Design impactful objects and systems - Like I mentioned in the introduction to design thinking, this process usually ends with a product or system design. Your end product will be slightly different because we're using this process differently. The idea is that you will come out of this process with a deeper understanding of the lives and experiences of LatinX folks in the midwest.

Reflect - Empathy Interviews (5 min)
- On your paper, take a few moments to reflect on the empathy process.

Discuss in small groups - Empathy insights (10 min)
- Discuss insights gained from empathy interviews
- Write key insights on post-it notes

Share back with larger group (10 min)
- Each group shares back their key takeaways & add post-its to the board.
- Identify common themes

Button Design Activity - Empathy Insights (30 minutes)
- Color theory
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- Design - your first iteration of your empathy logo
    - Remember, the design thinking process is iterative. The more iterations you go through, using your empathy skills and incorporating feedback from the people you are designing for, the better your final product will be!
- Choose colors

- Choose words
- Choose icon
- **Make your designs!**

Button Making (20 min)
- Turn your designs into buttons!

(If time) Share buttons with class & explain the why

Assessment

Students will be asked to fill out a post-instruction [feedback form.](#) Additionally, student projects will be observed and we may ask for FERPA release to photograph and document student work.