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Design for **Equity in Higher Education**

By:
KC Culver, Jordan Harper
and Adrianna Kezar

Pullias Center for Higher Education
University of Southern California

Contents

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Executive Summary

Liberatory design thinking is a promising approach for helping campus leaders rethink policy and practices related to non-tenure track faculty. It includes the following phases: notice, empathize, define, ideate, prototype, test, and reflect.

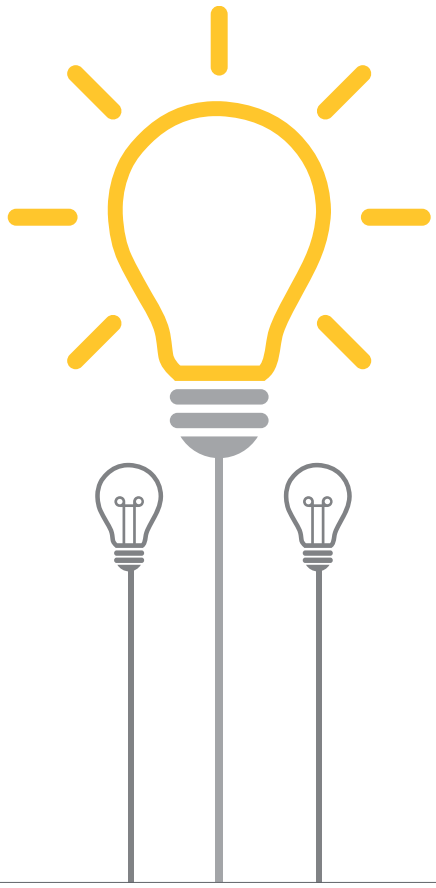
However, liberatory design thinking processes may be challenging in policymaking environments. In the context of higher education specifically, liberatory design thinking may be more easily adapted than in hierarchical policymaking contexts, as the use of collaborative design teams that have representation from different networks of stakeholders is more closely aligned with participatory governance models.

We contribute to the conceptualization of liberatory design thinking in organizational contexts such as higher education by integrating policymaking explicitly into the model and locating equity-minded practice as underlying the entire process. Our revised model for postsecondary settings modifies it as such: organize, empathize, redefine, ideate, choose, prototype, buy-in, and test. It also includes equity mindsets, notice, and reflect throughout.

Two case studies (one community college and one four-year regional institution) present the way campuses navigate the liberatory design process at each of these phases. These case studies provide real life examples of how this process can unfold on campuses.

Introduction

Colleges and universities have a major design challenge. They have been designed to support tenure-track faculty, but policies and practices do not support 70% of the faculty that are not on the tenure track. **The Delphi Project on the Changing Faculty and Student Success** has been working for the last decade to address this design challenge. We have developed guides for campus leaders to begin the design process and to rethink their policies and practices and align them better to support non-tenure-track faculty (NTTF). Yet, we often hear that campuses need more guidance about how to undergo the design process. The research study presented here aims to address this gap by providing a study of campuses that used design thinking to transform their policies and practices, documenting the modifications that they made to adequately conduct this work within higher education settings. What we offer is a customized guide about liberatory design thinking processes that have been tested within college settings to support changes that enhance equity in policies and practices within institutions. This research is based on case studies of several institutions, including focus group interviews with the campus design teams and an analysis of artifacts. We profiled two campuses that represent the trends of the data across a larger set of campuses.



While this study is focused on improving conditions for NTTF, we imagine that the model we present can also be useful for other design opportunities in higher education.

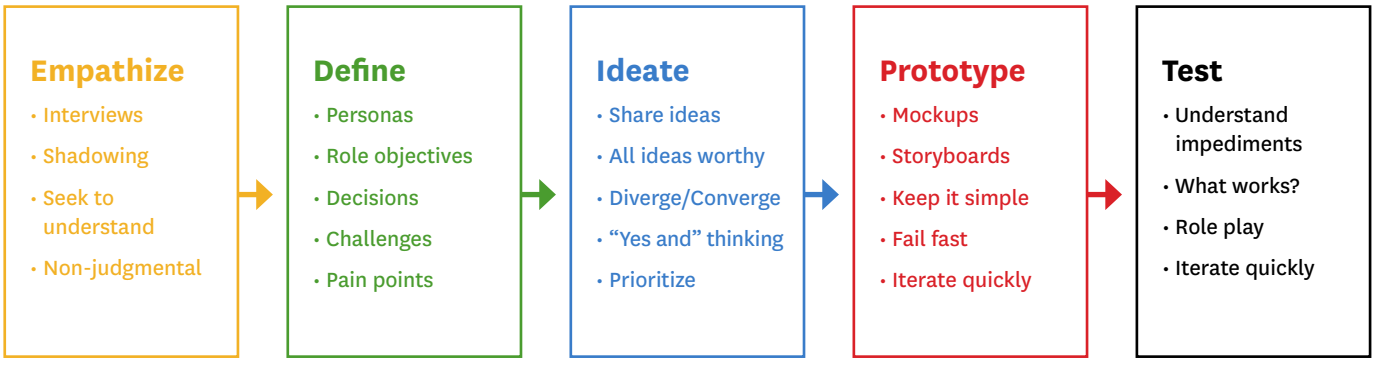
This report is organized in the following way. We first review the framework of liberatory design thinking. Given that this framework is aimed at addressing situations of inequity, we chose to conduct research on how liberatory design thinking is already being used to improve policies and practices for NTTF. We then describe modifications to the model that were identified in our research as important when adapting it to college settings. Lastly, we describe two case studies of campuses that used liberatory design thinking processes to modify their policies and practices.

Liberatory Design Thinking

Design thinking, which is defined as a human-centered and design-focused methodology to solving problems, has gained traction in business, government, and education as an approach that fosters innovation. While there is some variety in the way that design thinking is conceptualized and practiced (Nakata & Hwang, 2020), Figure 1 presents the way it is most commonly defined, including the following five phases: empathize, define, ideate, prototype, and test (Interaction Design Foundation, 2020).

Figure 1

Stanford d.school Design Thinking Process



The liberatory design thinking model (Anaissie and colleagues, 2020; Clifford & design school X, 2020), created in 2016 to address the inequities at the root of many problems and to emphasize power sharing in the design thinking process, expands the original design thinking model with two additional phases: notice and reflect, as shown in Figure 2. These phases focus on **what** designers do to add equity into the process and products of design thinking, while the creators of liberatory design also define a number of liberatory mindsets to emphasize **how** designers should engage in the process.

Figure 2

Liberatory Design Thinking Process

Notice: This phase focuses on you, the designer in order to build a practice of awareness of your values, identity, biases and assumptions and your impact on the user and the context within which you are empathizing. This allows for authentic user centered design, not "you" centered design.

Empathy: This phase of the process is focused on understanding the experiences, emotions and motivations of others. Designers use specific empathy methods to learn more about the needs of the usersfor whom they are designing.

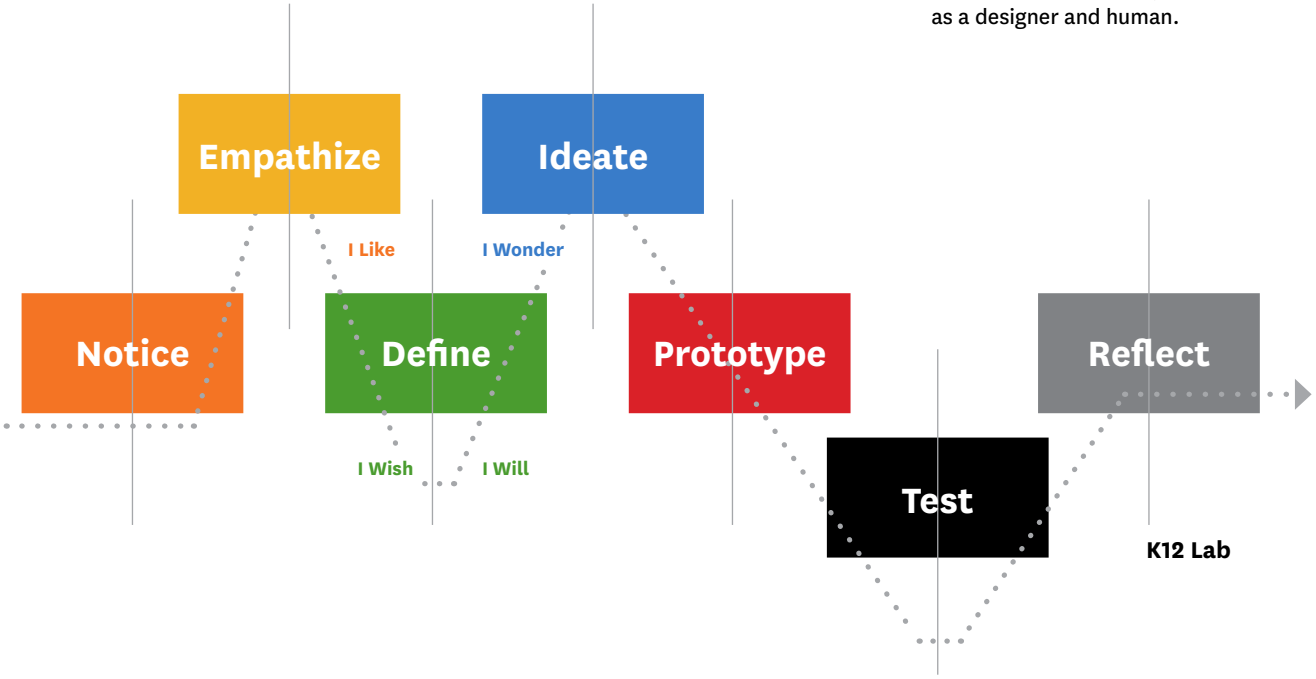
Define: This phase of the process is focused on developing a point of view about the needs of your user. During this phase of the process, designers narrow from lots of information to a statement that is inspiring and special.

Ideate: This phase of the process is focused on generating as many solutions to a problem as possible. Once many solutions have been generated, students will select one to move forward to prototyping, for authentic user centered design, not "you" centered design.

Prototype: This phase of the process is an iterative development of tangible artifacts or experiences intended to elicit feedback and answer specific questions about a concept.

Test: This phase of the process is focused on getting specific feedback about how ideas can improve. It is important to remember during this phase that prototypes are imperfect but feedback is precious.

Reflect: This phase of the process is on going and transparent throughout the design thinking process. It allows you the time to focus and reflect on your actions, emotions, insights and impact as a designer and human.



Scholars have taken various positions about the applicability of design thinking for policymaking, from suggesting that they are incompatible, to aligned at some stages, to game-changing (Lewis et al., 2020). In policymaking, there are hierarchies, politics, and constraints that are not always present in corporate design processes, that result in new products or services. These issues can present challenges to the success of design thinking.

At the same time, design thinking offers an alternative that can address several challenges associated with traditional policymaking processes. For instance, in rational approaches, policymaking teams are comprised solely of policy experts,

who often underappreciate the perspective of the citizens or employees they create policies for, thus addressing surface issues without discovering the root problems (Lewis et al., 2020). Furthermore, in bureaucratic policymaking, a reliance on standard procedures and stability creates risk aversion and prohibits creative solutions (Schuurman & Tõnurist 2017). Policymaking can also self-perpetuate silos and hierarchies, whereas design thinking encourages the transcendence of these boundaries (Mintrom & Lutjens, 2016). Design thinking uses an interdisciplinary, bottom-up approach that is informed by and sometimes even driven by those affected by policies (Kolko, 2018). Thus, design thinking goes beyond participatory policymaking processes and human-centered design where understanding the views of end users can be implemented in the bureaucratic model (Lewis et al.).

In the context of higher education specifically, design thinking may be more easily adapted than in hierarchical policymaking contexts, as the use of collaborative design teams that include representation from multiple networks of stakeholders is more closely aligned with participatory governance models (Fung, 2015; Sørensen & Waldorff, 2014). Here, organizational culture also plays a role. Cultures that privilege collaboration and experimentation support design thinking processes better than those focused on productivity and siloed specialization. At the same time, design thinking can be used in change efforts to develop more collaborative organizational cultures (Elsbach & Stigliani, 2018). Thus, design thinking grounded in equity-minded approaches (Bensimon, 2007) is a potentially powerful tool in higher education to encourage interdisciplinary and participatory cultures, and to address issues of equity.

Design for Equity in Higher Education

Figure 3 presents the Design for Equity in Higher Education (DEHE) model, which extends and refines design thinking and liberatory design in a number of ways. In this section, we describe the constituent parts of the DEHE model, such as integrating scholarship on design thinking, liberatory design, and policymaking, which highlights our contributions based on our research study. We begin with some comments on the overall conceptualization and visualization of the model, then describing the equity-mindedness that underlies the process before describing each phase of the process. In the narrative below, where our research added in a new perspective on a phase of the liberatory design thinking, we apply the DEHE label to make this contribution clear. We also summarize how the higher education context shapes each stage of DEHE in Table 1 (p.31).

The language we use reflects the political and organizational nature of higher education and a liberatory mindset. We refer to the people participating in the design team as ***designers*** and the people for whom they are designing — who may be faculty, staff, and/or students — as ***colleagues***. We use the term ***key stakeholders*** to refer to individuals and groups external to the design team who may play a role in the decision-making and implementation process; these individuals may include the college president, provost, deans, department chairs, union president, and faculty senate chair and groups include the faculty senate, the union, a college or division, faculty, and staff, as well as subgroups like non-tenure-track faculty, departments, part-time staff, etc.

Figure 3

Design for Equity in Higher Education (DEHE)

Organize (1)
Form design team.

Define objectives.

Assess participation for representation and political will.

+ Empathize (2)
Gain well-rounded understanding of the experiences and perspectives of those you are designing.

Multi-pronged approach to data gathering.

+ (Re)Define (3)
Synthesize and connect findings.

Identify most relevant context(s), stakeholders.

Develop a narrative that captures complexities.

+ Ideate (4)
Brainstorm a wide variety of potential solutions and encourage creativity.

Look for models of innovation as sources of inspiration.

+ Choose (5)
Assess feasibility and context of ideas.

Decide which ideas to expand and draft.

+ Prototype (6)
Draft solutions and learn by building.

Share with key stakeholders.

Develop a solution narrative.

+ Get Buy In (7)
Share problem-and-solution story.

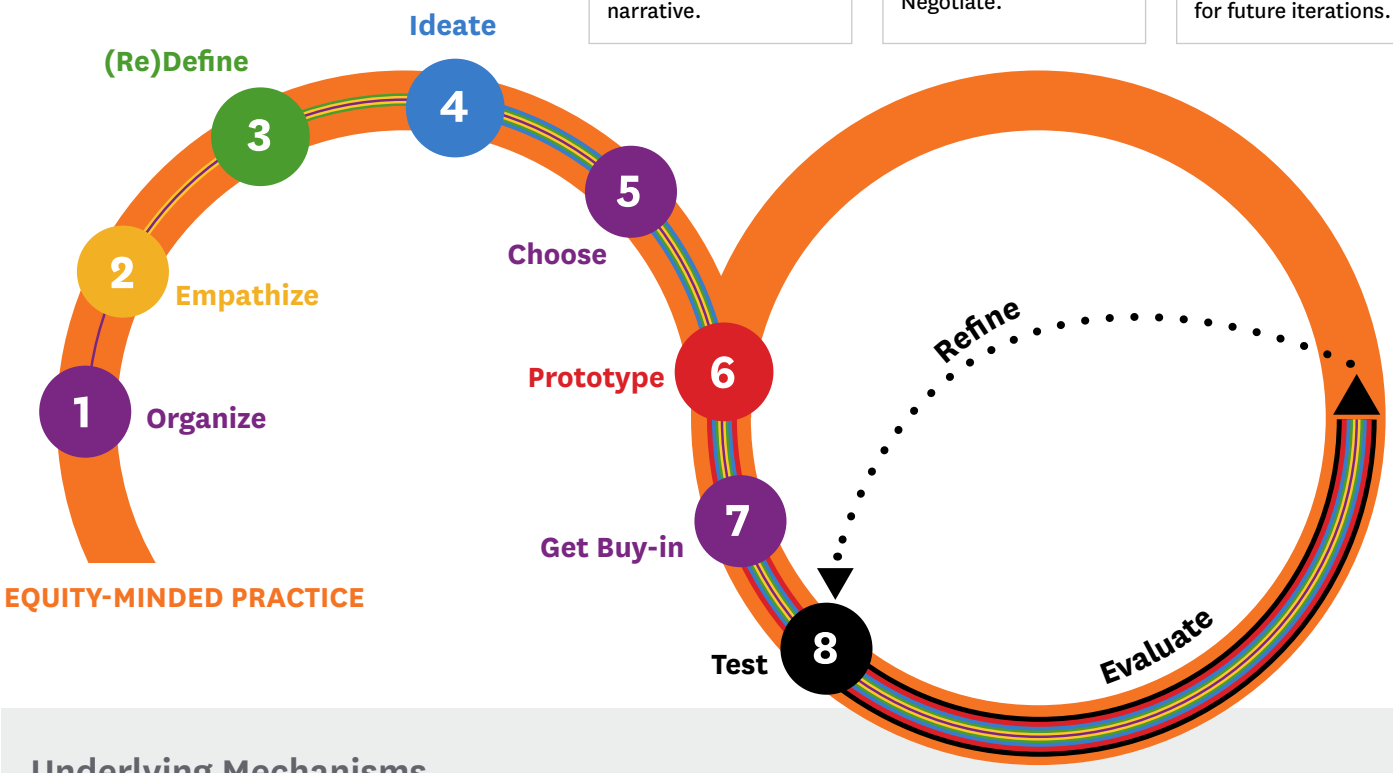
Build support among coalitions.

Negotiate.

+ Test (8)
Facilitate implementation at scale.

Evaluate and get feedback.

Refine and revise for future iterations.



Underlying Mechanisms

EQUITY-MINDED PRACTICE
- Address issues of identity, power, and values.
- Attend internally to team process and externally to design solutions.

Notice bias and power. Ensure intent increases equity. Be authentic.

Reflect on insights, actions, emotions, and impact. Improve the process as you're working.

Collaborate and build relational trust. Share, don't sell.

ORGANIZATIONAL CONTEXT
- Understand political and bureaucratic landscape.
- Consider constraints and opportunities.

Navigate competing interests internally and externally.

Leverage institutional priorities and political will.

Negotiate with key stakeholders and decision-makers.

Overall Conceptualization and Visualization

We contribute to the conceptualization of liberatory design thinking in organizational contexts, such as higher education, by integrating policymaking explicitly into the model and by locating equity-minded practice to underly the entire process. The DEHE model describes the opportunities and challenges of implementing equity-minded design thinking in environments where hierarchies, politics, and constraints are ever-present. To be successful, designers in higher education must navigate, collaborate, and negotiate with stakeholders and coalitions in ways that are not usually present in the private sector. At the same time, these constraints are at odds with the philosophy of innovation that guides design thinking. Thus, based on our case studies, we identify several moments where this work is particularly visible/prominent in order to define how the organizational context shapes the process in higher education. Our research also suggests that successful higher education designers infuse equity-mindedness, both inward- and outward-looking, into every phase of design thinking. We emphasize this finding by positioning equity-minded practice as underlying the entire process, rather than locating equity work in phases that are discrete from design thinking.

The DEHE model also reflects more nuanced aspects of our thinking on designing for equity in higher education. While the visualizations of design thinking and liberatory design present the process as linear, certain proponents stress the iterative nature of the process, conceptualizing the phases as "a system of overlapping spaces rather than a sequence of orderly steps" (Brown & Wyatt, 2010). As such, we use circles as our primary design shape to indicate the recursive nature of the process. At the same time, our model emphasizes the additive nature of each phase of design thinking, such that the empathy work conducted early in the process is carried through and shapes later phases. Additionally, the process represented on the left side of our graphic is internally-focused work within the design team, while process represented on the right side is primarily focused externally. Our visualization also accentuates the human-centered nature of DEHE by visually connecting people through the design process.

Equity-Minded Practice

In the liberatory design model, designers are encouraged to engage in activities that promote self-awareness of identity, values, emotion, assumptions, and positionality before beginning with the design process so that the team can engage authentically in the process. This phase also includes identifying issues of power, both within the design team and relative to institutional power, and interrogating the intent of the process to ensure that the design product increases equity (Anaissie et al., 2020; Clifford, 2017). Conducting these activities first, before engaging in other phases of design thinking, helps to build relational trust among the team. During the process, designers consider how to improve future iterations of the process by reflecting on their insight, actions, emotions, and impact (Anaissie et al.; Clifford).

Equity-Mindedness in the DEHE Model

Rather than locating, noticing, and reflecting as discrete phases of the process, the DEHE model situates equity-minded practices as underlying the entire design process in order to emphasize the ever-changing nature of power, oppression, and emotions. Our research suggests that ***designers*** must maintain self-awareness, check assumptions, and reserve judgment

throughout. Additionally, we emphasize the continuous nature of reflection based on the potential for ***designers*** to refine the design process in the present, rather than informing other efforts in the future. In other words, making equity-mindedness an ongoing practice allows ***designers*** to notice and address shifts in team dynamics and in the political environment in order to re-center intentions and actions around equity, which can further strengthen relational trust among the team. Table 2 (p.32) presents a list of liberatory mindsets, including a short explanation, and the phases of the DEHE process where they were most visible in our case studies.

Organize: *A New Phase*

In policymaking contexts, design teams are often limited to policy experts who understand the contexts, constraints, and political will that shape opportunities and constraints to change (Howlett, 2020). The same is true in traditional design models, where the functional organization of teams generally privilege expert designers (Anaissie et al., 2020). As an alternative to these siloed approaches, design thinking applied in business contexts encourages the use of cross-functional teams (Nakata & Hwang, 2020); for instance, the design team might include one representative from several departments, including human resources, sales, customer service, and marketing.

While the cross-functional approach allows for multiple perspectives on solving design problems, designers are often distant from the end users they are designing for, limiting their understanding of the actual problem. In contrast, the liberatory design thinking model emphasizes participatory design, including end users as members of the design team in order to benefit from their first-hand knowledge of the problem. However, in policymaking contexts, participatory design can result in vast information asymmetry, as non-experts often do not have mastery of the wide variety of policy tools that are available (Howlett, 2020) and may not have a full understanding of the institutional environment. Furthermore, the legitimacy of the outcome may be more easily challenged in policymaking contexts when the design team is comprised of non-experts (Mintrom & Lutjens, 2016).

We add organization as a discrete phase of the DEHE model to address two aspects of the design thinking process that are particularly influenced by the organizational context of higher education: design team formation and the widespread role of political will in organization.

Team formation reflects why and how design teams are created. For instance, individuals in similar work roles may come together informally around a common problem and subsequently organize when a political opportunity presents itself. Alternatively, an administrative leader may identify an issue that needs attention and appoint individuals to a task force. Given the culture of shared governance in higher education, the design teams we studied reflected intentional consideration of representation and inclusion when identifying ***designers***, not only by including *colleagues* on the design team, but also by incorporating delegates from ***key stakeholder groups*** who would need to be consulted or reported to during the design process.

Considerations of political will that may vary based on design team organization include authority, objectives, and commitment (Post et al., 2010). For instance, a task force may carry great authority as a result of being established by an administrative leader, while a grassroots effort may have to intentionally foster legitimacy through collaboration. Additionally, the stated and unstated objectives of ***designers*** often vary and may not always be compatible. In higher education, ***designers*** may have motivations tangentially related to the stated problem, such as fulfilling service expectations, achieving promotion, increasing the visibility or value of a specific program, creating organizational change, increasing equity, and/or fulfilling the goals of ***key stakeholders***. Based on their motivations, ***designers*** may thus have varying levels of commitment and investment in ensuring the success of the chosen solution.

Our research suggests that effective design teams in higher education are best comprised of ***designers*** with varying types of expertise, with some who understand the institutional landscape, some who can leverage political opportunities, and others who understand the problem firsthand. At the same time, the siloed nature of higher education and historically-rooted tensions that often exist between ***stakeholders*** can create challenges for the process and outcomes, both internally within the team and in external interactions. Equity-minded practice can help to address these issues. Among the mindsets defined by Anaissie and colleagues (2020), practicing self-awareness and seeking liberatory collaboration can be particularly beneficial when organizing the team.

Empathize

In the empathize stage, the design team must gain a well-rounded understanding of the motivations, experiences, and emotions of the end users in order to design to meet their needs and preferences (Anaissie et al., 2020). Thus, designers often use a multi-pronged approach to learning. Design thinking encourages primary data collection through ethnographic methods, including observations and interviews that allow designers to gain a better understanding of the end users, especially by understanding their experiences as a journey (Micheli et al., 2019). The use of observation may be particularly important in design thinking, as end users are not always able to accurately identify their needs, so their behaviors are especially useful to provide clues (Brown & Wyatt, 2010).

Scholars have also increasingly articulated the importance of collecting and considering data in the empathy phase that accurately captures the diversity of end users, in order to accurately define the problem and foster creativity in the ideation stage (Mintrom & Lutjens, 2016). In business contexts, designers often create a “persona” to represent the “typical end user” and develop a “journey map” to describe that user’s experiences (Micheli et al., 2019). Some design thinking experts also suggest that benefits accrue from hearing the stories of “extreme users” (Brown & Katz, 2011) or others who do not fit the profile of the typical user in order to better understand the problem.

In addition to embracing the diversity of people and their experiences, liberatory design thinking requires designers to practice self-awareness and focus on human values when hearing users' stories. These mindsets require recognizing privilege, setting aside judgments, challenging assumptions, listening from a place of love, and honoring the stories people share (Anaissie et al., 2020). Practicing these skills may be more difficult in institutional cultures where hierarchies and marginalization are the norm.

Empathizing in Higher Education

As a result of our research, we found that ***designers*** in the empathize stage went beyond the use of observation and interviews to get a holistic understanding of their ***colleagues***. Teams used existing institutional data and/or collected survey data to give them a wider view of the institutional population. Additionally, the ***designers*** we studied also consulted scholarly literature to understand what was known about the topic more broadly and to learn about different perspectives; an approach which also gave them the ideas and language that supported later phases of the process. This emphasis on a "wide net" approach to learning is not always considered in traditional policymaking processes, suggesting that the DEHE model can offer improvements to traditional processes. In addition, ***designers*** often took time to learn more about the institutional landscape, including structure, priorities, and funding, to better understand the experiences of ***colleagues*** holistically. In our cases, ***designers*** demonstrated clear use of equity mindsets and were particularly attuned to variation in the positionality and power of the ***colleagues*** they learned from; they also demonstrated openness to challenging the preconceived ideas that they had formed through previous experiences in the higher education community.

*(Re)*Define

Once data collection has finished, the design team synthesizes findings to define end users' needs and articulate insights about the situation. In this phase, designers judge what data is relevant, prioritize what seems to be most important, and forge connections across data to create a story about users and their experiences (Kolko, 2010). While this phase begins with the synthesis of what is known, it becomes generative in that designers perceive likely factors that contribute to the problem, even though these factors are not explicitly present in the data.

Brown and Katz (2011) suggest that this phase creates the greatest distinction between the types of thinking scholars usually practice and design thinking, as the goal is to engage in sensemaking and storytelling, rather than testing a hypothesis. This emphasis on intuition, inferences, and best guesses distinguishes design thinking not only from scholarship, but also from traditional policymaking processes. Furthermore, the inclusion of user

perspectives in the redefining of the problem also allows for more nuanced solutions to be developed in the next stage (Chambers, 2003; Fung, 2006).

Liberatory mindsets that are particularly important in the redefining phase include embracing complexity and ambiguity, as well as recognizing and naming oppression that may contribute to the problem (Anaissie et al., 2020). One liberatory design thinking tool frequently used in this stage is empathy mapping, where designers outline what end users say, do, think, and feel in order to define the problem in the context of user needs, preferences, and expectations (Clifford, 2017). The team can also work to better understand the contexts users experience by identifying organizational challenges and opportunities. Another liberatory activity frequently used in this stage is to have designers pose "How might we..." questions that use an asset-minded approach in order to focus on emotions, challenge assumptions, take it to the extreme, and focus in on particular elements. For instance, designers might ask "How might we design a program that makes our colleagues feel valued in addition to fulfilling requirements?" or "How might we offer forms of compensation other than money?" These questions reframe problems as opportunities that help designers to better understand what is really at issue, creating a bridge to the ideate phase (Project Fellows, 2020).

(Re)Defining in Higher Education

While this phase is called "define" in design thinking, our case studies reveal the importance of identifying this phase as "redefining" the problem. In higher education, organization of the design team often occurs because some problem has been identified. However, the sensemaking that occurs in the define phase often reveals connections between multiple issues that initially appeared unrelated (Mintrom & Lutjens, 2016). Thus, ***designers*** must address the "wicked" (Buchanan, 1992) nature of human problems. The design teams we studied demonstrated that the learning conducted in the empathize phase helped them understand that the real problem was much more complex than initially defined.

Ideate

The ideate phase is at the heart of the innovation that occurs in the design thinking process. Here, designers brainstorm a wide variety of possible solutions, withholding judgment of the feasibility of any idea. By refusing to be bound by constraints, the design team also challenges assumptions about the nature of the problem and potential solutions. Playfulness and imagination in this step really distinguish design thinking from traditional, rational, and participatory policymaking and design models, as imagination is valued more than technical expertise and evidence of previous efforts (Lewis et al., 2020). In this phase, designers can answer the "how might we" questions with multiple answers.

In response to cultural norms that privilege judgment and competition, the liberatory design thinking model emphasizes the importance of creating an environment where designers feel comfortable sharing ideas and where all team members must maintain an awareness of their biases (Anaissie et al., 2020). Such an environment not only requires a good deal of relational trust, but also an awareness of who is talking and who is being quiet. To support equitable participation that promotes innovation, designers can intersperse time ideating in teams with opportunities for individual reflection and ideation that can be brought back to the team (Bernstein et al., 2018). Furthermore, Anaissie and coauthors suggest that designers should practice affirming the creative moves of collaborators in order to reinforce a supportive environment.

Ideating in Higher Education

Our case studies suggest that the imaginative thinking that design teams engaged in was limited by the context, so much so that the constraints of the higher education environment shaped their ideation process. Teams researched potential solutions by reading scholarship and looking at models from other institutions, sources of ideation that are not usually part of the design thinking approach. ***Designers*** also relied on experiential knowledge gained through their careers, including models from other institutions where they had previously worked. The use of models may be one way that ***designers*** in higher education account for their lack of expertise in the breadth of policy tools available to them while also leveraging strengths in research and scholarship common among ***designers*** in academic. While these approaches can be inspirational, they are also relatively conservative, as replication limits the potential for innovation.

Choose: *A New Phase*

Design thinking and liberatory design thinking models move from the ideate phase to the prototype phase without much attention to the task of choosing which ideas to sketch out in the prototype phase. The lack of emphasis on how choices are made may reflect an inherent low stakes approach to iteration in the private sector. If a prototype is developed and becomes clear it is unworkable, teams can then quickly choose another idea to pursue. In policymaking, decisions are guided by a clear set of principles to identify the superiority of a particular choice, including the degree of consistency, coherence, and congruence of new policies with existing ones (Howlett, 2020). This reveals the large gap between the mindset of design thinking and that of policymaking. This disconnect may explain why critics of design thinking have suggested that successful implementation of truly innovative solutions in policymaking is rare (Considine, 2012).

Using an equity lens, it is critical for designers to notice who participates in the process of narrowing choices and how the "best" solution is defined. At the same time, the practice of considering radical ideas in the ideate phase may lead a design team to choose more creative solutions than would have been considered otherwise. Thus, it is important for designers to recognize and name oppression especially while choosing solutions to prototype to ensure an inclusive team process and to consider the unintended consequences that may result from different solutions (Anaissie et al., 2020).

Our study suggests that iterating between ideation and prototyping is far more constrained in higher education than in the private sector. ***Designers*** were aware that they would need to get a buy-in for their solutions, and so they considered the feasibility and the likely responses of ***colleagues*** and key stakeholders when choosing which ideas to prototype. As a result, we found that ***designers*** sometimes found it difficult to be decisive within the team, instead moving several potential solutions forward into prototyping. ***Designers*** also revealed nuances in the equity-mindedness required in this phase. They emphasized the importance of addressing the emotional aspects of choosing as well as practicing self-awareness to let go of ego and attachment. Additionally, the design teams we studied were keenly aware that the solutions they chose would have far-reaching impact beyond their ***colleagues***, especially considering how chosen solutions may affect equity and inclusion more broadly among the institutional community.

Prototype

During the prototype phase, the design team developed outlines and/or mockups, developing the solution as they build it. In design thinking, because of the expectation of iteration, rapid prototyping is key; rather than spending a lot of time and energy to fully develop a solution before testing it, designers quickly sketch out the solution in order to experiment with it. Prototyping is thus a form of thinking and learning by creating; as designers build out the specifics of a solution, they can recognize new challenges and opportunities revealed by the process. Forward momentum is the priority in the prototype stage, so mistakes are similarly used for learning in this trial-and-error approach (Nakata & Hwang, 2020). The agency inherent in the prototyping process can also help designers develop ownership of the solution, increasing their self-confidence and satisfaction with the process (Gerber & Carroll 2012).

The liberatory mindset that is most beneficial to this phase is being biased toward experimentation. Rather than engaging in risk-averse behavior, designers who embrace experimentation can celebrate quick failures, especially as each wrong turn provides a chance to reflect and to create a better prototype in the next iteration. Teams also benefit from having the mindset that liberatory collaboration will benefit the final product, as co-creation allows for further improvement.

Prototyping in Higher Education

In general, higher education is a risk-averse environment, and our empirical data suggests that maintaining a prototyping mindset was challenging for ***designers***. This challenge resulted, in part, from the notion that key stakeholders often expect to be presented with a complete, polished solution that is ready to be implemented, rather than engaging in an iterative process with many "rough drafts." As a result, ***designers*** tended to build multiple prototypes simultaneously, rather than iteratively, providing options to increase their likelihood of success. Furthermore, when teams began sharing prototypes, they realized the importance of including key stakeholders in conversations before sharing out solutions more widely. In order to achieve liberatory collaboration, ***designers*** focused on transparency and storytelling to inform others about the redefined problem and their proposed solution. Especially because of the information asymmetry that is inherent in loosely-coupled organization, ***designers*** crafted narratives of the redefined problem and solution as well as the design process to share alongside their prototypes, drawing especially from information gathered about ***colleagues*** in the empathy phase, in order to justify the proposed solution and to make their process transparent.

Get Buy-In: *A New Phase*

Scholars have noted that design thinking doesn't acknowledge the practical need to navigate contentious policymaking activities (Clarke & Craft, 2018; Lewis et al., 2020). We have added getting buy-in as a discrete phase of the process of designing for equity in higher education. In policy contexts, a great deal of negotiation occurs between the proposal and implementation of a solution, work that is steeped in political considerations. While corporate design teams may have the autonomy to scale a prototype for testing, environments like higher education often require approval from multiple ***key stakeholders***, including administrative leaders, members of shared governance, unions, and/or even institutional trustees.

As a result, the design teams we studied engaged in complex work to move solutions into implementation and testing. Two liberatory mindsets defined by Anassie and colleagues (2020) were critical in the buy-in phase: share, don't sell; and embrace complexity. As ***designers*** shared their problem-and-solution narrative, they connected their story to institutional objectives related to accreditation, strategic planning, and student success to inform and persuade various key stakeholders. ***Designers*** also acknowledged emotional challenges related to the liberatory practice of non-attachment, as they had to let go of some solutions and compromise on others to get buy-in. They did so, in part, because they were willing to trust that better solutions would emerge from the complicated, and sometimes messy, work of negotiating for buy-in.

Scale and Test (Evaluate and Refine)

After buy-in has occurred, the solution can be implemented. In traditional design processes, designers iteratively refine prototypes internally, developing a "perfect" solution before taking it to scale. Design thinking contrasts that model by encouraging designers to pilot solutions that meet minimum standards, knowing that user testing will reveal further issues that need to be resolved. User testing also improves users' satisfaction, as they feel like they've been included in the design process. Thus, designers often observe usage and collect user experiences through interviews and talk-alouds to garner feedback on the process. Additionally, the testing and evaluation process may help designers identify new challenges that need to be addressed.

Scaling and Testing in Higher Education

While some design solutions in higher education may result in pilot testing, implementation of the negotiated solution at scale is far more common. At the same time, the policy context creates expectations aligned with design thinking that evaluation and refinement would be ongoing. Indeed, our case studies indicated that implementation of new policies and practices relied on multiple ***key stakeholders***, so solutions were often further shaped and developed while they were being implemented at scale. To promote fidelity, ***designers*** continued to share their problem-and-solution narrative, especially to shape the validity of their recommendations for implementation. Such flexibility in implementation allows for improvement, but may also reflect slippage. Furthermore, given the turnover of individuals in varying positions, implementation and evaluation requires engaging in ongoing negotiation for buy-in. In our case studies where evaluation was ongoing, assessments were often conducted by ***key stakeholders*** rather than by the design team.

Case Studies

In the above section, we have described each phase of the Design for Equity in Higher Education (DEHE) model, in order to familiarize readers with the process. In this next section, we present two case studies that exemplify design thinking and add further nuance of DEHE.

Case Study:

Harper College

Harper College

Harper Community College noted that they utilized a design thinking model to develop a new professional development program for part-time non-tenure track faculty (adjuncts) through their newly formed Academy for Teaching Excellence.

Organize

In 2016, Harper College embarked on a process of reflecting on and designing a professional development program for adjuncts, called the Level II Adjunct Faculty Engagement Program. They had previously redesigned the faculty evaluation process so that the process better contributed to faculty members' professional growth. As a result, there was increased visibility and value associated with adjunct faculty and they realized the need for more robust professional development that adjuncts could access.

This awareness led the head of the Academy to work with the adjunct faculty union and the provost to negotiate the existence of a program that would formalize adjuncts' development of expertise in teaching and associate excellence with incentives, and these details were integrated into the adjunct faculty contract. In particular, this program would be open to adjuncts who had taught for four consecutive semesters, and adjuncts who earn the Level II designation receive increased compensation, priority course assignment, and a guaranteed phone interview for full-time faculty positions for which they are qualified.

In order to design the structure and process of the program itself, they convened a design team in 2017 that included four Academy staff members, a member of the adjunct union, and one adjunct from each division of the college. They called this team the adjunct faculty advisory group.

Politics surfaced during the organizing phase. In order to navigate the politics, the advisory group intentionally reached out to academic leaders and the union to obtain initial buy-in with the hopes of making program implementation easy and successful.

Empathize

In the empathize stage, they shared college-level data about adjunct faculty to help everyone develop a common understanding about their experiences, motivations to teach, type of adjuncts that are teaching (freelancers, freeway flyers, aspiring academics), length of service at the college, and basic information so everyone was more or less on the same page. Adjuncts in the advisory group also shared their own experiences and perspectives. They noted some challenges in the empathize stage because of using a participatory approach to organization, because most adjuncts did not have a lot of institution-level knowledge as a result of their limited connection to college outside of the classroom. The use of college-level data was one way they tried to help group members create the program from an organizational perspective rather than thinking only about their own experiences.

As a result of the empathy phase, the advisory group realized that it's hard to have just a few adjuncts to represent all of them because they have so many different perspectives, including non-teaching adjuncts such as librarians. As one person noted, "It was so important to have adjuncts from every division; it was eye opening to hear the different experiences of the different groups. Obviously one adjunct can't necessarily be the representative for the entire college, but there was a real disconnect between an experience of one adjunct from a certain division and an adjunct from another division." This design process has impacted future efforts where they bring in a much more diverse voice among adjuncts and do not try to have a few people represent the diversity of voices.

"It was so important to have adjuncts from every division; it was eye opening to hear the different experiences of the different groups. Obviously one adjunct can't necessarily be the representative for the entire college, but there was a real disconnect between an experience of one adjunct from a certain division and an adjunct from another division."

Empathizing did not just happen at the beginning but throughout the process. For example, from the define through the prototype stages, three individuals on the adjunct faculty advisory group were made point people for anyone to raise concerns to during the planning process so that the process (and its design) could be changed and ensure appropriate feedback loops.

(Re)Define

After getting a better understanding of the vast array of adjunct experiences, the advisory group wrestled with the reality that the program would need to be designed to accommodate multiple set of faculty interests and concerns as well as serving all the different types of adjuncts and their needs. Discussions related to defining the problem in the context of serving a very diverse population were sometimes hard because the adjunct faculty members had very different experiences within the institution and had difficulty coalescing around what the problems were and what a way forward might be. There was also a lot of frustration about their poor working conditions and discussions sometimes shifted in other directions, suggesting other design issues in need of attention. It was critical to document these issues for future design processes, but also to refocus the discussion around this particular practice.

Ideate

They spent six months identifying several characteristics of the program that they thought were important and looked at a number of models from other institutions to inform their thinking. During the ideate stage they emphasized how understanding the different adjunct faculty experiences through the empathize and redefine stage was absolutely critical to being able to design the program to meet the needs of so many different adjuncts. They debated prescriptive and more open-ended approaches to the program.

Choose

After consideration of several models, they decided on creating the program to be similar to a model they had looked at in the ideate phase. They noted how it was extremely challenging to make final decisions about the design and that it was shaped by many different interests and some very emotional responses. For instance, they considered whether it was better to have the program hosted internally or whether to use an outside organization that specializes in faculty development. They also had to navigate individuals who wanted a more prescriptive approach and those who wanted to provide options for adjuncts to learn and demonstrate professionalism around teaching. They ended up choosing a program that could be facilitated by the Academy staff and that was more open ended by being sensitive to and addressing concerns that were voiced.

Prototype

The advisory group then developed a prototype that included an online learning community hosted within their learning management system each summer, with participants creating an ePortfolio demonstrating reflective and evidence-based teaching. Adjuncts who completed all of the program requirements would then be considered for, but not guaranteed, the Level II designation. Several adjunct members of the advisory group were concerned about the deans acting as gatekeepers in terms of who was approved, especially because of the tenuous relationships many adjuncts have within their divisions, and so the prototype they built included a committee who would assess the ePortfolios and make decisions about which candidates earned the designation. Some members of the advisory group noted how the campus did not really like the idea of a prototyping and they wanted something more permanent that they could sign onto.

Get Buy-in

The advisory group met with several groups of stakeholders to get buy-in for their program. They first reached out to the dean's council to share their prototype. Initially the deans did not show a lot of interest and just asked to be informed about its progress.

The group then presented the program design to the provost and the adjunct union. This was another lesson learned, because even though the advisory group included a representative from the adjunct faculty union, that person did not always communicate with the union, and so they really had to work to get the union to understand and accept their design. They learned that it would have been better to include someone from union leadership in the design team or to communicate more directly with the union throughout the process rather than relying on a representative. As a result, at the prototyping stage, they had to make more changes than they had anticipated.

And faculty members who were full-time were circulating rumors that adjunct faculty would be taking away their course load once they were given priority course assignment through the Level II designation. The planning group had discussions with

each of these different groups about their concerns and helped allay their fears. It was at these moments that the idea that this was just a "trial" helped convince some to move forward.

The planning team admitted that it would have been easier to exclusively develop the program fully within the team and put it into the union contract so that there would not be any negotiations required, but they think this process served the adjuncts better in the end. As a result, they also designed evaluation and revision into the program itself. They noted, "Because we knew that [a set practice and policy] was not going to be a good idea, we developed a test process, and we left the door open to evaluate it every October to make improvements. Each year we knew we were going to have to put in this renewal process in place."

Scale and Test

Once the advisory group completed their design work, the process of getting buy-in and implementing the program took about year, with the first Level II cohort participating in the learning community during the summer of 2018. They conducted a training with the dean's council, who would be responsible for reviewing applications and recommending adjuncts for the Level II program. Some deans felt they had been left out of the planning process, even though they had been invited to be a part of the process early. The deans also wanted more input on who received the Level II designation, even though they initially did not feel that they needed to be engaged in that level of detail. The design team then had to navigate a difficult situation, because they had tried to be inclusive of all of the different stakeholders throughout the design process.

Evaluate and Refine

As one person noted, "It is critical to have a good assessment plan for something like this because we need to be able to sit down in the meeting and say, well, actually, even though in one or two cases, or a handful of cases, it's not working out as well as we'd like, overall, this program is working."

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In addition, they checked in with each of the stakeholder groups after the first year. The adjunct union conducted a survey and found that over 90% of them felt satisfied with the new process and whether they would recommend it to another faculty member. And now going forward, leaders on the effort meet with the adjunct union leadership every year to see if they have any suggestions for change to inform refinements. Buy-in also continues through the assessment of the program each year as they interact with a wide array of stakeholders, including new people in leadership roles.

After the first year, they implemented some areas of re-design based on feedback as they noted, "Because we built this as a dynamic program that could be improved." But they see how this rich design serves the purpose of helping faculty and are glad for this approach even if it is more complex.

The Academy has made some changes based on implementation issues. In particular, they had to create more detailed instructions about the process, because they learned from the implementation that some of the faculty members and department chairs were not sure of the process. For instance, some adjuncts believed that they would receive the Level II designation automatically and were very disappointed when they completed the program but the committee decided that their ePortfolio did not reflect the necessary level of development. In addition, some participants were surprised to find out how much time and effort the program took, and so the team worked to more clearly communicate the level of commitment required before people applied.

They also reflected on the potential to make some changes to incentives related to the Level II designation. For instance, they noted that priority course assignment is quickly becoming difficult in departments with a small number of faculty. Therefore, they talked about how to make incentives more flexible, so that, for instance, adjuncts in small departments might get a bigger increase in pay if priority course assignments are not feasible. They noted that recognizing the need to make changes to the design of incentives is only possible because the program has been implemented successfully—because adjuncts are earning the Level II designation. So, for them, it is a good problem to have. Refine is a truly on-going process for them.

Keeping Equity in Mind

Notice

The planning team noted that most people on campus are comfortable with the status quo and this makes changes challenging. One administrator noted, "I think when people speak with their hearts, like they recognize this [relying on adjuncts] isn't a great system. And we can do better—that is motivating." But they acknowledge that the overall culture reinforces a non-equitable situation, which makes designing something new challenging. They acknowledged how these biases are real.

They provided a really important example of noticing. They realized there was an issue of bias/inequity in their ePortfolio system because faculty members that were stronger in written communication had a decided advantage. They noted how this practice unfairly disadvantaged non-native English speakers in particular. They revised and clarified the guidelines and the assessment rubric for the ePortfolio based on identifying these biases in their design.

Identifying that issue also helped them to look for these types of inequities in other parts of the design. For example, they identified that there are faculty members who do not have the same levels of technology skills, which might be based on generational issues. Therefore, they added a number of resources to help guide faculty members through the steps of building an Eportfolio online.

Reflect

As the adjunct faculty advisory group met, they demonstrated the process of reflecting when they slowed down the design process to learn about who the adjunct faculty were and to hear their experiences and concerns. They noted the very emotional tone of meetings given that adjuncts often had very bad experiences. Rather than move forward, the planning group centered

on the feelings that emerged and acknowledged their experiences first. The reflection on the many voices that were communicated allowed them to create a program that meets the needs of lots of different adjuncts and an ongoing approach to program evaluation and refining that captures the many voices they heard in this open time of reflecting.

> **Just having really clear, consistent communications that help adjuncts, because they do feel very disconnected.**

Collaborate

Liberatory collaboration was present throughout their design process, particularly as they organized the design team to be inclusive of many different adjunct faculty voices, including non-instructional adjuncts like librarians. The struggle to broadly represent the distinctive adjunct faculty on the advisory group was a commitment to a liberatory collaborative process. And there was also a concerted effort to partner with the adjunct faculty union to make sure that voice was included in the conversation.

As certain key stakeholders were considered, the group had to navigate power conditions, especially in terms of evaluation of Level II candidates. For instance, they addressed the potential for power dynamics and relationships to determine which adjuncts received the Level II designation if the dean was the sole person responsible for deciding. They imagined potential problems from the adjuncts' perspective: "If they didn't have a relationship with the dean or if the Dean had some bad experience involving them and they had a misperception or something." So, the advisory group wrestled with power conditions that might stifle career advancement and decided instead on a more collaborative model of evaluation, where having a committee review and make decisions would result in a more just process.

They also recognized that adjunct faculty collaboration is a struggle as adjuncts are often isolated from campuses, so they needed to work hard to make sure adjuncts felt included. They noted the importance of "Just having really clear, consistent communications that help adjuncts, because they do feel very disconnected. They work at multiple schools."

Policymaking and Politics

In addition to empathizing being present throughout their process, they described how navigating politics was core to their process, a major consideration at all times. For example, above we described the need for buy-in from the dean's council, concern about deans' involvement in the planning, the need to work closely with the union and the like are all instances where politics came into play. The organizing, choose, and buy-in for prototyping represented key times where they navigated politics more intently. But as shown throughout this case study, navigation of different interests is inherent in design processes in higher education.

Case Study:

California State University, Dominguez Hills

CSUDH

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

In fall 2017, increasing faculty-student ratios at California State University, Dominguez Hills, along with increasing numbers of non-tenure-track faculty (lecturers[1]) compared to tenure-line faculty created a heightened level of stress on the faculty. As a result, the president of Dominguez Hills and the chair of the academic senate jointly decided to create a task force to examine working conditions of lecturers. Lecturers make up nearly 70% of instructional faculty at Dominguez Hills, and 95% of lecturers are part-time. The task force members described using aspects of the design thinking process to identify ways in which they could better support lecturers by creating less stratified policies and practices.

They have since implemented a number of the policies (e.g. pay increases, multi-year contracts) and practices (e.g. involving lecturers in governance, teaching awards for lecturers). Now with reforms for lecturers happening at the larger California State University system level, the design team at Dominguez Hills hopes to be seen as pioneers of this work. Their design thinking process is mapped out in detail below.

Organize

To initiate the joint task force, the chair of the academic senate and the president decided to share responsibility for inviting members; the chair invited faculty members while the president invited administrators. The task force was co-chaired by the vice-chair of the academic senate and a representative from the president's office. The task force included at least one faculty member from each college, including five lecturers, some of whom were part-time, as well as two tenured/tenure-track faculty; administrators included an academic dean, the director of faculty development, and the associate vice president of faculty affairs.

Politics were evident in the organize stage as the task force included at least one faculty representative from each of the colleges. Furthermore, the inclusion of administrative leaders reveals intentional consideration of political will in the organize phase, likely as their leadership would be necessary for the subsequent policy and practice changes.

Their efforts to involve all key stakeholders best explains the reason for having a plethora of voices. Particular emphasis was placed on including lecturers on the task force as their voices were the most resonant.

Empathize

As the task force included tenure-track/tenured faculty, lecturers, and administrators, it was important for all members of the design team to understand the experiences of lecturers at their institution. Members worked diligently using several different methods to hear and understand the experiences of both full-time and part-time lecturers. They conducted a survey among a small percentage of lecturers from each department, listened to the in-depth narratives of the lecturers on the task force,

1 Note: The collective bargaining agreement of the California State University and California Faculty Association does not use the term adjunct faculty. Additionally, though the term adjunct faculty is in widespread use, the task force identified that the term neither reflects reality nor conveys respect. Lecturers carry 60-70% of the teaching in the CSU system and are therefore integral to institutional functioning.

and collected institution-level and system-level data about the predominance of lecturers and the number of course credits they taught. Additionally, at the inaugural academic senate retreat, the task force hosted a roundtable on the narratives of non-tenure-track faculty. At this roundtable, task force members and members of the academic senate were able to learn about the experiences of full-time and part-time lecturers and generate ideas, together, around how to best support and advocate for them.

Task force members talked about their intentionality to empathize early on and in every step of the design thinking process. They did this by centering lecturers' voices and humanizing faculty off the tenure-track. Through this process they learned that for many lecturers at Dominguez Hills, teaching was their career and not a side job as often assumed. At the same time, because of the way the task force was intentionally organized, members were knowledgeable and significantly invested in the betterment of working conditions and culture for lecturers at Dominguez Hills. Some task force members were current and former lecturers, and for that reason, could better empathize with those who currently occupy such roles. Having been in that role in the past helped them to define and ideate with non-tenure-track interests and perspectives in mind.

The political nature of design work in higher education was also evident in this stage, as the task force partnered with the academic senate in their empathy efforts by hosting the roundtable at the retreat. It was especially important for members of the academic senate to understand that full-time and part-time lecturers have different interests and experiences at the institution. Engaging this key stakeholder group early in the design thinking process laid groundwork for getting buy-in later in the process.

Power imbalances are evident when creating new policies and practices for lecturers, as they are a marginalized group even though they are the majority of faculty. Inviting lecturers to exercise their voices in these policy design and implementation processes illustrates an effort to eradicate equity threats, thus subverting such asymmetric power relations between the dominant and marginalized groups within higher education faculty and administration. Therefore, empathizing, in this case, meant listening with care and attentiveness with the intention to create more equity.

(Re)Define

There were three key sources of data the task force used to (re)defining the issues that plague lecturers: reviewing the literature, connecting with external partners, and talking directly with department and college leadership. Reviewing the literature afforded the team the ability to identify the problems that lecturers at Dominguez Hills faced through a research and evidence-based lens. The task force also leveraged their position in the CSU system, tapping into a network of campuses and the central system office to identify issues that lecturers at other institutions faced. In particular, task force members spoke with representatives from other universities in the California State University (CSU) system, the CSU Chancellor's Office,

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and the California Faculty Association Lecturer Representatives. They also met with the chairs council of five colleges and conducted in-depth interviews with deans.

The task force engaged in sense-making activities to redefine their understanding of the problem. For instance, one activity they conducted was to write the issues they had identified on post-it notes so that they could classify them into different categories. Their use of literature and external partners also facilitated comparative sense-making, allowing them to more clearly identify where the institution was doing well and where there were opportunities for improvement. In talking directly to academic leaders at Dominguez Hills, task force members were able to understand what policies and practices should be changed within the Dominguez Hills context. While literature can provide general ideas, campus context matters and talking to department chairs and deans helped team members to identify specific, local needs and issues.

The consideration of political will in the organizing phase helped them put together a diverse and well networked committee which gave them access to the right information. Task force members described how it was beneficial to have people on their committee that had multiple levels of experience and in multiple roles, which benefitted them throughout their design thinking process. In the (re)define stage, in particular, the fact that some members had connections to the central office and other institutions facilitated their use of liberatory collaboration. In addition, using literature and their networks allowed the team to situate the issues they identified within a larger and ongoing conversation, reflecting politically savvy that likely benefitted them during the buy-in phase.

Ideate

Because of the data collection approaches used by the task force, there was a good deal of overlap between the empathy, re(define), and ideate stages. The literature they reviewed, data they collected, and conversations they had all included some attention to recommendations for best practice. For instance, their survey asked lecturers about their perceptions of being valued as well as suggestions for ways the institution could be more supportive.

One person said, “Having the ideas generated before coming to a definition is sometimes helpful in the way that we think about being able to implement some kind of new system.” Task force members therefore found themselves in an ongoing state of brainstorming ideas as they kept identifying new issues that needed to be addressed. They talked about how important it was for them to list as many ideas as possible before narrowing down what they wanted to implement.

Their approach proved to be advantageous as they got to learn about others’ ideas for improvement from a group that represented a wide diversity of perspectives. This information was pivotal for their ability to imagine potential solutions.

Choose

Moving from the ideate phase into the choose phase proved to be a difficult process for Dominguez Hills. With so many strong ideas flowing from key stakeholders and the task force, they had a hard time narrowing down which ideas to initiate and perhaps which ones to put on hold. Additionally, because the task force had been charged with recommending best practices for lecturers, they were able to include a wide variety of suggestions in their report.

At the same time, they did work to hone their list of recommendations by considering many factors, including time, resources, and necessity. Task force members were also very conscious of feasibility and political will. One member said, "A lot of the things that non-tenure-track faculty need don't cost money, but it requires political will."

They also acknowledged that political will changes in different environments, such as the larger institutional level versus the departmental level. For instance, there is no cost associated with advertising tenure-track jobs to lecturers or making a conscious effort to include lecturers in departmental faculty meetings, and both practices can help lecturers feel like they belong, but very different types of political will are necessary to implement each practice.

Prototype

The recommendations outlined in the report of the task force served as their prototypes. The task force members supported their recommendations with empirical evidence and literature, as well as carefully documenting the teams' process, including survey results, interview notes, etc. In the report, recommendations were grouped into the following categories: (1) recruitment, (2) support at entry and close of semester, (3) working conditions, instructional, and community resources, (4) performance evaluation and feedback, (5) mentoring and career/professional development, and (6) professional status and recognition. The recommendations included practices at every level of the institution, including the governance structure, human resources practices, and departmental level policies.

Recommendations:

1. **Recruitment**
2. **Support at entry and close of semester**
3. **Working conditions, instructional, and community resources**
4. **Performance evaluation and feedback**
5. **Mentoring and career/professional development**
6. **Professional status and recognition**

Task force members talked at length about the prototype phase. In fact, they called attention to how prototyping runs counter to the more deliberative process common in shared governance that works toward a fine-tuned policy the first time around. Because there is often not a clear path forward and the culture lecturers experience is fluid, team members emphasized the importance of framing missteps as iterations rather than failures. A prototyping mindset allows designers to revise or abandon ideas accordingly, which is especially necessary for the changing conditions of non-tenure-track faculty.

Get Buy-In

Task force members acknowledged that it helped that the task force was formed and co-sponsored by CSUDH's president and the academic senate, so a commitment to implementing these recommendations was already in place. In addition, the task force made choices that inherently fostered buy-in in other phases of their process, such as including members of the academic senate in their empathy work and using scholarship as evidence in their report. At the same time, the task force also needed the approval and support of other senior level administrators who controlled resources needed to implement some recommendations put forth by the task force.

For instance, the task force met with the provost and went through the recommendations, line-by-line, to assess what it would take to implement each recommendation and to explore where needed funding might come from. In another instance, in 2019, members of the academic senate attended a conference on shared governance, including some who were on the task force, and so they invited along a few members of the provost's office. One of the biggest takeaways from the conference was that non-tenure-track faculty cannot have a voice if they are not represented in shared governance. The message resonated with the academic leaders who attended and they brought the idea back to campus with them, paving the way for better representation of lecturers in the academic senate.

The task force thus worked to get buy-in using relational approaches, working more at the level of key stakeholders than with coalitions. In addition, the evidence from this case suggests that the team worked throughout the design process to create buy-in. In fact, their proactive approaches to redefining the problem by talking with so many lecturers, department chairs, and deans also probably contributed to their success, as these efforts made these stakeholders feel included and heard.

One of the largest lessons the task force learned was that buy-in and support from senior leadership matters in order to navigate the challenges of resources and priority setting. The initiatives, policies, and practices that were implemented were a result of being able to persuade senior leadership to make these issues priorities for the campus.

Test at Scale

After the task force presented the report, the academic senate began to implement a number of recommendations. Some of the recommendations put forth in the task force report that have been implemented at scale include inviting eligible lecturers to apply for tenure-track positions, providing compensation for lecturers who participate in the academic senate, and creating an onboarding handbook for lecturers.

Evaluate and Refine

While many of these recommendations have been implemented without any major flaws or backlash, policies and practices are also being evaluated and refined in an ongoing fashion.

One issue that has been hotly contested relates to the representation of faculty in the senate. While lecturers now have more representation on the senate, some feel that the senate will only represent them when the makeup of the senate reflects the faculty population, which would double the number of seats on the senate. Other faculty do not believe it is equitable or even necessary to double the size of the senate. As an alternative, the academic senate created a lecturer advisory board, which allows lecturers to have a greater voice and provides compensation for advisory board members without changing the size of the senate.

Another policy that reflects the iteration of prototyping, getting buy-in, testing, and refining relates to compensating lecturers for serving as senators. Initially, these lecturers were compensated at the equivalent to one course, based on the recommendation of the task force. However, the reality is that this was cost-prohibitive in the long run and that no other CSU offered such high compensation. This new policy has gone through about six rounds of revisions between the senate and the provost's office; it reflects decreased compensation but also a dedicated source of funding from the provost to ensure continuity.

Thus, the task force's design thinking process showcased many examples where, after testing and assessing, policies and practices change accordingly. This prototyping mindset, in fact, is one of the benefits of design thinking.

Keeping Equity in Mind

Notice

Having task force members from different backgrounds, including lecturers and others who were familiar with the culture for lecturers, was extremely helpful in thinking through the policy and practice changes needed to build a more equitable faculty culture at Dominguez Hills. Team members noticed power and acknowledged that their work was seen as valuable in part because of the way the task force was initiated by the president and chair of the academic senate.

There was also awareness of power within the team. One lecturer said, "I am always a little uneasy about participating in this kind of group and that comes from being a non-tenure-track faculty." Even though the team included a mix of lecturers and senior administrators, members noticed positionality and treated one another with respect.

This equity work in the team came in part from centering the voice of lecturers in order to understand the issues. Lecturers provided testimonies regarding their unfair treatment during the focus groups. One lecturer talked about being excluded from department meetings for three years, while another lecturer shared that many of their part-time faculty colleagues do not get

invited to faculty happy hours or acknowledged in the hallway by their tenure-track/tenured peers. In noticing the experiences, knowledge, and biases of the design team, designers were able to better empathize with their colleagues.

Reflect

Task force members talked at length about engaging in continuous reflection regarding their respective identities and roles on campus. Because the implementation of their recommendations is an ongoing process, they continue to reflect on the progress being made so they can alter and gain feedback accordingly. Team members talked about how each small change makes it easier for future efforts; they also reflected that even though sometimes the work being done was not visible, it was still valuable.

They participated in equity pauses and reflections to ensure that their proposed recommendations were improving non-tenure-track culture and not worsening it. One example of this was reflecting and realizing that total parity might not receive the buy-in needed from the academic senate or senior leadership, so in addition to the two seats on senate, they created a non-tenure-track advisory board that they thought would be more beneficial.

Collaborate

The task force really benefitted from engaging in collaborations within the university and with external partners. Members of the task force detailed the importance of gaining buy-in from and collaborating with senior leadership, which they did by sharing transparently in every stage of the process, even inviting leaders to engage in professional development opportunities that further developed awareness and empathy necessary to make a cultural shift. By publicly releasing their task force report, including their review of scholarship, transparently documenting their many conversations, and providing concrete recommendations, team members were able to create and expand buy-in.

One lecturer talked about being excluded from department meetings, while another lecturer shared that many of their part-time faculty colleagues aren't acknowledged by their tenure-track/tenured peers. In noticing the experiences, knowledge, and biases of the design team, designers were able to better empathize with their colleagues.

One example of where this work was particularly evident was that a new vice provost was hired in the midst of the implementation process. Task force members were intentional in bringing the new administrator into the process, discussing how to implement new policies and practices. Their work gathering and synthesizing relevant literature and consulting with academic leaders within the university and externally made it easier for the new vice provost to join the effort and support the implementation process financially. These collaborations also fostered buy-in of the senior leaders they consulted.

Through their external collaborations externally, task force members strengthened partnerships with the California Faculty Association (CFA) union, CSU system office, and other institutions. By tapping into key informants, they were able to identify

some areas in which Dominguez Hills excelled and others where there were opportunities for improvement. Their work helped solidify many collaborative relationships, which can continue to be a beneficial resource for guidance and collaboration in future efforts.

Policymaking and Politics

Task force members demonstrated awareness of power and leveraged political opportunities throughout the design thinking process. This was especially evident in the way that, rather than choosing one or two initiatives to put forth, they developed a very comprehensive list of recommendations, as they recognized that the success of specific initiatives would require external buy-in.

Conclusion

In this report, we provide a resource for higher education leaders to help campuses move in a new direction by making policies and practices more equitable for non-tenure-track faculty members. The same design process can also be used to design more equitable practices more broadly for higher education. Hiring diverse faculty, making learning more relevant and engaging for all learners, and creating more inclusive admissions policies are all important equity design issues that could benefit from the application of this process. Given the inequities that continue to plague campuses, leaders need tools to help guide campus decision processes. Too often, ideas are borrowed from other sectors without the appropriate vetting and reconfiguring to appropriately work within higher education settings. We offer this guide as a tool and approach that has been tested and modified and can be successfully embraced by campus leaders and their teams. We look forward to seeing the changes that result from using this guide as it supports an enterprise with integrity and equity, and the mission of diverse student success.

Table 1: Design for Equity in Higher Education. Notes on Differences.

Phase	Higher Education Context
Equity-Minded Practice	Equity underlies all of the phases, especially as a result of participatory design and a culture of shared governance.
Organize	We add this phase to account for the various ways design teams are organized and the role of political will.
Empathize	Design teams went beyond interviews and observation, learning more about the institution and their colleagues through institutional data and scholarship.
(Re)Define	Because teams are usually formed around a perceived problem, this phase focuses on redefining the problem as a result of learning through empathy.
Ideate	Idea generation was more constrained. Teams used scholarship and models to foster innovative solutions.
Choose	We add this phase to identify that feasibility is central in the choice process and that teams chose multiple solutions rather than one.
Prototype	The prototyping mindset is difficult to maintain. Because of the risk-averse nature of higher education, teams built multiple prototypes simultaneously and also developed a problem-and-solution story to share out.
Get Buy-in	We add this phase to acknowledge the intense work of negotiation, collaboration, and compromise required to get buy-in for the solution, as well as the complex environment, where multiple coalitions contribute to approval of the solution. Team share the problem-and-solution story widely.
Test, Evaluate, and Refine	This most often occurs at scale. Teams continue sharing the problem-and-solution story to facilitate implementation. Evaluation and feedback occur more publicly through collaboration, and is often ongoing.

Table 2: Liberatory Design Thinking Mindsets & Complementary Phases

Liberatory mindset	Description	Most relevant phases of DEHE
Practice self-awareness	We design from who we are. So we need a clear "mirror" to better see how who we are shapes what we see, how we relate, and how we design.	Organize Empathize
Focus on human values	Seek as many ways as possible to get to know your end users including immersion, observation, and co-design.	Empathize Choose
Recognize oppression	Our designs depend on how we frame a challenge. So we need a clear "window" to see how oppression may be at play in our context.	Redefine Choose
Embrace complexity	When the going gets messy, stay open to possibility. Powerful design emerges from the mess, not from avoiding it.	Empathize Choose
Seek liberatory collaboration	Recognize differences in power and identity. Design "with" instead of "for."	Ongoing
Build relational trust	Intentionally invest in relationships, especially across difference. Honor stories and listen for emotions.	Empathize Get Buy-in
Bias towards experimentation	The complexity of oppression requires courageous action. Build to think and learn.	Prototype
Share, don't sell	Practice transparency of process and non-attachment to ideas.	Get Buy-In Test and Evaluate
Attend to healing	Doing equity work includes on-going healing from the effects of oppression to increase our agency for liberatory design.	Ongoing
Exercise your creative courage	Every human has the capacity to be creative. Before there is confidence, there is the courage required to navigate self-doubt and creative fragility.	Ideate Prototype
Catalyze opportunities to transform power	Inequity thrives in situations of power imbalance. Look for ways to transform power to invite and experience liberatory collaboration. Move away from power "over" or "to" and design toward power "with" and "within" to interrupt the reproduction of power dynamics.	Empathize Ideate Test and Evaluate
Work with our fear and discomfort	Fear and discomfort are an anticipated part of this work. This includes feelings related to the situation, as well as what it brings up for you as a designer given who you are. Identifying sources of the fear and discomfort allows us to advance our design work if good or address it if harmful.	Ideate Prototype

Note: The liberatory mindsets and descriptions were copied from the Liberatory Design Card Deck developed by Anaissie et al. (2020).

Project Team

Adrianna Kezar, Director and Principal Investigator

Adrianna Kezar is the Dean's Professor for Higher Education Leadership at the University of Southern California and director of the Pullias Center for Higher Education at the USC Rossier School of Education. She is a national expert on student success, equity and diversity, change, governance and leadership in higher education.

KC Culver, Senior Postdoctoral Research Associate

KC Culver is a senior postdoctoral research associate in the Pullias Center for Higher Education at the USC Rossier School of Education. She employs quantitative, qualitative, and mixed methods to study the impact of educational policy and practice on the development and success of diverse students. Her research focuses on policies and practices related to faculty, curriculum, and learning environments.

Jordan Harper, Research Assistant

Jordan Harper is a second-year Ph.D. student in the Urban Education Policy program at Rossier. His research interests include non-tenure track faculty, student leadership development, and graduate admissions and transition. Jordan approaches all of his research with an equity and inclusion lens.

About the Pullias Center for Higher Education

The world's leading research center on student access and success in higher education, the Pullias Center for Higher Education advances innovative, scalable solutions to improve college outcomes for underserved students and to enhance the performance of postsecondary institutions. The Pullias Center is located within the USC Rossier School of Education, one of the world's premier centers for graduate study in urban education.

Since 1995, the mission of the Pullias Center for Higher Education is to bring a multidisciplinary perspective to complex social, political, and economic issues in higher education. Our work is devoted to the key issues of college access, retention, and accountability for underserved students—and the effectiveness of the colleges and universities that serve them. Both directly and through our research, we engage with institutional leaders, policymakers and the community at large to address the major challenges in educational equity today. For more information, please visit: **https://pullias.usc.edu**

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