# DESIGNING FOR EQUITY STARTER GUIDE

Jen Choi, Micha'el Monique Davis, Lilianna Kay Deveneau, Tammy Freeman, Jillian Humphreys, Molly McKnight, Jonathan Rotner, and Dan Ward Two guiding truths, (1) that all inequity exists because humans made it so and continue to maintain it and (2) that we can each play a role in creating the reality in which we want to live... While we acknowledge that the deconstruction and reconstruction of legacy systems of oppression will be difficult, we believe there is hope in this framing.

If people are the problem, people, then are also the solution.

— EquityXdesign<sup>1</sup>

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# INTRODUCTION

### Land Acknowledgment

This guide was composed by a collection of authors located across North America who are committed to equity and justice. We acknowledge Indigenous People as the traditional custodians of this land.

We honor and celebrate the following tribes, who were the original stewards of the territory we live and work in (listed in alphabetical order): Doeg, Manahoac, Massa-adchu-eset (Massachusett), Nacotchtank, Pawtucket, and Piscataway

We also acknowledge due to intentional erasure of Indigenous Peoples from euro-centric "mainstream" American history, that we may not know all the names of the tribes whose land we now inhabit. Though their names may be unknown to us, they are certainly not forgotten. May this acknowledgment stand as a signal of our respect and celebration of Native communities and our commitment to equity through sustained action to heal, restore, and continue to do the work to help create a better, more equitable future.

If you would like to learn more about the Indigenous lands where we live and work, as well as access educational resources, please see https://native-land.ca.



## **Overview of Equitable Design and Why It Matters**

### This Guide Is...

Tammy Freeman

Dan Ward

Twenty years ago, I came across a book that profoundly changed the way I look at technology and design. It's titled *The Unfinished Revolution,* by the late Michael Dertouzos,<sup>2</sup> and among other things it introduced me to the topic of "human-centered computing."

The book's basic premise is that we must judge computers' performance by how well they satisfy our needs, not by how fast they spin their wheels. Dertouzos makes the case that designers should focus less on a central processing unit's power to process information and more on measures of usefulness that... actually measure usefulness. I'm pretty sure none of my engineering professors mentioned anything about this. Looking back, it is one of those insights that should have been obvious to all of us but somehow was missed by most of us.

Human-centered design, placing people and their experience at the

front of our design work, is applicable far beyond computers of course. It has implications for how we build vehicles and buildings, processes and organizations, as well as policies and communication products. In fact, human-centered design applies to pretty much everything we design, whether it's made of concrete, microchips, or words. More importantly, human-centered design is not just inclusive of all kinds of *designs*—it should be inclusive of all kinds of humans.

The goal of human-centered design is to improve the experience of each person who interacts with the designed thing, and it generally does this by reducing barriers, confusion, friction, discomfort, and stress. Of course, humans are not all the same. We each have different needs and capacities. A barrier to one person may not be seen as a barrier by someone else. Clearly, there is a complex link between humancentered design practices and principles of equity. Dertouzos offered a brilliant design principle that helps us navigate these challenges, writing:

"...whenever designers build utility for the least-skilled users, they enhance utility for all users."

This is one of many reasons equitable design matters—and not just because designing with equity in mind helps people who might otherwise be left out, although that is a very good thing. Not just because it improves the experience of "the leastskilled," although that is also very good. And not just because it conveys benefits to a small group who we might dismiss as "Other." **Equitable design matters enormously because it helps everyone... enormously**.

Based on the rest of his book, I am confident Dertouzos would not object if we broaden the phrase "leastskilled" and recognize that usability is not solely a question of the person's skill. Beyond issues of individual ability, usability is also shaped by factors including awareness, access, familiarity, opportunity, and inclusion. We must consider all the factors that contribute to a system being usable, and all the barriers that exclude our fellow human beings from fully participating in, contributing to, and benefiting from the designed world. Even more, we should recognize that these barriers are often unjust, unwise, and unnecessary. Taking them down and redesigning possibilities helps everyone.

In the pages that follow, we'll explore methods and frameworks for designing with equity and "enhancing utility for all users." We'll provide considerations on technology, shifting paradigms, and language to help build a more equitable world...for everyone.

Let's get started.

...An introduction to designing for equity, for those who are working to advance equity in systems and institutions.

...Offered with great humility. We recognize the privilege and power we have in being able to create this guide for dissemination and consideration. We are grateful for those who have paved the way in this space and the organizations, communities, and individuals continuing to challenge unjust systems, policies, and practices. ...An acknowledgment and gratitude to communities and individuals who have pioneered this work, many of whom have the lived experience of various forms of inequity. We highly encourage you to visit the appendix at the end of this resource and to learn about organizations leading in this space via their workshops or other offerings to continue your learning and application of equitable design.

...Less of a "how to," and more of a "what is," this guide provides frameworks and concepts you can explore and leverage to craft an approach to designing for equity. Where applicable, we offer resources and information provided by our community partners.

We acknowledge the ways in which trac practitioner and want to make the shift Here we seed mindsets and provide fra to positive impact for sustainable chan
If the decisions and/or the work you do h intentional efforts to increase equity ar impact on people's daily lives in unequa influences, opportunities, and disruptor also gain a deeper understanding of the
For those who are interested or curious we offer tools, approaches, and mindse processes.

Note: The terms "equitable design" and "designing for equity" are used interchangeably throughout this document. For the purposes of this document, these terms are synonymous.



...A living document; we hope your experiences and learnings can help inform future iterations of this guide and/or inspire you to create a guide of your own. Collectively, we can learn from each other to further expand the movement of designers for equity and social justice.

#### This guide is for everyone

But depending on who you are and your role in an organization and/ or community, you might engage in different ways. **All issues are issues of equity, some more prominently than others**. We hope that once you read this guide, you'll be better able to identify, question, call out, and mitigate issues of inequity.

aditional design thinking can be harmful. If you are a design thinking ft to embedding equity in your design process, this guide can help. rameworks that help move from mere good intentions inge.

has the power to affect the reality of others, it's important to maintain ind access. Policies, programs, practices, and processes can have an ial ways. Equitable design can help you to understand the systemic forces, ors affecting the communities in which you work, live, and serve. You can ne various and interconnected communities you interact with and impact.

s about engaging in equity work from a human-centered perspective, ets to aid in integrating equitable design into your work and research

### What We Believe

Tammy Freeman

We believe that ensuring voices are heard sometimes means taking a step back to allow those typically less invited, including those with less access, to step in.

#### Racism and inequity are products of design. They can be redesigned.<sup>3</sup>

We believe that systems work exactly as they are intended to work. Systems that harm and cause undue barriers and burdens were designed to achieve the outcomes they get, intentionally or unintentionally.

#### Nothing about us without us.<sup>4</sup>

We believe in centering the lived experiences of those who have endured inequity. We believe that people who will be affected by a policy or other decision should be part of the process of policy development in whatever capacity gives them voice to use their lived experience and expertise to help shape it.

#### Nothing can be changed unless we are willing to face it.<sup>5</sup>

We believe that we must tell the truth about our history and our present, no matter how uncomfortable. We must always make the invisible visible. What is hidden can never be healed, and what is ignored can never be fixed. We believe truth allows us to move forward and plant new seeds of change.

#### **Reparative justice is** a path forward.

We believe that steps must be taken to restore communities who have suffered historical harm and trauma. Trust in our systems and institutions depends on the recognition of historical harms and consistent, deliberate actions to repair and not repeat them.

#### Embody equity through consistent word and action.

We believe that commitment to this work is required. This includes continuous learning, such as becoming aware of our biases, being willing to make mistakes, and holding ourselves and one another responsible and accountable. This

can be uncomfortable, like growth itself. We are committed to liberation through equity by deliberate, transformative, and purposeful action—not the performance of action.

#### Stepping back can be stepping up.

We believe that ensuring voices are heard sometimes means taking a step back to allow those typically less invited, including those with less access, to step in. This means that power must be ceded by those with and most proximate to power. This means challenging white supremacist and colonialist power structures that are biased toward action and that prefer speed over taking the time required to make room for equity. This goes hand-inhand with centering those with lived experiences in all that we do.

Note: We adhere to and uphold the design principles set forth by Equity Meets Design, which are: (1) design at the margins, (2) start with self, (3) cede power. (4) make the invisible visible. and (5) speak to the future. To learn more about these design principles, see Appendix B.

**REFLECTION PAUSE...** Throughout this guide, we offer pauses to make room for you to notice and reflect on what you have read and learned and to reflect on your own experiences. We do this because we don't want you to only intellectualize this guide; we want you to sit with it and to bring awareness to your thoughts and feelings as you move throughout the pages.

#### How have you promoted equity in your work, school, home, or community?

How I have

How I haven't

I'm not sure of the impact of my actions

Reflect on your answer. Perhaps your answer doesn't fit neatly in any one box. Use the space to jot down how you promote equity in your work, research, and daily interactions. This work is important because equity begins with you.



To understand equitable design, let's look at what we mean by "equity" and what we mean by "design."

#### Design

We are all designers. Design refers to the act of creating with intention to achieve a specific outcome or outcomes. We are designing and participating in design all the time, whether we are aware of it or not. We design our work, our days, our lives. And we can take an active part in co-designing the society in which we want to live. It is important to note that we can be very much intentional about achieving a specific outcome, yet remain unaware of how what we do impacts others.

Design has a purpose. Everything created was designed to do or accomplish something. A television was designed to broadcast information and entertainment. A train was designed to help transport goods, materials, and people. Systems, too, were designed to accomplish something.

But what happens when systems, by their very design, create negative consequences for certain groups of people? For example, a five-story

apartment building that only has stairs excludes access for those who are unable to climb them. Machine learning and artificial intelligence (e.g., algorithms) have been found to target and/or exclude Black and Brown people, resulting in negative outcomes on a spectrum that can perpetuate racial profiling on one end and lead to invisibility of people of color altogether on the other (here are some examples). When we talk about invisibility, it can mean overestimating a large group's homogeneity (e.g., blanket stereotypes or statements that don't consider unique differences within groups) or not representing certain groups at all (including neglecting to include certain groups in development of new policies, programs, innovations, etc.).

Invisibility can also mean ignoring the development of innovations, ideas, and solutions... from these groups by those with more power and control. All are inequitable.

Were the designers who created these systems malicious in their intent? Maybe not. However, their lack of awareness and consideration for certain groups created inequity anyway. And for those whose lives and livelihoods are impacted, it doesn't matter whether the designers had good intentions but simply didn't think to include all people, because

the negative consequences for those groups who are left out are the same as if it were an intentional act of exclusion and deliberate inequity. As Creative Reaction Lab's Dhara Shah shared, "Unintentional impact becomes a choice."

#### Equity

Often, equity is confused with equality-they are not the same. Equality seeks fairness through sameness and treats everyone the same, ignoring potentially vital differences. Equity realizes that fairness can only be achieved by recognizing differences. These include both naturally occurring differences and differences in how a group may have been impacted by outcomes caused by racism, sexism, and other forms of systemic oppression.

Importantly, equitable approaches seek to remedy disparities by focusing on systems and the disproportionate and disparate outcomes unfairly imposed upon groups due to these longstanding injustices.

More specifically, equity recognizes that individuals have different needs while also considering that, historically, certain people and groups have suffered discrimination and inequity. Equity is realized when disproportionality and disparity do not exist.

#### **Designing for Equity**

Cookie-cutter solutions to complex problems do not exist. Because of factors like culture, history, geography, and how groups experience systemic forms of oppression, what may work in one situation may not be the most impactful approach for another. Fortunately, there are a variety of tools we can use to design for equitable processes and outcomes that take into account historicity and unique needs of individuals and communities.

Designing for equity requires us to understand and address the systemic problems that create disparities. We present several approaches to designing for equity in the later sections of this guide. Before we do, we offer a few fundamental concepts that are central to equitable design. They are highlighted for ease; however, order does not denote ranking. All considerations are equally important.

 Critically investigating a problem is a crucial starting point of both design and addressing **inequities**—We need to be honest about from where we are starting as well as focus on our goals, while making room for those goals to shift and evolve over time. Being honest about inequity can require

# obscure the truth.

 Remain open, honest, humble, and accountable—Newcomers to this space and teams who are embarking upon this work for the first time should remember to remain open, curious, and aware that systems and policies can impact different communities in different ways. This is especially important when learning about ways in which organizations/ agencies/governments have inflicted harm through their policies and practices. The work of equity requires accountability and restoration to the communities that have been harmed.



individuals to confront and sit with discomfort. It is important to not let discomfort in dealing with inequity

- **Community as experts**—Engaging the community in question as experts of their own experiences is critical to equitable design. We aim to shift from community informed practices, where communities are simply told what will happen, to deferring to communities as much as possible in the development of policies, programs, and other solutions that will directly affect them.
- Continued awareness, evaluation, and mitigation—It is imperative to explicitly acknowledge how our beliefs and assumptions may be contributing to inequities. The continued evaluation and mitigation of assumptions, stereotypes, and biases of those doing this work is critical.



Awareness of self is key to helping to ensure we don't cause harm while meaning to do good. Good intentions do not always equal positive impact. Good intentions alone are no longer good enough.

Equitable design provides a way for us to bring awareness and intentionality to what, how, and with whom we design, so that we do not create or perpetuate inequity. **To be clear, if** we are not intentionally designing to ensure equity, we are designing for inequity. Design is not neutral.

#### **Considerations and Frameworks**

So, how do we start to evaluate and correct systems that create and/ or perpetuate inequity? How do we ensure our work and research do no harm so that we do not contribute to the same problems we want to end? We must start where it all begins and ends: *with* people.

Every design is a manifestation of people and their ideas and beliefs about themselves, others, and the world. In this guide, we present human-centered design techniques with an equity lens to combat inequity that shows up in our systems, institutions, and even the ways we're taught to approach opportunities. And, these techniques can be applied not only to combat inequity, but also to prevent it.

What we present here is not a "how to" because there is no one-size-fitsall approach to ending inequity and injustice. So, we offer an exploration of mindsets, frameworks, and considerations that allow us to begin to tackle inequity at the root to help create sustainable change for a just society.

Frameworks arise from a need to make something better, whether that's a product, service, policy, or opportunity. But what is better? Better for whom? And who decides? To begin to acknowledge systems of inequity and expose their root cause, these questions must remain top of mind. The following sections introduce frameworks and considerations that attempt to explore these questions using an equitable approach, centering people with lived experience of inequity, and empowering communities who are often pushed out and left out of the "dominant" conversation to help ask and answer pertinent questions.

#### **REFLECTION PAUSE...**

Throughout this guide, we offer pauses to make room for you to notice and reflect on what you have read and learned and to reflect on your own experiences. We do this because we don't want you to only intellectualize this guide; we want you to sit with it and to bring awareness to your thoughts and feelings as you move throughout the pages.

Take a moment to notice any feelings that may have come up for you while reading. Use this space to name the feelings and, if you can, identify why those feelings arose.

# FRAMEWORKS AND TECHNIQUES

Look closely at the present you are constructing: it should look like the future you are dreaming <sup>7</sup>

- ALICE WALKER

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## Applying an Equity Lens to Design Thinking

Jen Choi

Applying an equity lens to design thinking requires a shift in both mindset and methodology to help teams create equity-driven outcomes. Equitable outcomes are solutions that are available to all (e.g., equal access or opportunity) and/or they also help equalize and normalize who benefits from the solution (e.g., many groups benefit, not just one).

Traditional design thinking is often used when there is no clear answer, and the team must build their way forward. In these situations, no prior solution may exist for the problem set, and/or real-world data is non-existent or insufficient. After empathizing with audiences of focus to understand and define the problem, the team ideates potential solutions. The team builds their way forward by creating **prototypes** to test their assumptions and generate data. This data then informs the next prototype that is built, tested, and so forth, in an iterative manner until an effective solution is reached.

Adding an equity lens to design thinking adds two key steps to the traditional design thinking process: Notice and Reflect.<sup>8</sup> These Notice and Reflect steps should be conducted throughout all steps of the process, and applying an equity lens is an iterative (instead of linear) process.

#### Notice

The Notice step asks the team to broaden their perspective and notice where and how inequity exists, especially where it might not be immediately obvious. One of the key tenets of applying an equity lens to design thinking is to **design at** the "margins" (see Appendix B), where those with the greatest need

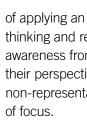
or greatest opportunity to benefit may exist. These are the groups who are left out because they don't have a seat the table, aren't heard, and/or may not have access to the resources necessary to implement changes for themselves.

For example, groups at the margins may not have power or resources, they may represent only a small portion of the overall set and are not included in the "average audience," and/or the effort doesn't engage with them because the team believes there isn't enough time to meet deadlines. It's critical to include these groups because, not only does their inclusion often yield a better solution for many, but these groups are often the ones most likely to suffer the greatest burden or consequences of inequitable design. Teams can also Notice by broadening their thinking to find insights and inspiration by learning from others.

A second key tenet of applying an equity lens to design thinking is to center on those with firsthand experience of the problem, often referred to as "lived experience." Community members and those with lived experience have invaluable knowledge, and they should be included as active and full members of the team. Applying an equity lens also asks teams to consider not just

the problem in front of them, but to broaden their lens to consider the intergenerational, systemic, institutional, environmental, and historical impacts that led to today's problem.

Lastly, the Notice step asks the team to take a critical look at their own assumptions and biases that they inherently bring to the table and implicitly embed as part of the solution. Teams must look not only at the problem that they are facing, but they must also look at how they themselves might be part of the problem. This is the third key tenet



#### Reflect

The Reflect step asks the team to reflect on the impact of these new considerations that are uncovered during the Notice step. With intentional reflection, the team can make more informed and equitable decisions for the best path forward.



of applying an equity lens to design thinking and requires honest selfawareness from the team about how their perspectives may be limited or non-representative of the audience

As a mindset, it is crucial to apply an equity lens throughout all aspects of the problem-solving process. When the team is nonrepresentative of the audience of focus, ceding power and listening more to those with lived experience is critical. This process affects not just the thoughts and beliefs but also the words and actions of the team. Using language that reduces harm, even when certain terms are considered

important to prevent re-triggering trauma or inflicting new suffering.

the norm, is one example; it is





Participatory Research (PR) gives researchers a guide toward engaging with those who typically do not have "a seat at the table." PR values and prioritizes the lived experience of community members and acknowledges they are experts in understanding their communities.

PR also creates a co-learning process between community members and researchers; empowers participants with tools, information, connections, and other resources (explained more fully below); and is crucial for identifying equitable solutions.<sup>9</sup>

As previously discussed, equitable solutions are not one-size-fits-all. Acknowledging the nuances of a given community helps researchers and community members find opportunities and solutions that address the complexities of the problems to better effect change. Figure 1 illustrates five types of participation: Inform, Consult, Involve, Collaborate, and Empower. As researchers working with the community, we can continue to look for ways to further *democratize* our processes and more fully center those in the communities of interest. This can lead to more equitable outcomes, greater support, and longlasting relationships.

With each decision we make within the research process, we can ask questions to more fully center on

At each step in the research process, there is a choice about the degree of participation. The choice guides the selection of research methods and tools.

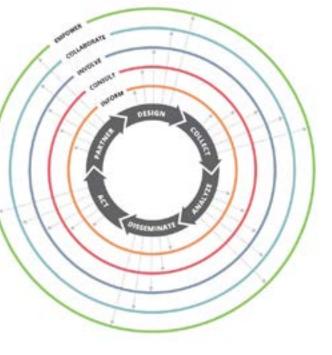


Figure 1. Participation choice points in the research process<sup>10</sup>

community needs. This includes being mindful of who we're asking to partner with (and who we're not), our research design, what information to collect and how, and the choices we make in how and what to analyze, disseminate, and act on based upon what we've learned.

Participatory and democratic research asks us to move from designing for toward designing with and designed by. Empowering a community to lead the research—

INFORM

to community

CONSULT

community.

INVOLVE

COLLABORATE

EMPOWER

Community is portner in research process

Community leads research decision/making

use of Natile Perticipa

Information is provided

Input is obtained from

Anierarchers work directly with community taking the reins on decision making—is viewed as the ultimate democratic and participatory action. This is where communities can speak for their most pressing needs and contribute their strengths and ideas, all of which can help ensure equitable practices.

The benefits of PR are vast and include collection of representative data; increased chance of longlasting, equitable social change; deeper trust built and maintained between community members and researchers; and an increased willingness of community members to engage with researchers on other community-driven topics, especially those belonging to historically excluded groups. Of course, this type of engagement does not come without its challenges. Engaging with and empowering communities can mean longer project times and more cost, and community needs may not align to corporate or organizational initiatives easily. Creating space for open conversation needed to build trust, for example, takes time, patience, and a willingness to truly listen and reflect.

If you are not able to involve community partners at the very beginning of the research process, from first formulating your research questions to sharing results at the end, any choice you make to increase the degree of community participation is one more step toward designing with people instead of for people.

### **Participatory Design** Lilianna Kay Deveneau

Participatory design (PD), also known as co-creation. co-design, or cooperative design, is a specific method of participatory research that brings customers into the design process as subject matter experts. Participatory design can democratize decision making by engaging those of interest in the design process for better, more effective solutions and outcomes.

PD is used for two main reasons. One is to create better outcomes and processes through connecting designers, developers, and/or researchers with those being designed for. This includes when, already having identified a solution, designers wish to engage people to refine the solution or opportunity, such as through testing.

Another reason is to engage and empower people to have an impact on the product created through an iterative process. This is best when a solution has not been identified and designers seek to co-create the solution with those using the product or service and not merely for them. The approach is the hallmark of equitable design; while in some traditional PD approaches people had felt they were being designed at instead of designed with, PD involves consulting communities of focus to help develop the options and to decide what is needed and preferred.

PD allows people to share and show what matters most to them, what makes sense to them, what they like and need—and don't—and leads to more specific, honest, and reliable data.

One way design teams can involve partners and communities of focus in the co-creation process is by hosting PD sessions. These sessions can include, but are not limited to, activities that allow participants to test prototypes of solutions/ideas.

When should you run a PD session?

- To better understand how people think about a specific problem
- When there is a gap between what those in communities of focus say they do and want versus what may be the actual case
- If there are cultural, political, religious, or other major social differences or disconnects between the design team and the person using the product or service

Including and collaborating with audiences of focus can lead to improved designs and a deeper understanding of those of interest. Benefits to those who engage in participatory design sessions include: an increased sense of belonging; expansion of one's social network; learning new skills; access to resources; feeling ownership over solution(s) to issues that are important to them; contributing to more sustainable products and tools; and the possibility to influence projects or products that can reduce inequity by removing barriers and burdens while increasing access and participation. Transformative mindset shifts can even help to improve one's quality of life (MIT D-Lab, 2021).7

Importantly, many of the potential impacts of PD rely on a design organization's attitudes toward communities of interest (including <sup>44</sup> Participatory design methods, especially generative or 'making' activities, provide a design language for non-designers (future users) to imagine and

- LIZ SANDERS, ASSOCIATE PROFESSOR, OHIO STATE UNIVERSITY, DEPARTMENT OF DESIGN

assumptions and unconscious biases), ability to listen, and willingness to remain open and incorporate the ideas they've asked participants to share. Community members have many insights, perceptions, experiences, and strengths that are so engrained in their daily lives that they may hardly recognize them as assets. This expertise can be greatly insightful and impactful.

This approach may even seem radical to some, as historically the power within an organization (particularly forprofit entities) has been safeguarded and shared by few, which can result in a lack of innovation and a lack of equity. PD provides a method in which organizations, government agencies, and others who have the power to change and shape people's lives can cede power and share resources with those who are often left out of the conversation to ensure groups have the opportunity

to participate in decisions and actions that will impact them.

By thinking through potential access and ethical issues before interacting with audiences of focus, teams can ensure more inclusive, considerate, responsible, and respectful communication and participation. By taking time to notice and reflect upon any biases, stereotypes, or other assumptions that may come up when considering the communities of interest, designers create the space for continual learning, increased trust and participation, and further inclusion. This work—internal and external—is needed to create sustainable equitable outcomes in the lives of our fellow humans and community members.

Let's recap. PR involves community members of focus in the research process-ideally from start to finish. Participatory Design (PD) a specific method for encouraging

# express their own ideas for how they want to live, work and play in the future.

participation includes audiences of focus in the design process as co-creators. Design thinking with an equity lens provides a framework to help designers adopt a mindset shift to notice and reflect throughout the process while working toward more equitable outcomes.

These approaches are not mutually exclusive. For example, a research project can involve questions of designing with and for people (PD) on the edge (design thinking with an equity lens) through democratic practices with community members (PR). These people-centric approaches can help encourage fairness while recognizing the power of our differences—if we are willing to notice and reflect.

Note: Here, the word "product" is used as a catch-all phrase for all programs, policies, practices, etc.

# EQUITABLE FUTURES

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## **Strategic Foresight** 44 Jillian Humphreys

Designing with people rather than for people means you might get some surprising ideas of what change looks like. The idea of change is that it results in a better future but better for whom?

A Futures Thinking mindset such as Strategic Foresight (SF or Foresight, for short) can be leveraged with an equity lens to help us imagine equitable futures and to help us think through which external factors and internal actions can help us actualize these futures.

In thinking about what our futures might hold-and make no mistake, when we talk about creating an equitable and just society, this is indeed an exercise in futures thinking—we can use an approach called Strategic Foresight. Strategic Foresight is an aspect of strategic thinking that opens up a larger range of perceptions and possibilities for exploration and consideration.

The key here is the awareness and acknowledgment of bias, a known **risk** to Strategic Foresight. As we begin to unpack the trends and patterns which come together to

inform futures states, it is important that all participants acknowledge the biases (unconscious or understood) they may bring to the process.

Foresight requires active participation and multiple perspectives. As such, in doing Foresight work, it is important to involve different combinations of participants from a variety of backgrounds, roles, and perspectives. Importantly, Strategic Foresight is concerned with the exploration of options, not with process steps needed to make those happen.<sup>11, 12</sup> Foresight should be seen as a natural evolutionary step in one's overall strategic or risk planning process rather than a niche activity.

But this raises a key question about the future: *What is it?* The future is typically defined as a set of possibilities, as plausible alternatives that can be influenced by external sources (i.e., inbound change) and by the actions people take to bring about change and affect the world (i.e., outbound change).<sup>13</sup>

Notice we say *futures* here. There is a tendency to focus on the future as a singular end state with one unchanging linear path forward. What we find in Strategic Foresight is that the future offers many alternative realities to explore because we are working with "unknown data in unknown **worlds.**"<sup>14</sup> The best illustration

of these futures is a cone (or a headlight) expanding outward from the current state into the future, which allows you to explore possible, plausible, and preferable futures (see Figure 2).<sup>15</sup>

Foresight is not about predicting the future. Unlike quantitative areas of study, foresight involves uncertainty because it addresses the unpredictability of human behavior.

#### Instead, Foresight is about enabling decision makers to anticipate the impact of emerging issues on their strategies and policies. Because of this, it is a valuable tool that supports risk management and strategic planning.

According to Andy Hines, Futurist and Director of the University of Houston's Strategic Foresight Program, "The objective is not to be too right (which is impossible) but rather not to be wrong—not to be surprised. Surprise means inadequate preparation, late response, risk of failure, even chaos or panic."16, 17 And for some reason, society seems to be surprised when social justice issues arise or when inequity is found in our programs, practices, and policies. This can be because we assume that inequity does not exist; therefore, in our planning and in our solutions, we don't correct for it, which can perpetuate and create more inequity and harm.

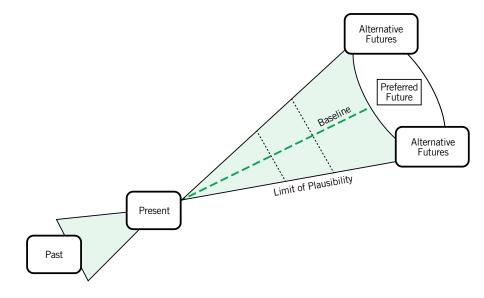


Figure 2. Cone of Plausibility illuminates the plausible, alternative future options available to an organization or community, allowing or critical thought and exploration

A Foresight approach starts with an environmental scan of the organization's operating environment to surface trends and emerging issues. Key inputs to the approach include identifying:

- The focal issue: key question(s) or concern(s) the organization has about the future that they want to explore.
- The time horizon: how far into the future are we looking?

- organizational direction.

• Forces: external influences/ factors impacting an organization's operations as well as internal actions that can influence

· Parties of interest: customers, actors, and/or consumers whose attitudes and behaviors directly impact the organization's future. Conversely, in viewing the future through an equity lens, we also regard parties of interest as those groups who are impacted or influenced by the organization's actions.

Trends: drivers or barrier of change in large systems. These are indicative of the present state of affairs and emerge through the environmental scan.

Different futures offer options for an organization's strategy planning going forward. As stated earlier, these options offer the potential to make decision making wiser. This may include ways to address gaps, improve risk management, and enhance organizational responses to issues. Once scenarios are fully developed, they may be used by the organization in the final phases of the Strategic Foresight approach to understand if different futures are promoting equitable environments or reinforcing systems of oppression society would prefer to avoid. Understanding the indicators that may emerge and the role indicators play in an organization's or community's strategy helps them pivot toward or away from certain future states.

### **Speculative Design**

Tammy Freeman

Speculative Design (SD) is another Futures Thinking technique. SD imagines what the world could be and creates space to conceptualize it through physical, tangible prototypes and experiences. SD offers designers a way to not only address the known challenges of the future but to push past current paradigms and structures to design new futures.

In SD, designers create an experience such as mockups, prototypes, and scenarios and/ or narratives of ideas about the future. This allows others a chance to experience the future, to interact with the future, so that people can articulate what they want and don't want, what they like and do not like. Designers create prototypes that hint to a future, enabling discussion around in what type of world would this prototype exist. Questions such as, what is society like? What are the laws and policies? How do people interact with one another and the environment? Spark dialogue, open the realm of possibilities, and perhaps most importantly ask not just What can be? but, What should be?

SD is a method to use to evaluate potential consequences and social impact of technology and policies to uncover how it may affect people in ways not immediately evident. It can be used to spark further imagining, pushing us outside of current paradigms and constraints to think in new ways that can help create the equitable future we want to see. SD can help us get in right relationship with ourselves, others, and the environment.

Traditional design can be limited to what is right now and the confines of the current reality. SD designs for what can be. Where design thinking with an equity lens and PD ask How might we? Speculative design (and Strategic Foresight) asks What *if?* This doesn't mean they are at odds-quite the opposite. These techniques used together can prove powerful. We see the convergence of SD and PD in an emerging field called Afrofuturism. Afrofuturism is a field worthy of study and can be extremely useful in reimagining society outside of traditional eurocentric paradigms.

The value systems and thinking that will prevail in the future are the same values and thinking that prevail now. Unless we act, those who are left out, made vulnerable, and those who have been pushed to the margins today will be even more so in the future if we do not course correct now. Futures thinking allows us to think and shape possible futures based on today's signals, providing the ability to make better decisions about which futures we prefer out of the possible alternatives.

<sup>44</sup> There is a lot of focus especially in the tech world in using design to try to change the world around us to accommodate our ever-expanding needs. And we're interested in maybe changing ourselves, to rethink our attitudes to fit within the limitations of the planet...it could be using design to try and reprogram and rethink our values, assumptions, beliefs, and priorities so that once we begin to change those, new behaviors can emerge, and from that, new kinds of realities.

– ANTHONY DUNNE, CO-AUTHOR OF THE BOOK, SPECULATIVE EVERYTHING<sup>18</sup>





Designing for social innovation can be applied to a variety of problems (and opportunities), here we focus on social innovation design in built environments and the application of social innovation design to create spaces that foster access and participation, which are critical components of social justice. As we work to democratize decision making, we must also work to expand who can participate in decision-making activities.

Expanding democracy to create room for participatory approaches, while a good thing, still may miss the critical voices of those who are marginalized and underserved. For those whose daily lives are focused on survival and meeting their basic needs, it can be difficult to think about tomorrow. However, these voices must be heard so that effective policies and programs can be introduced that better meet their needs.

How might we (re)create, (re)design, and (re)imagine public spaces to serve the needs of the people in better, more responsive ways?

It is often overlooked how built environments can help or harm people, specifically built environments where social services are performed and delivered. It is also often overlooked how built environments have the greatest potential to meet people where they are and have the power to create space for community, participation, equity, and innovation.

We can use social innovation design to reimagine how built environments can play a critical role in social justice by bringing people into the democratic process in the



places and spaces they are, to make democracy and participation more accessible without adding undue pressure and burdens on communities. Additionally, doing so in a way that adds immediate value to people, where they can see the tangible results of their involvement and participation, is key. Underlying this, of course, is the fundamental need to provide people with what they need in efficient and impactful ways to encourage and motivate participation in other activities that enable them to interact, learn, and participate in processes that can enhance their lived experiences.

Designing for social innovation in the built environment is to think about physical spaces in a way that better meets the needs of the people that the service provides and/ or government entity serves, and in more robust ways. Additionally, it can help to alleviate behaviors and outcomes that can negatively impact individuals and communities. Missed opportunities in the better use of space, connection, and community can undermine service providers' and/or governments' ability to foster maximize utility of their services, and other value-added benefits and opportunities for service recipients.

Spaces where social services are delivered can also provide

opportunities for positive change, growth, and development for those they directly serve, and for others in the community. Community spaces such as libraries, schools, parks, and other areas can be reimagined to better serve the community in ways that encourage use of the important services; also, these spaces can empower those using the services (and even others in the community who do not use the services) to thrive by providing increased access, information, participation, and other support.

Social Innovation Design is inherently participatory and multi-disciplinary; the best results come from leveraging systems thinking, PD, and (equity-driven) design thinking to achieve sustainable social impact. Social Innovation design in the built environment manifests in a multitude of ways. It can look like traumainformed space design, such as the work done for homeless services by the City of Philadelphia;<sup>19</sup> it can look like evidence-based placemaking<sup>20</sup> to support underinvested communities, or it can be local governments engaging citizens in co-creation and co-design activities such as involving senior residents in the <u>co-design of a community</u> space.<sup>21</sup>

Questions to ask agencies and governments that deliver social services include:

- How might we design spaces that promote feelings of care and belonging?
- How might we deliver (social) services in a way that provides for effective delivery of those services that also creates an environment for recipients to maximize their ability to thrive?
- How might we create environments that preserve people's dignity and safely invites them in, encouraging them to receive the services they need?
- What other issues impact the program/service and what other issues impact the lives of those the program serves? How might public spaces be transformed to bring about change that can help to remedy these issues?
- How might we invite local organizations into our space and increase participation and access?
- How might we co-create with the communities we serve and defer to them for actions and decisions that affect them?

# **OTHER KEY CONSIDERATIONS**

We've offered several frameworks and techniques that can be used to design for equity, and we turn now to a few important considerations for executing this work: technology, shifting paradigms, and language.

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### **Technology Considerations**

Jonathan Rotner

Technology shapes people's behavior and culture, and people shape how technology is used. Or said more formally, technologies are more than standalone widgets; they are part of a complex ecosystem that interacts with and influences human behavior, decision making, preferences, and ways of life.

Sometimes the result is really wonderful—for instance, when it translates a conversation into another language in real time<sup>22</sup> or more accurately diagnoses patients and proposes treatments.<sup>23</sup> And, sometimes, technological progress means progress only for some. Both extremes of this continuum occur, as has everything in between.

#### The approaches that got us into these challenges will not help us overcome those challenges.

Technologists usually have the best of intentions. Yet, the number of examples where technology adversely affects people's lives reveals that having good intentions is not good enough.

The reality is, after a system is released into the wild, something will change—the data that drives decisions, the environment it interacts with, people's behaviorand the technology will have unexpected outcomes. Policies, law, and accountability structures have yet to catch up and enforce more equitable outcomes.

So, what can help? Having the courage to pause, reflect, and take personal responsibility is a good start. That happens when we work to appreciate the history and volume of evidence of how technology has fallen short.

#### "Systems of Oppression, Inequality, and Inequity are by design. Therefore, they can be redesigned."24

Inequitable technologies have inflicted real impacts and traumas. These impacts can be categorized into eight technology risk zones<sup>25</sup> eight consequential and inequitable systemic consequences that result from intentional or unintentional design choices.

#### Technology Risk Zone #1.

Surveillance. Surveillance technology can monitor someone's voice, face. biometrics, phone calls, emails, and movement. Surveillance has been weaponized to control behavior and subjugate groups of people.<sup>27, 28, 29, 30, 31, 32</sup>

#### Technology Risk Zone #2.

**Disinformation.** Bots that present themselves as real people spread propaganda;<sup>33</sup> deepfake images,<sup>34</sup> videos,<sup>35</sup> and audio<sup>36</sup> present realistic scenarios that never happened. Disinformation spreads belief in false narratives, and it erodes confidence in one's perceptions, senses, and instincts. 37, 38, 39

#### Technology Risk Zone #3. Exclusion.

Not all groups of people have access to the same technology.<sup>40, 41</sup> As technological convenience turns into requirements for functioning in a modern world, those without technology (who are often already underserved) fall further and further behind.<sup>42, 43, 44</sup>

#### Technology Risk Zone #4.

Algorithmic bias. Data can be inaccurate, incomplete, or reflect historical prejudices. Algorithm models can encode the developer's assumptions about how the product will and should be used. Yet algorithms are falsely perceived and marketed as objective and fair.45,46,47 And so they have amplified societal inequities in healthcare, 48, 49 justice, 50, <sup>51</sup> immigration,<sup>52, 53</sup> and more.

#### Technology Risk Zone #5.

Addiction. In order to keep consumers engaged, products are intentionally designed to be irresistible.<sup>54, 55, 56, 57</sup> The results<sup>58,</sup> <sup>59</sup> induce depression, anxiety, impulsivity,<sup>60</sup> increased susceptibility to substance use,<sup>61</sup> and even new mental health conditions.62

Technology Risk Zone #6. Data control and ownership. Individuals don't know what data is being collected about them, nor are there consent or oversight mechanisms to restrict that data collection.<sup>63, 64</sup> As a result, data is repeatedly shared with those who really shouldn't have it,65,66,67,68 and that's before any data is hacked.

#### Technology Risk Zone #7. Bad

actors. Companies use a range of technical approaches<sup>69, 70, 71, 72, 73</sup> with various degrees of automationto try to reduce bullying, trolling

(see endnote for definition<sup>74</sup>). radicalization, fraud, and exploitation on their platforms. Legislation exists,<sup>75,76</sup> but enforcement is difficult and generally occurs only after the damage is done.77

Technology Risk Zone #8. **Outsized power.** A few individuals with outsized power can control information flow, which shapes others' beliefs and behaviors.<sup>78,79</sup>A few organizations with outsized power create monopolistic marketplaces and labor practices.<sup>81,82</sup>

#### You have the power to redesign your technology.

Okay, that's a lot to digest. But now steps can be taken to design differently.

For every risk, there is an equitable opportunity. Technology systems can be designed to protect privacy, promote truth, broaden access, judge by algorithmic impact, inspire healthy behaviors, increase data ownership, encourage civility, and facilitate choice.

In practice, equitable design can look like the following:

Protecting privacy by design. Smartphone apps that offer end-toend encryption make it very hard for a third party to read messages or listen in. That feature appealed to

Hong Kong citizens in mid-2020, during a time of increasing tension with the Chinese government.<sup>83</sup>

Broadening accessibility design. Closed captioning (transcribing audio into text) was created to help the deaf and hard of hearing.<sup>84</sup> It also brought advantages to wider audiences, including those learning a foreign language, those wanting help understanding accents, and those in an area where access to audio is limited.85

Increasing data ownership by design. Zero Knowledge (ZK) proofs allow someone to verify a fact without looking at the data. For example, if I am buying alcohol, a ZK interaction would verifiably and reliably tell the cashier that I am over 21 without revealing personal information, like my birthday.<sup>86</sup>

If you'd like to learn more about thinking through what equity means for your projects, building equitable goals early on into technical work, and transforming technical risks into technical opportunities, MITRE has written "An Equity Guide for Techies," coming to https://sjp. mitre.org/ in fall 2022.

### **Shifting Paradigms**

Tammy Freeman with Micha'el Monique Davis

**REFLECTION PAUSE...** Throughout this guide, we offer pauses to make room for you to notice and reflect on what you have read and learned and to think about your own experiences. We do this because we don't want you to only intellectualize this guide; we want you to sit with it and to bring awareness to your thoughts and feelings as you move throughout the pages.

At its simplest, redesign can mean reframing project goals. Redesign means asking:

How might we create project goals that reflect equitable outcomes as well as technical ones (e.g., accuracy, false alarm rate, or efficiency)?

How might we arrange for both sets of goals to reinforce each other?

How might we design for equitable outcomes from the beginning of the effort?

How will you lead the way?

Consider each of these questions and think about your current work. Use this space to answer. Don't be concerned with being "right" or having the right answer. This is a journey, and if you have more questions than answers, that is okay too. Perhaps a past scenario or situation comes to mind; feel free to use this space to answer the question in the context of that situation. Inequity often takes root and is allowed to prevail in the things we don't notice—or do notice and don't challenge. We must shift our paradigm when designing for equity to unlearn the conscious and unconscious beliefs and behaviors that seed and perpetuate inequity.

Kike Ojo-Thompson, DEI Consultant and Principal of the Kojo Institute, uses the term "powerful unexamined ideas"<sup>87</sup> to refer to thoughts about groups of people that are not based in evidence and hold a great deal of power within our society; these ideas are rooted in what Ojo-Thompson has called the legacies (capitalism, colonialism, patriarchy, imperialism, slavery, religious universalism, and the theft and conquest of the Americas). These powerful unexamined ideas become the flawed foundation upon which many things, including policies, practices, and programs, are created and administered. Not surprisingly, these policies, practices, and programs, are usually unfairly biased against some groups, leading to the creation of (more) inequity.

We can begin to shift our paradigms in several ways by revealing and interrogating these powerful unexamined ideas. Two ways we can do this, which we'll discuss next, are: (1) examining our language and (2) shifting from a deficit-based to an asset-based perspective.

Real and equitable progress on critical social and environmental problems requires exceptional attention to the detailed and often mundane work of noticing and acting on much that is implicit and invisible to many but is very much "in the water."<sup>88</sup>



#### **Examining Our Language**

"Language is important in negotiating and renegotiating power in a world where too many are disadvantaged, marginalized, and attacked, often first through words and expressions, then through actions."<sup>89</sup>

We often don't think about how the language we use reflects what we think about others or have been made to believe about others. Language is not neutral. It can be used as a tool for both oppression and liberation. The good news is that we can use language to reimagine society and create terms that speak to the future we want to create—a future that is more equitable and just.

The words we use in everyday conversations, and that are spoken without a second thought, can carry implicit bias and stereotypes inherent to their meanings. They signal what we think and what we believe and can also reinforce and/or trigger conscious and subconscious belief systems about people and places.

Language can be harmful when often focused on what makes a person "different," or by alluding to a perceived lack, or any notion that someone is "less than 'normal'," which is harmful by reducing a person to a perceived problem. Some words and phrases perpetuate We cannot solve our problems with the same thinking we used when we created them.

– ALBERT EINSTEIN

damages done to populations that are historically and currently targeted.

We also must examine the way we frame problems and the terms we use to articulate them. To illustrate this, let's look at the term "high school dropout." This term carries a connotation that assumes an individual lacks work ethic, or perhaps is lazy or stupid, when in reality many students are pushed out of a systemically broken and devolutionary education system.<sup>90</sup> The term "high school dropout" puts the onus on the individual student who leaves schooling, and not on the system and environment the student must navigate—which are the driving factors. According to the American Civil Liberties Union, the term "high school dropout" enables the "failure to address bias and harassment within a school, creating an environment that serves to alienate and ostracize students. particularly those most vulnerable.

These experiences lead to a lack of engagement, misbehavior, exclusionary discipline, and ultimately alienation to the point of students choosing to leave school or being forced out."91 Other terms such as "pushed out," "pulled out," "forced out," or "disconnected" may be better terms to describe the phenomena.<sup>92</sup> When we shift the language, we shift the paradigm, which then invites deeper exploration of the experiences and circumstances students face that may lead to them being "pushed out" or "disconnected" from high school.

These are just a few examples where language and terms we apply to people can be harmful and steer us away from understanding the real problems. An examination of all harmful terms and words is beyond the scope of this guide, but the main point is this: we must continue to make the invisible visible by examining the status quo—the ordinary things we do, say, and think. Failure to do so does not invite inquiry or critical examination but leads to complacency and (further) harm.

### Shifting from a Deficit-based to an Asset-based Perspective

While it is important to challenge and shift the words and terms we use, we must also assess how we think about and perceive communities that have historically been pushed to the edge. Too often people fixate on the downfalls or deficits of a community, instead of positive aspects. And too often these deficits are used to mark and mar communities as being inherently dysfunctional with little to no evaluation of history, hegemony, culture, and other critical contexts. As we've illustrated, language reveals what we think about people and places, who we center, and what we believe to be true; this also shows up in how we engage with others, and our framing of problems and creation of solutions such as policies, programs, and services.

Context matters, history matters, lived experience matters. How systems and institutions perform, creating advantages for some and disadvantages for others, also matters. While it is certainly important to point out unfair differences, disparity, and disproportionality (in outcomes, opportunity, and access), we must avoid the trap of thinking that certain people or groups are characteristically dysfunctional because of the inequities they experience, or because of the ways systems have disenfranchised and disempowered them-and in some cases the outright violence they have experienced at the hands of the institutions that are supposed to work in their best interest. One way we can avoid this trap is to challenge hegemonic ideas that create false narratives; false narratives can be so embedded in what we've been taught to believe that we don't think to rethink them. Again, anything that remains unchallenged remains unchanged.

We can replace deficit-based perspectives (or deficit framing) with an asset-based perspective or framing. Instead of focusing only on challenges, we can look to other framing that speaks to the whole of a person or group. "Asset-Framing is a narrative model that defines people by their assets and aspirations before



noting the challenges and deficits. This model invests in people for their continued benefit to society."<sup>93</sup> When our perspective becomes rooted in assets and not deficits, we then create not only a clearer picture of who people are today, but also the future.

The goal is not to sweep issues under the rug, but to provide a way that enables hope and opportunity—with the appropriate and accurate nuance and context that give way to the full experiences of a community and the historical and present contexts that impact them. **REFLECTION PAUSE...** Throughout this guide, we offer pauses to make room for you to notice and reflect on what you have read and learned and to reflect on your own experiences. We do this because we don't want you to only intellectualize this guide; we want you to sit with it and to bring awareness to your thoughts and feelings as you move throughout the pages.

How have you, or will you (re)think language and challenge paradigms that may perpetuate stereotypes?

Consider this question and think about your current work and beyond. Use the space to answer. Don't be concerned with being "right" or having the right answer. This is a journey, and if you have more questions than answers, that is okay too.

Deeper Dive: What words or terms do you use that reflect your conscious or unconscious biases about people or places? Are they true? Why or why not? What do you know? Would you feel comfortable/confident expressing these words or terms to a group of strangers? Why or why not?

It is okay if this is hard. You can use the space to answer. Or, sometimes, the words don't come easy, so feel free to articulate your answer in a way that works best for you. Some other options include taking a piece of paper and sketching your thoughts, or perhaps make something with some small office items you have at your desk or around the house that can serve as a 3D representation or prototype of your thoughts. You can have different parts of your prototype represent a concept you want to convey. Do whatever works best to help you think about this prompt and be honest and transparent with yourself. Tammy Freeman with Micha'el Monique DavisAnd this brings us to<br/>one very simple point.<br/>Everything we've written<br/>in this guide, and what<br/>we hope we've clearlyWe must<br/>about ou<br/>we must<br/>truth abo<br/>the truth<br/>in the pat<br/>happen to<br/>about bo

walked you through, should illuminate this: designing for equity requires us to search for and start telling the truth—even when the truth is hard, uncomfortable, and inconvenient.

We must tell the truth to ourselves about ourselves (start with self), and we must search to understand the truth about each other. We must tell the truth about what has happened in the past and what continues to happen today. We must tell the truth about how people experience life by listening to them and allowing them to tell their own stories. And we must recognize the ways in which harm is done to some and what that means for them, and also what that means and reveals about us, as a society. We must tell the truth about how powerful unexamined ideas become the bedrock of systems and institutions that create harm and produce inequity.

We have created and developed narratives, "realities," and walls to prevent us from telling the truth. We've recorded history and created symbols, ideas, ideals, and standards that favor a "dominant" group or groups over others. This guide provides mindsets, frameworks, and techniques to help challenge the narratives that are so entrenched in who we are and how we operate that we don't pay attention to them or the ways in which they keep the truth hidden and create harm. This guide offers methods to be intentional about finding the truth, to understand what is really happening, and to bring light to what is hidden (make the invisible visible).

## **Designing for Equity Starts with Telling the Truth**

Until we can tell the truth—which will require us to be comfortable with being uncomfortable—we can't truly design for equity. We will not be able to fix what we refuse to face. And without truth, reconciliation efforts to create equity will be performative at best, and at worst, just create more inequity. We can no longer fall back on good intentions as a replacement for positive impact and outcomes.

We exist in a society that has constructed entrenched and sophisticated systems that bend the arc of reality and favor toward some groups at the expense of others. We've created a society that places people at odds, where there are always winners and losers, a neverending zero-sum game. The work of equitable design knocks on the door of opportunity to up-end these paradigms and these structures and gives us ways to reimagine how we live, work, and play for the benefit of all (speak to the future), and not at the expense of some for the benefit of others. But a mutually beneficial society where the value of what we do and produce accrues to us all in positive and sustainable ways. A society where people are not hindered by or harmed because of race, gender, sexual orientation, and other arbitrary factors. A society where power is distributed and shared, where we increase access to democracy and who can

participate, where we honor varying ways of knowing and thinking that de-center euro-centric standards that tend to center action and speed at the expense of inclusion and equity (cede power).

What we've offered in this guide are mindsets and frameworks to counter the perpetuation of inequity and the processes and thinking that create it. It is no longer enough to pacify ourselves and others with ideas of doing better without consistent action and commitment that lead to better outcomes.

We often think that solving problems is about a brand-new thing we need

to create—a new technology, a new program, a new service—so, we create new things with the same thinking, using the same tools and adhering to the same hegemonic ideas; and then, we wonder why we get the same results. And while we do all these "new" things, we avoid doing the fundamental thing, which is to tell the truth about our past and our present, about who is left out, who is othered and stereotyped (design at the margins), and about how past harms have led to current predicaments and deeper inequity.

Consider what we've offered here in this guide as counter-frameworks



and mindsets to begin and facilitate the work of truth telling. There is no social equity or justice without truth.

#### From Rhetoric to Deliberative Action

This brings us to the end of this document but hopefully to the beginning of your exploration and concrete action to design for equity in your work, using mindsets and frameworks presented in this guide.

Throughout this journey into Designing for Equity, we have talked about the differences between equity and equality; looked at several mindsets and frameworks we can use to incorporate equitably oriented practices into our projects and research; and discussed how language, technology, and social innovation can be leveraged to design more equitably. Equity is both a process and an outcome; the work of equity should not be an afterthought or an "add on." Equity must always be centered and pursued with intentionality and rigor. Equity is not a point in the process as much as it is a process. At the onset of this guide, we shared that this was a "what is" not a "how-to" guide and provided concepts and frameworks to help operationalize equity in your work and support the journey, but there is little shortcutting the work that needs to be done. In the United States.

we have endured over 400 years of racial inequity; we can't give a magic formula to undo it in a few pages.

That's a huge paradigm shift that our society has been calling for. It's time to answer.

So, what's next? With your next project, try adjusting course using what Frans Johansson calls the smallest executable step (SES). Think of each SES as an experiment to try, followed by an observation of what happened. These can also be repeated without trying to do too much—keep them short and focused, minimize the number of things changing each time, and use each experiment as a stepping stone for the next one. MITRE's Innovation Toolkit has many specific tools to guide you.

For example, an SES could be:

- As low risk as having weekly team discussions about how your technology touches a specific tech risk zone
- Celebrating moments when the team is making progress toward equitable outcomes
- Honoring when difficult yet necessary discussions are held
- Rewarding a team member who questions or challenges a feature of the project on topics of equity and inclusion

Additionally, the resource section of this guide offers links for more information. Consider taking a course and using the tools and other resources to help embed equity into your work.

investigate how harmful historical practices exist today so that we can replace them with policies, structures, and beliefs that enable equity and justice. We can begin by inviting and centering community members and their lived experiences into our research efforts to promote equity and a future where each of us has the same opportunities to live our best life. We can go even further by realigning incentives, ceding power and co-creating with communities, and enabling community-led and community-powered solutions. We can change how we relate to one another and the structures in which we live, and we can improve the wellness and dignity of those who have historically been left behind. Let's move forward.

to listen for the answer...

appendix.

## Together, we can continue to

### It all begins by asking the tough questions and being truly willing

*Note: In parentheses are design principles* adopted from Equity Meets Design; a full list of design principles appears in the

# **APPENDICES**

#### Appendix A—Resources/Community **Partners**

#### MITRE's Innovation Toolkit (ITK)

#### https://itk.mitre.org/

The Innovation Toolkit (ITK) is a publicly available collection of proven approaches and methods to help your team be more innovative. Derived from humancentered design practices, the toolkit helps teams think creatively, frame problems, build consensus, and ask the right questions. The ITK includes 26 tools derived from human-centered design to help teams throughout the problem-solving process, and a subset of the tools have an embedded equity lens:

- Problem Framing tool and blog
- Stakeholder Identification Canvas tool and blog
- Stakeholder Power Categories tool and blog
- Quickstart Stakeholder Engagement tool and blog
- PAINstorming tool and blog

#### Equity Meets Design

#### https://equitymeetsdesign.com/

#### "Merging the consciousness of racial equity work with the power of design methodologies."

- Courses: https://courses.equitymeetsdesign.com
- Additional Resources: <u>https://docs.google.com/</u> document/d/1mfQ1z81egKxpQRNG6Dk6P8yq4-SsCChY2-p mrG-NPg/edit?usp=sharing

#### Creative Reaction Lab

#### https://crxlab.org/

"Creative Reaction Lab's mission is to educate, train, and challenge Black and Latinx youth to become

#### leaders designing healthy and racially equitable

**communities.** We're challenging the belief that only adults with titles (e.g., mayors, CEOs, etc.) have the power and right to challenge racial and health inequities. However, we are conscious that it's not just the work of the people that have been historically underinvested to dismantle oppressive systems. Therefore, we are rallying an intergenerational movement of Redesigners for Justice."

Virtual Learning: https://crxlab.org/training-workshops

#### **Equity Design Collaborative**

#### https://www.equitvdesigncollaborative.com

"The Equity Design Collaborative was formed in 2017 by organizations and individuals from across the U.S. practicing what we would later call Equity Design. This community emerged out of a collective urgency to leverage design to subvert exploitative power dynamics. We recognize that we are not the only group practicing equity design. The Equity Design Collaborative invites and holds space for collaboration amongst equity designers."

#### **Design Justice Network**

#### https://designjustice.org/

"The Design Justice Network is a home for people who are committed to embodying and practicing the Design Justice Network Principles. We wield our collective power and experiences to bring forth worlds that are safer, more just, more accessible, and more sustainable. We uplift liberatory experiences, practices, and tools, and critically question the role of design and designers. Rooted in a sense of abundance, possibility, and joy, we provide connection, care, and community for design justice practitioners."

#### Appendix B—**Design Principles**

The design principles below derive from Equity Meets Design.94

#### **Design Principle 1: Design at the Margins**

Our current innovation conversation is exclusive, accessible only to the powerful and privileged. This erodes the innate creative agency and leadership in the marginalized, reduces the experience of incredibly complex people, and often leads to the allocation of resources to symptoms while neglecting the existence, permanence, and resilience of root causes.

The current social order blames the marginalized for their experience without acknowledging or attempting to redesign oppressive historical structures. equityXdesign expects the privileged to trust and listen to the voices on the margins to identify the root causes of inequity and the ways they manifest. It positions the marginalized as leaders in the design process and as experts in their experience, arming them with a process to solve their own problems.

Designing at the margins means that those in privileged positions do not solve for those experiencing oppression; rather, in true community, both the privileged and marginalized build collective responsibility and innovative solutions for our most intractable problems. Even the use of the word marginalized linguistically parallels the exclusion of individuals. The definition of a group simply by their relationship to the dominant culture is a problem that continues to persist.

#### **Design Principle 2: Start with Your Self**

Our identities (race, gender, upbringing, social status, home language, etc.) create our lens for the world and how we make sense of it. We must be aware of this lens when engaging in design. When we design for people without understanding the impact of their historical stories, our understanding slips into paternalism. When we design for people without accounting for our own biases, our understanding slips into stereotypes. We must raise our awareness of our own identities and how bias impacts our thoughts, choices, conclusions, and assumptions to truly co-create with others.

#### **Design Principle 3: Cede Power**

Equity requires a nonviolent, action-oriented spirit of cocreation and co-invention, necessitating an inversion of legacy power structures. Expertise cannot be quantified in degrees, and the designer/end-user dichotomy is no longer useful. We must acknowledge the power dynamics that allow some votes to count more than others. Equitable design demands that practices change and evolve—that we redefine roles, revalue ways of knowing, and reassess the ways we reach decision. We recognize the potential for "cede power" to reinforce the hegemonic view of power as a zero-sum game-more for you must mean less for me. This is not the case. We believe that shared power is in the interest of everyone and does not require a growth in the ranks of the powerless. And yet, this work still requires each of us, who hold power in some ways, to deeply guestion its inheritance and its locus and to cede it when necessary.

#### **Design Principle 4: Make the Invisible Visible**

The relationships between people and problems are often governed by sets of heuristics—techniques that allow problems to be solved with speed, agility, and economy. However, these preexisting schemas can perpetuate exclusionary assumptions and biased practices, manifesting as implicit bias, power dynamics, and hegemonic practices that govern relationships with people in our organizations, schools, and governments. By making them visible, we can assess their impact and create a space for reflection and repair.

#### **Design Principle 5: Speak to the Future**

Because an equitable reality has never existed, we cannot look to our past to learn how to create an equitable future. With no guide, we must speak this reality into existence. In order to write a different story, we have to use different language. We must replace our current discourse.

Eugene Eubanks, Ralph Parish, and Dianne Smith, in "Changing the Discourse in Schools" in Race, Ethnicity, and Multiculturalism: Policy and Practice introduced a framework (Discourse 1 vs Discourse 2) we use to guide our work. Discourse 1 is our current and hegemonic discourse—the language typically used to talk about, question, and plan the work of reform. This dialogue supports and maintains the status quo without appearing unresponsive to outside demands for improvement. Discourse 2, the discourse of transformation, is the language that tends to be about uncomfortable, unequal, ineffective, prejudicial conditions and relationships. This discourse creates space for ambiguity, change, and the opportunity to be a part of a purposeful structure.

There is an often-overlooked power in language and discourse to influence and control ideas, beliefs, actions, and ultimately culture. When we notice how hegemony dominates our conceptual understanding of problems and how they impact others who are different, we have a powerful opportunity to see the end-users' historical selves and how those selves manifest in the present.

When we take control of our language, when we speak to the future, we lay the groundwork to create something new—together.

#### Appendix C—Legacies

The legacies below derive from Challenging Systemic Barriers: The Equity Lens.<sup>95</sup>

Legacies refer to seven events rooted in history that continue to negatively impact equity today. The legacies are the processes and occurrences that establish the location of wealth and dominance globally and define our values:96

**Capitalism**—an economic system of private and for-profit ownership. It has led to unequal distribution of power and wealth globally.

**Colonialism**—when a powerful country rules over a less-powerful country and uses its resources to gain more power and money.

**Imperialism**—policies that increase a country's influence through physical, political, or economic control over another.

Patriarchy—a system that values masculinity over femininity. Patriarchy disadvantages women and all people who do not conform to traditional gender roles.

Religious Universalism—the idea that there is one set of religious beliefs that everyone should follow.

**Slavery**—when one person owns another. An enslaved person does not have the same human rights as a free person.

Theft and Conquest of the Americas—when Europeans took American lands from the Indigenous peoples through force and unfair contracts.

#### Appendix D—Acronyms

ITK	Innovation Toolkit
PD	Participatory Design
PR	Participatory Research
SD	Speculative Design
SF	Strategic Foresight
ZK	Zero Knowledge

#### Appendix E—Endnotes

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**Equity** is the effort to provide different levels of support based on an individual's or group's needs in order to achieve fairness in outcomes. Working to achieve equity acknowledges unequal starting places and the need to correct the imbalance.<sup>97</sup>

The concept of equity applies across social disparities (e.g., Racial Equity, Gender Equity) and social outcomes (e.g., Health Equity, Educational Equity).

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