Inclusive Design and Design Justice

Strategies to Shape Our Classes and Communities

By Amy Collier

Illustrations by Matt Chase
Design matters in higher education.

In her book *Mismatch*, Kat Holmes writes, “Design shapes our ability to access, participate in, and contribute to the world.” When we think about what that means in education—that design shapes students’ ability to access, participate in, and contribute to meaningful, transformative learning—we are reminded how seriously we should be taking the concept of design in education. In her introduction to the keynote address at COLT 20, Theodosia Cook, chief diversity officer for the University of Colorado system, commented about the context of higher education in the United States:

As I say these two phrases—*inclusive design, design justice*—I struggle to understand why some in our country are against these principles, these methodologies, when our creed states our government should be one of the people, by the people, and for the people. I would hope that you consider that the United States sits on the land of indigenous people, grew its wealth through enslaved Africans, expanded its territory by taking Mexican indigenous people’s property, created railroad tracks off the backs of Chinese immigrants, and has always had its borders open to European immigrants who used this country as a penal colony where White convicts were allowed to come work off their debt and grow their wealth…. Our country today is in dire need of living up to its creed, and we can only do that if we embrace and live out the principles of inclusive design and design justice.
As she notes, when there is both a growing realization of structural inequities across our social systems, including and especially our educational systems, and a denial on the part of many that such inequities exist, we are reminded of how critically we should be examining our designs and design processes in higher education.

We engage in design in many ways at educational institutions: from instructional design, to curricular design, to classroom design, and more. Yet design processes are often obscured or kept private as individuals or groups make decisions—for example, about how they will teach courses or which technologies will be used to support teaching and learning. There are few processes that encourage us to look critically at our designs and design processes. We know that uncritical design approaches—designs that do not intentionally attend to the experiences of marginalized and disenfranchised learners—perpetuate and even exacerbate inequities.

That is why we should look to embrace design approaches that are attuned to our learners for whom education has not typically been designed. Inclusive design and design justice provide frameworks and practices for doing so.

Inclusive design is “design that considers the full range of human diversity with respect to ability, language, culture, gender, age, and other forms of human difference.” It goes beyond accessibility, though accessibility is considered within inclusive design. Inclusive design celebrates difference and focuses on designs that allow for diversity to thrive. In higher education, this means asking ourselves, “Who has been served, supported, or allowed to thrive by our educational designs and who has not?” And, “How might we design for inclusion of more students?” This refers not just to the privileged students, or the ones we understand, or those studied by researchers. Not just to those who look like us or act like us. Kevin Gannon has written that inclusive design in education is “a realization that traditional pedagogical methods—traditionally applied—have not served all of our students well. It’s a commitment to put actual substance behind our cheerful declarations that all students deserve access to higher education.” Gannon goes on to explain that the benefit of inclusive design is that it works to the benefit of many students, not just those who have been disenfranchised. “The beauty of inclusive pedagogy is that, rather than making special accommodations that would decrease equity, it actually benefits all students, not just those at whose needs it was originally aimed.”

An inclusive design orientation pushes back on “best practices” in education and instead asks, “For whom are those best practices good, and for whom are they not?”

Design justice, meanwhile, is design work that centers and prioritizes people who have been marginalized by design. Design justice advocates ask us to recognize how designs exclude or even exploit some people and communities, and it
In practice, inclusive design and design justice are challenging to achieve. They require constant reevaluation of the design choices we make in order to recognize how each choice can open up new forms of exclusion and barriers for learners.

Going Beyond Accommodations

According to the Inclusive Design Research Center: “It is the responsibility of inclusive designers to be aware of the context and broader impact of any design and strive to effect a beneficial impact beyond the intended beneficiary of the design. Inclusive design should trigger a virtuous cycle of inclusion, leverage the ‘curb-cut effect,’ and recognize the interconnectedness of users and systems.”

The “curb-cut effect” refers to how changes in the built environment for the purposes of accessibility (e.g., curb cuts) can have benefits beyond their intended purpose (e.g., aiding those with strollers, wheeled luggage, and bicycles). Similarly, in higher education, eliminating course and institutional barriers for marginalized students helps to create paths for additional students with a wider range of “fit” issues. Accommodations alone are not enough to achieve inclusion; when we go beyond accommodations, we create paths that help and support many learners, not just those who need or want accommodations.

Going beyond accommodations involves designing for flexibility, choice, and empowerment. A great example is Professor Michael Wesch’s use of mixtapes—recordings of weekly course readings and other materials. While helpful and maybe necessary for students who need accommodations, the mixtapes also provide support for students facing other learning barriers, such as time limitations due to work or long commutes. Similarly, Professor Maha Bali provides multiple paths that students in her digital literacy course can take to reach their goals. Students can explore those best suited to their needs and, in doing so, co-design their own learning.

If we understand the imperative for inclusive design and design justice, how do we work to achieve these principles? There are many strategies, but here I will highlight three that we have been discussing and exploring in my group at Middlebury: going beyond accommodations; embracing participatory design; and focusing on justice.
assignments and student choice about how to complete assignments are solid ways of practicing “designing for flexibility.”

**Embracing Participatory Design**

In “Design Justice, A.I., and Escape from the Matrix of Domination,” Costanza-Chock emphasizes: “Design mediates so much of our realities and has tremendous impact on our lives, yet very few of us participate in design processes. In particular, the people who are most adversely affected by design decisions—about visual culture, new technologies, the planning of our communities, or the structure of our political and economic systems—tend to have the least influence on those decisions and how they are made.” A key tenet of both inclusive design and design justice is intentionally centering the voices and experiences of the people for whom you’re designing, especially those who are typically marginalized by design.

Inspired by the Detroit Digital Justice Coalition’s DiscoTechs, created via a robust participatory model, the digital learning and inquiry (DLINQ) group at Middlebury created a series of CryptoParties for faculty and students. CryptoParties are hands-on events that encourage participants to reclaim some control over their privacy and data, taking it back from technology companies that extract and exploit those data for their profit. Designing and cohosting these events with student groups across the institution meant spending time listening to their concerns, sharing examples of privacy issues they face, and co-designing how events could serve students well.

Outside of formal curriculum, participatory design may seem straightforward, but inside the formal curriculum there are fewer opportunities for participatory design to take shape. For example, faculty typically design part or most of a class before they meet their students. Bringing participatory design into the classroom, providing opportunities for students’ perspectives and voices to shape the learning experience, can be challenging, especially given constraints on faculty members’ time and freedom in the classroom (e.g., faculty may be given a syllabus and told to teach a course in accordance with that syllabus).

Yet there may still be ways to encourage participatory practices. Courtney Plotts proposes inviting students to co-construct classroom values by using collaborative technologies to collect students’ perspectives. In a post to his blog, Kevin Gannon suggests a Progressive Stack approach to discussion: “Classroom discussions, without mindful guidance and a commitment by participants to fairness and inclusion, are often dominated by those with the loudest voices...
An orientation toward justice means that we and our students cannot accept the exclusions that are baked into our learning environments and our society. **Justice means we have to ask, “What’s wrong?” And we must take action to fix what’s wrong.**

**Focusing on Justice**

The educator Megan Erickson states: “There are many reasons to start with ‘What’s wrong?’ That question is, after all, the basis of critical thought. Belief in a better future feels wonderful if you can swing it, but it is passive, irrelevant, and inert without analysis about how to get there. The only people who benefit from the ‘build now, think later’ strategy are those who are empowered by the social relations of the present.” After quoting Erickson, the educator Sherri Spelic takes this idea further: “Our students can see inequality. Many of them experience its injustices on a daily basis. Precisely here is where I would like to see us focus our educator energies: on helping students see and identify the faulty designs throughout our society that plague the most vulnerable among us. In order to dismantle and correct these designs and patterns, they must first be able to notice and name them. That’s the kind of design thinking I hope and wish for: Where ‘what’s wrong?’ drives our pursuit of ‘what if?’”

An orientation toward justice means that we and our students cannot accept the exclusions that are baked into our learning and quickest at raising their hands—or, in too many cases, those most willing to interrupt others.” The Progressive Stack is a way of structuring a discussion that makes space first for the contributions of students who identify as a member of any marginalized group. Gannon also points to Danica Savonick’s full description of the approach. Co-teaching with my colleague Netta Avineri at Middlebury, I learned how free writing exercises can help students unsilence themselves and recognize that their voices are necessary for change, including change in our courses. Finally, Autumn Caines and Erin Glass also provide a model for participatory design, issuing a syllabus-based call for students to recognize and push back on the extraction and exploitation of technologies that they are expected to use as part of their learning (e.g., the LMS, proctoring software).
environments and our society. Justice means we have to ask, “What’s wrong?” And we must take action to fix what’s wrong. Think of exclusionary designs in educational settings. Some examples are obvious: student information systems that require students to identify as either male or female. Other exclusions are found in “hidden curriculum” or in the requirement for students to join online or remote classes synchronously or even in the lack of diversity among authors of the readings we assign. Part of the work of inclusion is, first, being attentive to where designs in higher education marginalize students and, second, taking steps to counteract those exclusions.

Justice-oriented designs often require big moves, ones that may call for collective action. At Middlebury, we’ve been inspired by, for example, Mapping Access, a participatory data-collection and accessibility mapping project of the Critical Design Lab. The project provides resources to help staff map problems of access and equity on their campuses, such as locations where construction impedes transit to buildings or locations of buildings without gender-neutral bathrooms. Another example is the Right to Learn Undergraduate Research Collective (R2L), at the University of Colorado Denver. Directed by Professor Manuel Espinoza, this student research group aims to propose amendments to the Colorado Constitution in support of education as a fundamental right of personhood. The group uses the social annotation tool Hypothesis to annotate legal filings and build a case for legislative change in Colorado. Finally, the Marginal Syllabus, cofounded by Remi Kalir and Joe Dillon, is a community of educators who explore educational equity topics. Marginal Syllabus fosters robust conversations between educators and scholars who are at the margins of dominant educational narratives; these conversations take place in the margins of texts (via Hypothesis) and in video meetings.

These examples show how asking “What’s wrong?” can lead to designs that focus on justice for marginalized and disenfranchised teachers and students.

Conclusion
I want to conclude with a warning and a call to action. More than a generation ago, bell hooks wrote: “Within white supremacist capitalist patriarchy, we have already witnessed the commodification of feminist thinking (just as we experience the commodification of blackness) in ways that make it seem as though one can partake of the ‘good’ that these movements produce without any commitment to transformative politics and practice. In this capitalist culture, feminism and feminist theory are fast becoming a commodity that only the privileged can afford.” I want to caution, as hooks does, against making gestures toward inclusive design and design justice without committing to the transformation required to change the structures of inequality and oppression that shape our students’ lives. There is real, and challenging, work to do, and we cannot allow ourselves to stop at small moves.

Those of us who work in digital learning or IT organizations need to recognize (1) how educational technologies perpetuate and exacerbate inequity and (2) the need for justice-oriented work in this area. While digital learning can be a site of liberatory pedagogical practices, the tools and approaches we use are often antithetical to our goals. This is particularly true of learning technologies that are fueled by students’ data (i.e., in which students’ data are extracted and used/sold for profit). Thinking about how to reject these exploitative tools, pervasive in our educational institutions, is challenging. But it’s time for us to take action. My call to action, inspired by the Feminist Data Manifest-No, is for digital learning organizations to draft and publish anti-racist and justice-oriented statements that acknowledge the harm our work can do and that outline the steps we can take to fight against that harm.
Notes
I want to acknowledge Sarah Lohnes Watulak, my colleague and friend at Middlebury, who introduced me to research about inclusive design and design justice and to the inspiring people working in these fields.

7. See the Design Justice Network website.
9. At Middlebury we also point to Plymouth State University’s “Rule of 2’s.”

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