



Anti-Ableist Medical Education: *Meeting the Challenges*

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Despite increasing attention to the harms of ableism in health care and among health care providers, few institutions have made significant changes to the ways medical students and trainees are taught to think about disability and provide care to patients with disabilities. But given the well-documented health disparities, barriers to access, and discrimination that disabled people face while interfacing with the U.S. health care system, institutions of medical education have an ethical imperative to equip professionals-in-training with the tools to recognize and intervene upon those harms. In order to develop a specific understanding of what that ethical imperative might consist in and what it might take to meet it, The Hastings Center, with the support of the Josiah Macy Jr. Foundation, held conversations with expert advisors including medical educators, disability advocates, disability studies scholars, leaders of professional organizations, and disabled medical students/trainees (with overlap among these categories), and hosted two convenings to synthesize and refine the takeaways from those conversations.

What we learned was both heartening and sobering, if not terribly surprising: while there is a robust community of educators and advocates working to make change, their efforts are often atomized within individual institutions and their success depends on a highly variable degree of institutional support. At the same time, there are some common challenges that tend to arise in these efforts, and there are few resources that either acknowledge them or think through how to address them.

And so, we aim to offer such a resource here: strategic recommendations for any medical educator who recognizes a need to address ableism in their program but is unsure what might be possible or is facing common roadblocks. In addition to outlining a set of **fundamental goals** for educators and institutions to pursue in developing a more disability-conscious curriculum, the recommendations

identify some of the most **common challenges** that arise in the pursuit of each goal and offer **strategies for meeting those challenges**.

These strategies might be used by faculty, administrators, curriculum committees, or other interested institutional groups. As such, some recommendations involve actions individuals might take whereas others call on broader institutional response. They are written primarily with medical school (undergraduate medical education/UME) in mind, though there is some applicability for residency programs (graduate medical education/GME). Wherever possible, these recommendations provide links to publicly available teaching materials and resources that can serve as models.

The ideal audience for these recommendations is already somewhat familiar with the insights of the disability rights and justice movements and the concept of ableism; providing a full introduction to these frameworks is beyond the scope of this document. For those who need such an introduction, we suggest starting with Joel Michael Reynolds' essay "Three Things Clinicians Should Know about Disability"¹ and exploring the National Council on Disability's "Framework to End Health Disparities of People with Disabilities."² JSTOR also offers [a short reading list](#) for understanding key concepts from disability studies beyond the clinical context.

This document is organized into two parts: first, a chart that provides a snapshot overview of the recommendations as a whole, and second, detailed discussions of each of the six recommendations. Readers can explore the document sequentially or toggle between the chart and the discussions using the hyperlinks in each section. The recommendations are a living document that we will continue to monitor and update as further resources become available or known to us. If you have suggestions to this end, please contact BowenEl@upstate.edu.

Institutions committed to developing a disability-conscious curriculum should develop:	Common challenges to achieving this commitment include:	Strategies for meeting this challenge:
<p>I. Curricular components with learning goals tied to Core Competencies established by the Alliance for Disability in Health Care Education (ADHCE) and the National Council on Disability (NCD).</p>	<ul style="list-style-type: none"> • The competencies are very comprehensive and curriculum developers may not know where to start. 	<ul style="list-style-type: none"> • Identify disability competencies that already resemble or support your institution’s overall learning objectives. Locate courses and activities tied to those objectives and evaluate how a disability lens could be added or strengthened. • Identify existing faculty strengths/ expertise in relevant areas and build on them.
<p>II. A procedure for identifying and removing curricular components that perpetuate harmful, outdated, or inaccurate understandings of disability.</p>	<ul style="list-style-type: none"> • Ascertaining a detailed and complete map of the curriculum may be time-consuming and logistically challenging, involving coordination with numerous course directors and instructors. • Materials and course plans may change regularly, requiring ongoing attention. 	<ul style="list-style-type: none"> • Work with the Office of Medical Education or other relevant curricular oversight bodies to better understand the curriculum as a whole. • Encourage faculty to audit their own course materials using a bias identification tool.
<p>III. A biopsychosocial approach to teaching about disability across the curriculum, with an explicit focus on the relationship between ableism and health disparities.</p>	<ul style="list-style-type: none"> • Curricula are overloaded and there is competition for new content. <p>Faculty may:</p> <ul style="list-style-type: none"> • lack the necessary relevant training, • be perpetuating culturally ingrained ableism, • be resistant to changing their approach. 	<ul style="list-style-type: none"> • View moments of institution-wide curricular review and redesign as an opportunity for institutional growth. Emphasize connections between disability core competencies and existing learning objectives. • Explore professional development opportunities (see Section VI below). Partner with faculty who are open to incorporating a disability lens but may not have expertise, and direct them to easily accessible teaching materials. • Emphasize intersections with racism and economic injustice in teaching about social determinants of health. • Advocate for the establishment of a curricular “thread” or other institutionalized prioritization of disability in the curriculum.

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Institutions committed to developing a disability-conscious curriculum should develop:	Common challenges to achieving this commitment include:	Strategies for meeting this challenge:
<p><u>IV. Opportunities for learners to engage with disability culture</u> in ways that model flourishing and challenge preconceived notions about quality of life.</p>	<ul style="list-style-type: none"> • Curricula are overloaded and prioritize biomedical sciences. • Disability culture may be less widely recognized as an entity than cultures associated with other marginalized populations. 	<ul style="list-style-type: none"> • Identify institutional priorities related to the health humanities and/or narrative medicine. Connect with faculty who teach in these areas and are likely to be receptive to learning about and incorporating disability arts and culture into their teaching. • Support disabled students in organizing affinity groups and advocating for access needs. Having a recognizable presence of disabled students and faculty can help challenge the binary of disabled patient / nondisabled doctor. • Partner with diversity officers to ensure disability is represented as a form of diversity in institutional activities and materials.
<p><u>V. Relationships with disability community groups and individuals</u> who are acknowledged and compensated as expert educators.</p>	<ul style="list-style-type: none"> • Institutions may be hesitant to dedicate funding to experts outside the walls of academia. • The health care system has historically acted in untrustworthy ways toward the disability community and may need to repair or build trust. 	<ul style="list-style-type: none"> • If advocating for internal funding is not successful, seek external funding for a pilot program. Collect data on students' development of specific knowledge and skills that are aligned with institutional learning objectives and can be reported back to the institution. • Adopt a community-engaged approach that asks disabled people how they could benefit from the partnership and what they want medical students to learn. • Hire and train people with disabilities to act as standardized patients.
<p><u>VI. Professional development opportunities</u> for faculty and staff to build a disability lens into their teaching.</p>	<ul style="list-style-type: none"> • Participants in professional development opportunities are largely self-selecting, and so professional development may not reach those who most need education or intervention. 	<ul style="list-style-type: none"> • Partner with professional development administrators to incorporate key disability concepts and competencies into required trainings and other faculty activities. • Create co-learning opportunities and recognize the expertise of disabled students.

table continues ►

Institutions committed to developing a disability-conscious curriculum should develop:	Common challenges to achieving this commitment include:	Strategies for meeting this challenge:
<p><u>VII. Classroom and clinical</u> environments built using Universal Design for Learning.</p>	<p>Faculty may:</p> <ul style="list-style-type: none"> • have limited time to align their approaches with UDL, • not feel UDL is relevant to their teaching or student population, • lack training in UDL, • view UDL as a burdensome expectation. <p>• Physical learning environments may pose barriers.</p>	<ul style="list-style-type: none"> • Create/advocate for an institutional commitment to accessibility that includes specific, standardized requirements for faculty. • Create/advocate for a staff position dedicated to training faculty and assisting them with updating course materials and activities. • Replace inaccessible equipment in academic environments such as standardized patient facilities and advocate for accessible equipment in clinical spaces where students learn. • Acknowledge access barriers or conflicting access needs, and promote flexibility and creativity in facilitating access.

I. Curricular components with learning goals tied to ADHCE and NCD Core Competencies

In 2019, the Alliance for Disability in Health Care Education, in partnership with the Ohio Disability and Health Program at the Ohio State University Nisonger Center, published a [report](#) naming 6 core competencies and 49 subcompetencies needed to provide a baseline of quality care for patients with disabilities. Using a Delphi method of iterative structured feedback, the Core Competencies established a consensus among 152 people with disabilities, disability experts, health educators, and health care providers. The 6 core competencies are:

1. Contextual and conceptual frameworks on disability
2. Professionalism and patient-centered care
3. Legal obligations and responsibilities for caring for patients with disabilities
4. Teams and systems-based practice
5. Clinical assessment
6. Clinical care over the lifespan and during transitions

In 2022, the National Council of Disability published a [policy brief](#) titled “Framework to End Health Disparities of People with Disabilities.” This ambitious framework named comprehensive clinical care curricula as a core component of ending health disparities, calling on the U.S. Department of Health and Human Services to develop model curricula using a framework based on the ADHCE Core Competencies. To those 6, the NCD recommends adding 2 further competencies:

7. Effective communication
8. Advocacy

While these competencies are comprehensive, rigorously developed, and responsive to the wide range of health care needs and disparities that disabled people face, the implementation of 49+ potential learning objectives can be challenging. Where does one start when all seem equally important, and when any attempt at adding content to the curriculum can feel like an uphill battle?

It may be useful to identify which competencies are already prioritized by your institution more generally, and thus have structures in place to integrate relevant content. In order to comply with the Liaison Commit-

tee on Medical Education’s curricular content [standards](#), programs’ learning objectives often include competencies in patient-centered care, professionalism, and communication. In our view, these competencies cannot be met if they do not include a disability lens. A physician cannot be said to be an effective communicator if they cannot engage respectfully with a person who communicates via an interpreter or an augmentative and alternative communication device; a clinician cannot be called proficient in patient-centered care if they don’t know about supported decision-making. The curricular components that are designed to meet these learning objectives may be an ideal place to begin incorporating a disability lens into the curriculum.

It may also be helpful to make connections with faculty who have strengths and expertise in health justice and social determinants of health, even if not in disability specifically, and identify areas of their teaching that intersect with disability and ableism. For example, if the director of a module on professionalism dedicates part of their teaching to the role of whiteness in constructing professional norms, that faculty member may be more prepared to incorporate a discussion of ableism than would, say, a faculty member who teaches clinical assessment of certain disabilities only from a medical-model perspective. Some decisions about how to prioritize competencies may depend on current faculty resources. In the future, recruitment and hiring processes should prioritize candidates who can develop competencies that are not currently represented among faculty.

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II. A procedure for identifying and removing curricular components that perpetuate harmful, outdated, or inaccurate understandings of disability

In addition to identifying areas in the curriculum where disability-related competencies could be incorporated or strengthened, institutions should be committed to identifying where in the curriculum ableism is being reinforced and removing or reframing those activities. This may include reconsidering the use of disability simulation exercises,³ removing outdated terminology from slides,⁴ using disability identifiers judiciously in clinical case presentations,⁵ or thinking critically about how discussions or

images of particular conditions might perpetuate stigma.⁶

This type of curricular audit is no small task. Outside of curricular administration offices, many educators do not have a well-developed understanding of the curriculum as a whole. Ascertaining a detailed and complete map of the curriculum may be time-consuming and logistically challenging, involving coordination with numerous course directors and instructors. Moreover, materials and course plans may change over time, requiring ongoing attention.

Offices of Medical Education or other relevant curricular oversight bodies may be best positioned to undertake an audit of the curriculum as a whole, but they may not be equipped with the expertise to identify ableism where it exists and suggest alternative approaches. Ideally, one or more disability champions⁶ within the institution would partner with administration to complement one another's knowledge bases.

Meanwhile faculty in general may be encouraged to audit their own course materials using a bias identification tool such as the [Upstate Bias Checklist](#) (UBC) for content aimed at learners in the health professions.⁸ Although, to our knowledge, there is currently no disability-specific bias audit tool for educational content in medicine, a comprehensive approach that prompts faculty to seek out manifestations of ableism alongside other forms of bias may be useful for those who are already attuned to the need to redress racism, sexism, homophobia, and other systems of oppression in the classroom. The UBC includes questions that prompt educators to think specifically about ableist stigma, disability and sexual health, and visual representations of disability in their course content alongside intersecting dimensions of potential bias. Of course, faculty may need some preparation to be able to answer those questions thoughtfully and accurately; see Section VI on professional development below.

III. A biopsychosocial approach to teaching about disability across the curriculum, with an explicit focus on the relationship between ableism and health disparities

Many educators are familiar with the challenge of attempting to introduce any kind of novel content into a medical school curriculum: the objection that there simply isn't room. On one level, there is an "easy" answer to this protest in the context of disability-conscious education,

which is that it's not primarily a matter of finding more time. A supplementary module (or even a few modules) challenging the medical model of disability will have little impact if that model is being regularly reinforced in other parts of students' training. Moreover, the areas encompassed by the Core Competencies range from biological knowledge and clinical skills to social and legal frameworks—an interdisciplinary set of competencies that requires integration across multiple components of the curriculum. A disability lens needs to be brought to what is already being taught and incorporated longitudinally, rather than squeezed in somewhere else.

On another level, introducing a new framework across the curriculum introduces challenges of its own. In order to implement a disability-conscious approach longitudinally, faculty members across the curriculum must be willing and equipped to teach about disability using a biopsychosocial approach that frames disability as the product of inaccessible and discriminatory environments as well as embodied difference. Some faculty may feel they lack relevant training to discuss disability in these terms, whereas others may react with resistance to the concept. And faculty members of all persuasions may unknowingly perpetuate forms of ableism that are ingrained in the culture of medicine, such as unduly privileging health and independence.

Though it is unlikely that any shift in institutional priorities will have universal faculty support, a strong and explicit institutional commitment to the importance of disability-conscious education can authorize and provide structure and resources to efforts at longitudinal integration. Moments of program-wide curricular overhaul can provide opportunities for faculty, staff, and students to advocate for commitments of this kind, as these are moments when the institution evaluates, defines, and redefines its priorities and learning objectives. Educators who understand ableism to be a primary barrier to the provision of quality health care may seize upon these moments of institutional introspection to make the case that disability core competencies are inseparable from the institution's existing learning objectives and priorities.

More specifically, curricular redesign could be an opportune moment to establish a dedicated curricular thread, such as those at medical schools that longitudinally integrate content on subjects with wide-ranging applica-

tions such as health systems science, quality improvement, evidence-based medicine, ethics, medical humanities, and systemic racism.⁹ Indiana University School of Medicine, for example, has established a Disability thread whose objective is “to better equip all IU School of Medicine graduates with competent skills in serving populations experiencing disability, and to support those with special interest in disability in their professional development.”¹⁰ The faculty and/or staff overseeing these threads should be granted adequate time to dedicate to curricular work (e.g., a course release or protected service hours) and should have the authority to hold departments and course directors accountable for making a good-faith effort to collaborate on course content. These collaborations should include people with disabilities, who may be thread leaders, students, or other community members. Harvard Medical School’s [Disability and Anti-Ableism Curriculum](#) provides a model for collaborative stakeholder-engaged curriculum design.¹¹

There is a strong need to incorporate disability competencies into professional development in order to address faculty knowledge gaps. (See Section VI below.) Encouraging all or most faculty to address disability in their teaching may cause inadvertent harm if they are not first trained to recognize medical ableism. In the meantime, as suggested in the previous section, an efficacious first step may be to identify faculty members whose teaching already includes elements of structural analysis, social determinants of health, and patient perspectives, in order to build a disability lens into the existing curriculum rather than attempt to supplement it with large quantities of additional material. Ableism is intimately intertwined with social determinants of health including racial, economic, and environmental injustice, and so these areas would benefit from an intersectional lens.¹²

Faculty may be introduced to teachable materials and resources that address health disparities, public health, and patient-centered care from a disability perspective, complementing their usual approaches. Examples include:

- [Healthcare Stories](#) (Disability Rights Education & Defense Fund): video archive of disability advocates describing their experiences of inaccessibility and provider attitudes/assumptions in the health care system.
- [Disability and Ableism in Medicine](#) introductory curriculum (Borowsky, Morinis, and Garg 2021): a series

of small-group activities and discussions focused on recognizing and addressing ableism in the health care system. Includes facilitator guides.

- [“The Dangers of Diagnostic Overshadowing”](#): a short essay by Lisa Iezzoni, M.D., on the author’s experience of witnessing the medical neglect of a friend who uses a power wheelchair.¹³
- [Ableism in Health Care case discussions](#) (Stanford Medicine Alliance for Disability Inclusion and Equity): open-access cases and facilitator guides that address instances of medical ableism directed at a patient and a provider, respectively.¹⁴
- [Sample case modifications](#) (Ankam et al., 2019): examples of modifications to case-based learning activities that build clinical knowledge and skills relevant to patients with disabilities.¹⁵
- [Fire Through Dry Grass](#): a documentary led by members of a poetry collective of Black and brown nursing home residents as they fight against being rendered disposable during the COVID-19 pandemic.
- [“As Hospitals Fear Being Overwhelmed By COVID-19, Do the Disabled Get The Same Access?”](#): an NPR investigation into the differential treatment of disabled patients in 2020.
- [“Most OB-GYN Practices Fall Short In Caring For Women With Disabilities”](#): Connecticut Health I-Team report on the state’s sole provider of gynecological care to disabled patients and the care vacuum that her retirement will create.
- [“How Health Care Makes Disability a Trap”](#): a *New York Times* mini-documentary by disability activist Jason DaSilva about how barriers to accessing health care limit his life choices.

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IV. Opportunities for learners to engage with disability culture in ways that model flourishing and challenge preconceived notions about quality of life

At the same time that learners need to understand the nature and impact of medical ableism, presenting disability only as a site of oppression can reinforce the misconception that disability is primarily associated with pain and suffering. Unlearning medical ableism requires challenging this assumption and developing an understanding that dis-

ability can be a cultural identity that encompasses deeply valued and valuable histories, arts, ideas, and experiences. Students should have the opportunity to ask and learn how they can support the flourishing of disabled people, and to reimagine the practice of healing beyond the medical frameworks of cure and normalization.

The challenges facing this imperative are similar to those named in the previous section: tightly packed curricula and a lack of knowledgeable faculty. In addition to not being familiar with disability culture, faculty who are steeped in the medical model may not even yet understand that disability can be a culture. The above-named approaches—longitudinal integration, institutionalized priorities, staff support, and collaborations with faculty in related areas—apply here, as well. In this context, connecting disability culture with institutional priorities related to the health humanities and/or narrative medicine may be especially generative.¹⁶ Faculty working in these areas are likely to be familiar with, or at least receptive to, disability arts and culture as models and resources for the practice of patient-centered care.¹⁷

Meanwhile, disabled flourishing is not merely a concept that can be represented via course materials. It should also be represented in students' daily lives as the possibility for disabled people to flourish in roles as health professionals. To that end, institutions and faculty should support disabled students—as well as faculty and staff—in organizing affinity groups, disclosing disability status (if and only if they choose to do so), and advocating for access needs. Cultivating a recognizable presence of disabled medical students and professionals can begin to mitigate the stigma and misperceptions that attend disability, as well as challenge the assumed binary of disabled patient / nondisabled provider. Institutional support for such groups may also involve partnering with diversity officers to ensure that disability is represented as a form of diversity in institutional activities and materials, and that disability is welcomed as a potential source of expertise in navigating health care systems and insight into patients' experiences.

Examples of teachable materials and resources that foreground disabled flourishing include:

- [Crip Camp: A Disability Revolution](#): a 2020 documentary film, directed by Nicole Newnham and James LeBrecht, that follows a group of friends from a joy-filled summer camp for disabled teens to their work as

disability rights activists in the Section 504 sit-ins and actions leading up to the ADA.

- [“The Art of Flourishing: Conversations on Disability”](#): a webinar series hosted by Erik Parens, Joel Michael Reynolds, Rosemarie Garland-Thomson, and Liz Bowen in which scholars, artists, writers, and thought leaders with disabilities reflect on what flourishing means to them.
- [Docs with Disabilities](#): a podcast hosted by Dr. Lisa Meeks and Dr. Peter Poulos dedicated to amplifying the experiences of health care providers with disabilities.
- [About Us: Essays from the Disability Series of the New York Times](#): a collection, edited by Peter Catapano and Rosemarie Garland-Thomson, of short op-eds from the *New York Times* “Disability” column that speak to the fullness of human experience with disability.
- [Disability Visibility](#): a podcast hosted by disability activist Alice Wong centering disabled perspectives on politics, culture, and media.¹⁸
- Performances by disabled comedians: performers like [Tina Friml](#), [Maysoon Zayid](#), and [Steve Way](#) represent lived experiences of disability with humor and candor while lampooning the absurdity of ableist assumptions and norms.

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V. Relationships with disability community groups and individuals who are acknowledged and compensated as expert educators

A curricular intervention cannot be said to be disability-conscious if it does not include the insights and input of disabled people. In addition to the need to honor the disability rights mantra “Nothing about us without us,” research supports the intuitive notion that personal interactions with disabled people can improve health professions students' attitudes toward and assumptions about people with disabilities.¹⁹ At least equally important, building a disability-conscious curriculum can begin to correct the long-running epistemological injustices in the health care system that minimize disabled people's expertise into their own lives and medical needs. People with disabilities have expertise in both the social and embodied dimensions of conditions that students will undoubtedly encounter in

their practices, including valuable knowledge about what constitutes equitable and effective care. This expertise should be recognized and compensated on an equal level with any other form of expertise that enriches students' capacity to provide quality care.

Among the institutions that offer some form of disability-specific training—recent studies suggest that only 34 to 52 percent of medical schools do so²⁰—most include some form of engagement with disabled educators, typically in a panel or other large-group format.²¹ Present literature does not account for whether and how much these educators are typically paid. However, the hierarchical culture of academic medicine may lead some institutions not to recognize expertise formed outside the walls of academia or compensate those with lived experience adequately and in line with community educators' needs. (Flexibility and creativity may be required for compensating some people who rely on disability benefits with income limits.) If faculty are not successful in advocating for internal support, they may need to seek external funding for a pilot project involving community educators. Such funding may support the collection and analysis of data measuring students' development of specific knowledge and skills aligned with institutional learning objectives, which may increase the likelihood of internal funding in the future.

Meanwhile, it is important to recognize that the health care system has treated the disability community in untrustworthy and harmful ways, and that educational partnerships have the potential to exacerbate rather than repair those harms. Like any community-engaged learning initiative, involving people with disabilities in the education of medical students must be to the benefit of both communities. The planning of any such initiative must include disability community members from the outset, asking how they could benefit from the partnership and what they think medical students need to learn. Community educators should be supported in speaking frankly about their experiences with the health care system, without fear of censorship or rebuke. If possible, it may also be beneficial to challenge assumptions about the divide between the health care system and “the community.” Though the potential repercussions for disclosing one's disability in the medical field remain significant, students are increasingly choosing to disclose their disability status for the sake of building community and countering stigma.²² If there are

students who are vocal about their disability identity and willing to share their expertise with others, they might be included as peer educators.

Forming authentic relationships with community groups may help to address another shortcoming in medical education, which is the underrepresentation of disabled people in standardized patient (SP) simulations. Typically, if disability appears in a standardized patient activity, a nondisabled actor is hired to play the part.²⁴ But there are good reasons to advocate for the hiring of disabled SPs, including that it diversifies the range of embodiment that students are familiar with and presents them with the opportunity to receive feedback on their care directly from disabled people. While there may be some logistical challenges to hiring disabled SPs, such as irregular part-time hours that may not fit easily with other work or care schedules, several institutions have successfully established programs to recruit, hire, and train disabled SPs.²⁵ Educators interested in implementing such a program can refer to Long-Bellil et al.'s [comparative study](#) of programs that use SPs to teach about disability, which includes learning objectives and descriptions of SP scenarios. [A recently published forum](#) on disability-focused health professions curricula also includes detailed descriptions of SP programs at Northeast Ohio Medical University and Central Michigan University.²⁴ More resources can be found at Partnering to Transform Health Outcomes With Persons With Intellectual and Developmental Disabilities (PATH-PWIDD), which has [documented several learning activities](#) that feature people with IDD as standardized patients.

In that study, the authors note that involving disabled SPs in programs that are primarily educational (formative) rather than evaluative (summative) can enable SPs to incorporate aspects of their own experience and expertise into the case, which can provide additional learning opportunities.²⁶ It may be helpful to note this possibility in conversations with leadership, who may be concerned that introducing personal experience interferes with standardization. Moreover, disabled SPs have reported benefiting from the opportunity to repair previous negative experiences with the health care system by contributing to the development of better-prepared physicians.²⁷

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VI. Professional development opportunities for faculty and staff to build a disability lens into their teaching

Addressing gaps in faculty training and buy-in is a challenge that is not unique to the disability context. When novel or underrepresented approaches become institutional priorities, they require training and ongoing support. Just as faculty who were trained entirely via lectures cannot be expected to design effective active learning techniques without guidance or assistance, faculty whose educations only ever approached disability from a medicalized perspective will need support in reframing their received frameworks for thinking and teaching about disability. Institutions must invest in professional development opportunities and support, on par with their investments in training faculty in novel medical or educational technologies. This may mean investing in training by qualified disability-focused consulting firms led by people with disabilities, such as [LaVant Consulting's](#) or [Access Living's](#) virtual trainings on disability-inclusive language, workplace culture, and accessibility.

Mandating participation in professional development sessions can prove challenging, especially in areas related to diversity and cultural/structural competence, as there is evidence that required training can stir up resentment and even lead to increased backlash against marginalized groups.²⁸ At the same time, non-mandated trainings may only reach a self-selecting group, failing to reach learners who may not be actively resistant but may not be strongly motivated to attend. But it may be possible to take a graduated approach to continuing education that finds a middle way. For instance, educators who have expertise to share when it comes to disability-conscious education might consider partnering with faculty development administrators to arrange a series of visits to curriculum-focused faculty meetings. Rather than requiring a large group of potentially unreceptive faculty to attend a training session, it may be helpful to first familiarize those who have a direct role in curriculum design with key concepts and competencies in a more intimate setting that allows for questions, clarifications, and discussion. It may also help to meet with staff organizing mandated trainings in related areas (e.g., cultural competency, professionalism) to ensure that relevant disability dimensions are addressed. Larger-scale trainings will likely also be needed to encourage

longitudinal integration, but educators should consider the institutional culture when making a determination about whether and when to make such trainings mandatory. If it is likely that mandatory trainings would result in backlash or other unproductive outcomes, institutions may consider incentivizing participation in professional development through mechanisms such as micro-credentials or digital badges.²⁹

Innovative approaches such as co-learning, in which students/trainees and faculty learn together, have shown promising results in other areas where faculty lack the expertise to teach concepts that have been institutionally prioritized, such as quality improvement.³⁰ In addition to allowing students and faculty to learn together, co-learning also recognizes the fact that students, some of whom have prior education or experience in areas newer to medical education, may have relevant expertise from which their instructors could learn.³¹ Indeed, efforts to implement disability-conscious curricula and improve accessibility in medical education are increasingly led by student-activists with lived experience of disability, previous work in disability activism, and/or education in relevant justice frameworks. Though co-learning is inherently complicated by professional power dynamics, which may be compounded by the risks of disability disclosure,³² these challenges are not insurmountable if appropriately acknowledged and managed.³³ Learner-led presentations like those in in Borowsky, Morinis, and Gard's "[Disability and Ableism in Medicine](#)" curriculum, in which learners are each assigned unique materials to learn and then teach one another, may lend themselves well to co-learning experiences.

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VII. Classroom and clinical environments built using Universal Design for Learning

Curricular content dedicated to challenging medical ableism must be accompanied by a commitment to the inclusion of disabled learners. If the learning environment does not support students' access needs, it will implicitly teach nondisabled students that people with disabilities are not their peers, perpetuating ableist hierarchies within medicine. By contrast, proactively designing learning activities with disabled learners in mind fosters a culture

of medicine in which disabled practitioners are recognized and welcomed.

[Universal Design for Learning](#) applies the concept of Universal Design—composing an environment such that it “can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability”³⁴—to the context of learning environments. The guiding principle of UDL is the notion that providing multiple modalities for learning reduces systemic barriers to learning and promotes equitable learning opportunities. As such, UDL guidelines encourage educators to offer multiple means of engagement, multiple means of representation, and multiple means of action and expression for each learning objective or activity.³⁵ This includes, for example, offering alternatives to visual information by describing images and video, making written materials accessible via text-to-speech software, providing captions or transcripts of auditory materials, and scaffolding content to support information processing.

Creating course content using multiple modalities can take more time than less accessible pedagogical approaches and require training in relevant technologies. Without adequate institutional support, faculty may perceive UDL to be incommensurate with competing responsibilities and time constraints. Moreover, the low representation of disabled medical students may produce a vicious cycle in which institutions perceive UDL to be unnecessary for a student population with few disabled members, and thus perpetuate learning conditions that exclude all but a few disabled students. But even for faculty who aim to center UDL, the physical environments of medical school may pose barriers; elements such as overhead lighting, fixed seating arrangements, and inaccessible equipment may be beyond an instructor’s control.

Institutional expectations and support for UDL are therefore key. Accessibility should be an institutional commitment with specific, standardized, and clearly communicated expectations for faculty. Some universities have instituted expectations that all course materials be screen-reader accessible, for instance, and provide services to faculty members that will convert their course documents to accessible formats for free.³⁶ These services may be coordinated through university libraries, centers for teaching and learning, or disability services. Regardless of where such resources are housed, it is imperative for

institutions to provide on-staff support for faculty whose course materials/activities need to be updated for accessibility.

Institutions committed to a disability-conscious curriculum must ensure that equipment is accessible in academic environments such as standardized patient facilities; height-adjustable examination tables are a particularly urgent priority for disabled patients and providers alike. Having accessible equipment both ensures that disabled learners can fully participate in learning activities and provides an opportunity for all students to learn what constitutes an accessible clinical environment. Although medical schools may not have control over all the clinical environments in which students undertake clerkship work, they should advocate for accessible equipment in clinical spaces where students learn. In cases where access barriers have not been resolved, faculty should be encouraged to acknowledge these barriers openly so that students learn to identify them and advocate for their removal.

Finally, training and other efforts at developing UDL should emphasize that there is no “checklist” that guarantees a fully inclusive and accessible learning environment, and flexibility may be required to respond to the wide range of potential access needs in any given classroom. This might include training around how to communicate appropriately about access needs, such as the University of California San Francisco’s [Faculty Training Series](#) on working with students with disabilities.³⁷ Institutions should communicate clearly to faculty that students with documented accommodations are entitled to those accommodations.

[\(Click to return to chart.\)](#)

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