

Accessibility & Inclusion in Teaching Across the Medical Education Continuum

Resource Packet

- **Infographic: Accommodations in Didactic, Lab, and Clinical Settings**
- **Discussion Questions from Chapter 5: Accommodations in Didactic, Lab, and Clinical Settings**
- **Infographic: Using Spoon Theory to Explain Chronic Illness**
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ACCOMMODATIONS IN THE DIDACTIC, LAB, AND CLINICAL SETTINGS

Suggestions for determining reasonable
clinical accommodations

MOST STUDENTS

Already have a history
of accommodations
and know what they
need

THE MOST COMMON ACCOMMODATIONS

- extended time for tests
- reduced distraction testing locations
- noise-canceling headphones
- lecture notes
- specialized furniture
- alternative versions of texts
- assistive technologies

WRITTEN EXAMS

Determine how much
additional time to allow
on exams

- should be proportional to the impact on a student’s functioning
- may need “stop-the-clock” breaks during exams for health reasons

FLEXIBLE FIRST

Consider alternative
participation, timeliness,
and location requirements

- may need priority seating
- may have barriers around group work
- presentation tools may be an issue

For more information, review *Equal Access for Students with Disabilities: The Guide for Health Science and Professional Education* Ch. 5, edited by Lisa M. Meeks, Neera R. Jain, Elisa P. Laird





LAB SETTING

This is a critical area for accessibility as lab time is perceived to be essential

PREFERRED adaptive or assistive devices

- personal assistants
- equipment and ergonomics
- visual aids such as magnification
- special furniture
- alternates for chemical sensitivities and allergies
- auditory aids
- simulations
- planned breaks

CLINICAL EXAMS

Evaluate each distinct portion to determine reasonable accommodations

CLERKSHIP SETTING

Proactively address issues to support students' learning and well-being

- location distance
- schedule a pre-visit
- scheduling rotation order
- modified schedule
- reduced hours
- access assistants
- live captioning
- consider an intermediary
- ensure parking
- physical inaccessibility
- counter attitudinal barriers
- preview preparation for rounds
- transparent masks
- use of service animals*

HEALTH RECORD

Proactively determine if the electronic record system is accessible

* service animals are not considered an accommodation but rather a right

Chapter 5: Accommodations in Didactic, Lab, and Clinical Settings

1. The amount of extra time a student may need to take exams should be directly related to the impact of the disability-related limitations on a student's functioning. How does your office determine the amount of extra time for the following assessments? *Didactic exams, standardized patient exams, anatomy exams, and quizzes.*
2. Periodic review of the effectiveness of accommodations is important to student success. How does your office review and adjust approved accommodations as needed to ensure that the accommodation adequately addresses the barrier for each student? Does your office provide explicit directions to students about how to initiate a revision of their existing accommodations?
3. There are times when students with certain disabilities (e.g., visual disabilities, chemical sensitivities, dexterity, or mobility issues) may require a personal assistant or an intermediary as an accommodation. Intermediaries fulfill a specific role, but DRPs must be careful to ensure that all core competencies are met by the student. What are the parameters of an intermediary's role? How would your program determine whether or not an intermediary would be appropriate given the competencies and technical standards of your program?
4. What are some types of accommodations used by students in clinical sites? Has your program implemented any of them in the past? What 340 Equal Access for Students With Disabilities about placement into particular clinical sites as an accommodation—has your program done this for any students with disabilities? What were some barriers to implementing these accommodations in your program? How might these be addressed?
5. Students with disabilities may experience exacerbation of their disability that impacts their ability to be present or arrive on time. Determining whether missing class, clinical, or lab experiences is reasonable depends on a number of individual circumstances, specific to each setting and student. Discuss the guidance OCR has provided to institutions to help determine whether attendance is an essential element of a course. When might it be inappropriate to approve an accommodation for attendance?
6. The clinical portion of health sciences education is often the most challenging for students on the autism spectrum, particularly related to interpersonal communication. What are some potential clinical accommodations that may reduce barriers in the clinical setting for students with autism spectrum disorder (ASD)?
7. Because service animals are not an accommodation, the ADA provides a presumptive right for disabled individuals to bring service animals with them into most spaces. How would you summarize the guidance offered by the Centers for Disease Control and Prevention regarding service dogs in clinical settings for a faculty member who asked you about it?

Keep C.A.L.M. (Choosing Accessible Learning Materials)

Choosing accessible learning materials (C.A.L.M.) is one avenue for achieving the goals of Universal Design for Learning (UDL). In the context of teaching and learning, UDL is one way to actively include people with disabilities, and at its foundation makes learning available to the broadest possible audience. An additional benefit of choosing accessible learning materials is the usability that it brings to the entire audience. As a simple example, choosing an already closed captioned video may be required for a student who is hard-of-hearing, but that choice benefits a myriad of other students such as visual learners and multilingual students.

Caption On

Make closed captions a priority to meet WCAG standard 1.2.2. By choosing already closed captioned content, or creating closed captions, your message increases in clarity and effectiveness.

Check Contrast

Check the colors used in their digital resources to make sure that they provide enough contrast for people to read comfortably.

Describe Images

Make describing images a priority to meet WCAG standard 1.1.1. By describing images verbally and writing alternative text for images, your message increases in clarity and effectiveness.

Simplify Slides

When you present or teach, ensuring your slides are simple and accessible means that your entire audience is going to be able to fully engage with and learn from the content you are creating.

Use Ally

Use Ally to check content accessibility within the Canvas LMS. This helps us ensure conformance with WCAG 2.0. By using Ally, rich content and document uploads will be more accessible and usable to all students.

Use Headings

Headings are essential for improving the readability, accessibility, and usability of webpages or digital documents and presentations. Similar to news headlines, headings organize and describe the content that follows.

Use Meaningful Links

Make proper link usage a priority. Help meet WCAG standard 2.4.9 by removing "click here" and writing meaningful link text instead. This makes your content more mobile friendly and accessible.

Excerpted with permission from Virginia Tech Assistive Technologies Keep C.A.L.M. campaign. Full details and links available at <https://assist.vt.edu>.

UDL/Accessibility Checklist

☐ **Clear and concise language**

- ☐ Is the language used in sentences and paragraphs clear and easy to comprehend?
- ☐ Have you refrained from using technical jargon or intricate terminology that could potentially confuse users?

☐ **Alternative (alt) text for images**

- ☐ Is there descriptive text provided for all images to convey the same information as the images?
- ☐ Is the provided text concise and informative, avoiding unnecessary details?

☐ **Multimedia content**

- ☐ Do captions accompany all multimedia content (e.g., videos and audio)?
- ☐ Are transcripts available for audio content, providing an alternative for those who prefer or require text-based content?
- ☐ Do the provided captions or transcripts accurately reflect the content and context?
- ☐ For videos or animations, have you included narrated descriptions of visual content to assist users with visual impairments?

☐ **Color contrast**

- ☐ Have you confirmed that text and graphic elements have appropriate contrast against their backgrounds?
- ☐ Have you validated color combinations using accessibility tools to accommodate color vision deficiencies?
- ☐ Do color-coded elements include text labels or other visual indicators?

☐ **Headings and semantic structure**

- ☐ Have you employed a correct hierarchy of headings (e.g., h1, h2, h3) to organize the content?
- ☐ Do headings assist in outlining the content's structure and improving navigation, and not just decorative in nature?

☐ **Links descriptions**

- ☐ Do hyperlink texts provide meaningful descriptions that convey their destinations?
- ☐ Can users discern the destination of a link without requiring additional context?

☐ **Downloadable alternative formats**

- ☐ Are text versions of multimedia content, such as PDFs or text transcripts, provided for users who may prefer or require different formats?
- ☐ Are audible versions of written content in formats such as MP3, provided for users who may prefer or require different formats?

☐ **Testing with assistive technologies**

- ☐ Have you evaluated your designs using screen readers and other assistive technologies?
- ☐ Are you confident that users with disabilities can effectively access and utilize your content?

Foster a culture of inclusion: advocating for the needs of students with disabilities and promoting an understanding of their experiences and perspectives.

As educators, administrators, and advocates for positive change, we hold a pivotal role in shaping the educational landscape and ensuring that every student, including those with disabilities, has equitable access to opportunities and resources. This resource offers some ideas such as embedding accessibility and accommodations into orientation and course syllabi. It highlights the importance of equal opportunities, addressing hidden barriers, and expanding diversity in networks, committees, and conferences. By advocating for systemic changes, our goal is to cultivate a culture of inclusion that empowers every student, especially those with disabilities, so that every student's potential is celebrated and realized.

Ensure that all students have access to the same opportunities

It's essential to ensure that all students have equitable opportunities and that opportunities are assigned fairly. Intentionally examine any metaphorical doors of opportunity such as access to research projects or special interest groups that may be inadvertently closed to disabled students because of networking issues. We must be prepared to make students aware of these hidden opportunities. Often, the curriculum itself may not explicitly present these opportunities and students rely on their social circles to inform them of advantageous possibilities. However, not all students have access to the same social circles. As Diana Cejas, assistant professor of neurology at the University of North Carolina at Chapel Hill and faculty of the Carolina Institute for Developmental Disabilities, highlights in Docs with Disabilities, Episode 39 (n.d.), "People often fail to recognize how many doors are closed to Black physicians, to disabled physicians, simply because we may not even be aware that those doors exist." To promote inclusivity, be intentional about whom we mentor and sponsor. Make a concerted effort to establish relationships with students and residents from underrepresented backgrounds, including those with disabilities. Ask if they would like to network and get acquainted. Take the time to understand their goals and inquire about any support they may need. Extend invitations to educational opportunities that they may not be aware of, or encourage attendance if they are aware but may be hesitant to participate. Share insider knowledge and make introductions to these opportunities, thereby providing access and inclusion.

Be mindful of financial and energy-related burdens

Students with disabilities often face additional financial and energy-related challenges that affect their participation in extracurricular activities. These challenges may arise from the costs associated with their disabilities, such as medical bills or assistive technology. They may also experience physical, cognitive, or emotional challenges that make non-academic activities more demanding (Petersen et al., 2021). Be aware of these disparities and set inclusive expectations for students' participation in non-academic activities. Offer flexible

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participation options, recognizing that not all students have the same capacity for additional commitments, either due to financial constraints or energy-related reasons.

Respect cameras off during virtual meetings

Karen Catlin (2022) shares a story from "Belonging in Healthcare" where an innocent comment about someone's camera being turned off turned out to be insensitive. We must avoid making assumptions and respect people's decisions, including their choice to keep their cameras off. Let's foster an environment where everyone feels comfortable participating in their own way, without judgment.

Consider your role(s) in supporting students

Within your organization, consider adopting various roles along a spectrum of sponsorship, as outlined by Herminia Ibarra & Kathleen O'Connor (2023). Be a mentor, a strategist, a connector, or an advocate based on where you are and what you can offer. This spectrum serves as a valuable tool for guiding individuals in understanding the types of support that sponsors can provide. Take action, share your insights, make introductions, and champion the success of your students. By elevating their potential, you also elevate yourself as a catalyst for positive change in your organization.

Elevate role models

Representation is crucial, especially for medical students with disabilities. They need to see physicians and healthcare workers with disabilities thriving. The presence of role models from marginalized populations in both the workplace and society is limited (Key, 2019), making it vital to actively seek out and support diverse voices, narratives, and role models. Elevate them in your circles, follow physicians with disabilities on social media, and celebrate their accomplishments. Include them in panels, quote them in your presentations, and support them when they publish articles. Representation matters, and it's our responsibility to ensure that everyone feels represented in our professional community.

Watch for and address DARVO behavior

DARVO, a term coined by Joy Freyd, stands for Deny, Attack, and Reverse Victim and Offender. It frequently appears in interpersonal violence situations but is also common in situations where someone is called out for unfair treatment, microaggressions, or inappropriate behavior (Vialle-Giancotti, 2021). Unfortunately, people with disabilities are often excluded from learning and social situations. Non-disabled individuals may often place some blame for the situation on the disabled individual, rather than taking ownership of their errors or lack of preparation. This behavior should be recognized and addressed to create a safe and inclusive learning environment.

Educate yourself on the lived experience for people with disabilities

To gain further insight into the lived experience of people with disabilities, listen to podcasts or read blogs authored by individuals with disabilities. Follow people with disabilities on social media such as LinkedIn, Instagram, Facebook, or X. Each platform has

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its share of users. On LinkedIn, you can follow people with disabilities such as Meryl Evans, Sheri Byrne-Haber, Jamie Shields, Jennie Berry, Catarina Rivera, Meg O'Connell, Dave Dame, Tori Clark, or Haben Girma. For perspectives on living with autism follow Instagram users such as Daniel M. Jones (@theaspieworld), Chris Bonnello (@autisticnotweird), Haley Moss (@haley.moss), and X users like Christa Holmans (@NeuroRebel).

Join online discussion forums for underrepresented groups, such as people with disabilities. If you're interested in participating as an ally, be sure to ask for permission and indicate your interest.

Consider attending the annual online Stanford Conference on Disability in Healthcare and Medicine, hosted by the Stanford Medicine Alliance for Disability Inclusion and Equity. Access full playlists for past conferences on their YouTube channel at <https://www.youtube.com/@stanfordmedadie/playlists>

Provide the accommodation now, think about systemic changes for the future

Accommodations are typically individual adjustments made to provide equity to a single student. However, when creating accommodations for a specific medical student, it's essential to take a step back and identify systemic changes that can benefit all students. By addressing systemic issues, we can create a more inclusive learning environment that benefits everyone (Catlin, 2022).

Include information about accessibility and accommodations during orientation and in course syllabi

If your degree program holds an orientation for incoming students, incorporate a dedicated section on accessibility and accommodations. Also consider adding a statement about accessibility and accommodations into your course syllabi. Discuss the types of accommodations and assistive technologies that your institution commonly provides. Having this conversation early (and regularly) can help normalize the idea and communicate your support and allyship to all students. In simple terms, if students had an Individualized Education Plan (IEP) in high school, encourage them to engage with the office of services for students with disabilities at your institution. Higher education, especially medical school, is not the time to "tough it out." Accommodations are in place to ensure an equitable learning experience for all students. Consider this sample statement:

My goal is to make this class accessible to every student, including those with disabilities. I've included slide decks, notes, video captions, alt text for images, and considerate color contrast. If you encounter barriers, please let me know. I'm open to enhancements for accessibility.

Reach out promptly to Services for Students with Disabilities for accommodations if you need them. You can find SSD information at ssd.university.edu. The Assistive Technologies office supports learning with software like text-to-speech, screen magnification software, and more. Explore their services at assist.university.edu.

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Lastly, please feel free to meet with me during my office hours or schedule an appointment so that we can discuss how I can best support you in this course.

Ensure accessibility for all events

Accessibility isn't just about accommodating known needs; it's about creating a welcoming environment for all. Even if you don't currently have students with specific accessibility needs, consider their friends, family, or supporters who might attend events. Plan your events with accessibility in mind, such as using microphones for recorded events and automated captions for meetings and livestreams. Include accessibility statements in event promotion materials to inform visitors of the available features and encourage them to add their accommodation requests. Be proactive in ensuring that all events, including off-site ones, are accessible, and have a clear policy that you can share on your website (ADA Network, 2015). Consider this sample statement:

We are committed to inclusive, accessible events. All virtual events have automated captions, and recorded events will offer edited captions soon after the event. If needed, please request live captioning or a sign language interpreter two weeks before virtual events. Our university building is wheelchair accessible via parking garage elevators located underneath the building. Blind or visually impaired guests may need help with finding the elevator or navigating the stairs. Please request accommodations from the event organizer at least 2 weeks in advance. We'll try to meet late requests but can't guarantee availability.

Diversify your network

Make an effort to reach out to people you don't typically engage with. Introduce yourself to individuals of different genders, races, ages, or other backgrounds and get to know them. Diversifying your network can lead to a more inclusive perspective and foster a sense of belonging for everyone (Catlin, 2022).

Advocate for diversity for conferences and committees

When invited to speak at conferences, inquire about the diversity of the panel or speakers. Ensure that there will be a variety of voices represented. Avoid participating in all-male panels or all-white panels. If you are speaking at a conference on disabilities, ensure that panels include people with disabilities. Likewise, when asked to serve on a committee, advocate for a diverse representation of voices. If committees are homogenous, recommend inviting additional individuals who can provide different perspectives (Catlin, 2022).

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