# Fostering an Inclusive Classroom: Universal Design Learning and Accessible Online Teaching Practices

Compiled and written by Nicole Schroeder, PhD Candidate University of Virginia

To contact the author please email [nls4te@virginia.edu](mailto:nls4te@virginia.edu)

## A Note from the Author

Hello everyone! I hope that my original guide (with the same title) has been a helpful resource to you as educators. Three years later I’m back – this time to talk about disabilities, accommodation, and digital course design in light of COVID-19.

I have compiled these resources on universal design and teaching in the COVID-19 era for multiple reasons. While many of us have taught before, most of us haven’t designed our teaching with full universal design strategies. That’s not our fault – we weren’t explicitly taught how to do so.

I hope that these resources will help those who are new to teaching, and those who are embarking on other career choices! No matter what your career trajectory, learning accessibility standards and equitable modes of communication is worthwhile. The more often we casually implement these standards in our work, the more accessible we make the world.

For the most part, these resources have already been designed and collected by UVa, other universities, and disabled advocates. That is to say – I’m not saying anything new here – I’m only compiling, condensing, and bringing resources to your attention that you may not know about. Please make sure that if you’re circulating, that you’re giving proper credit and citations to the original sourceslisted here.

## **Purpose of Guide**

I wrote this guide because I saw a gap in our training. I also wrote it because students with disabilities are facing added challenges during COVID-19. While some of our students will return to campus, disabled students disproportionately overlap with our university's immunocompromised population. They will likely not have the chance to return due to rising infection rates. As a result, I want to be absolutely sure that we're providing them an equal and fair experience in the classroom. In the spring, disabled students have already noted that accommodations were skirted or ignored altogether. We know that they are struggling, as reported by:

1. [NDTC Education "Students with Disabilities Struggling with E-Learning"](https://www.ndtv.com/education/covid-19-students-disabilities-struggling-e-learning-ngos-call-for-accessible-approach)

2. University of Washington ["No one left behind: COVID-19 pandemic underscores need for accessibility"](https://www.washington.edu/uwit/stories/covid-19-pandemic-underscores-need-for-universal-accessibility-on-the-web/)

3. United Nations “[A Disability-Inclusive Response to COVID-19](https://www.un.org/en/coronavirus/disability-inclusion)”

These are just a few examples of the numerous articles detailing the issues that students are facing.

In some cases, the ramifications have been even more severe. One teen in Michigan was [sentenced to juvenile detention](https://www.propublica.org/article/a-teenager-didnt-do-her-online-schoolwork-so-a-judge-sent-her-to-juvenile-detention) because she was unaccommodated and unable to engage in her classes. Leaving her schoolwork unfinished was found to be a violation of her parole, and she was institutionalized as a result. The pandemic is already disproportionately affecting Black students, when we fail to accommodate them, we leave them at the mercy of a system that actively discriminates against them.

The stakes at hand are very high. Students may feel pressured to drop out of school, or halt their studies until they can return to Grounds. In our own reopening materials, the President reminded students that those who are immunocompromised can elect to take medical leaves of absence. When we recycle that language, we basically say “we don’t want you in our classroom.” Disabled students and minority students at large deserve better.

## **Building Diversity & Equity on Campus**

Universal Design Learning (UDL) does not benefit disabled students alone, although it is probably the biggest change we can implement as educators (other than following the ADA) to ensure disabled students have an inclusive learning environment. UDL acknowledges that students arrive at college with a range of experiences and skill sets. It acknowledges that there are privilege gaps between our students, and asks that we design courses to narrow these gaps, instead of increasing them. If we want to commit to diversity and equity initiatives, we have to make sure that our support for marginalized students extends beyond admissions. We know that higher education can be one of the best ways for students to access social mobility, yet community colleges far outperform top tier universities in creating social mobility for students. We need to center ourselves as resources, not as barriers to inclusion. If we build accessibility first, diversity will naturally follow. If we commit to diversity without implementing widespread accessibility, student retention will flag and success after college will falter.

## **What is UDL?**

Basic features:

* UDL offers guidelines that help us design learning objectives, methods, materials, and assignments
* UDL acknowledges the diversity we have on our campuses
* UDL takes into account the historical discrimination of minorities within higher education
* UDL encourages us to design course content that is engaging for all learners
* UDL asks that we set standards that are accessible for all learners

Here are some definitions offered by practitioners of the model:

* “Universal Design for Learning (UDL) is a set of principles for curriculum development that give all individuals equal opportunities to learn. UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone--not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs.” - [About UDL](http://udloncampus.cast.org/page/udl_about)
* “In contrast [to ADA accommodations], Universal Design is the development of products and environments that are usable by all people to the greatest extent possible without the need for an adaptation or a re-design. When universal design is applied to education, it takes the form of developing educational products, such as curriculum and environments like an online class or a science lab, that are usable by people, primarily students, but could be faculty and staff as well… usable by everyone without the need for re-design or some type of an adaptation or accommodation.”
* Sheryl Bergstahler, [Universal Design: An Accessibility Philosophy that Helps Everyone](https://wcetfrontiers.org/2015/09/29/universal-design/)
* Overall Takeaway: content should be **usable, accessible, and inclusive** from its design through its implementation

### **Why use UDL in your classroom?**

There are many reasons why UDL offers useful tools for your classroom. Likewise, there are a ton of ways in which UDL helps to subvert issues of privilege. I’d like to outline ableism and accommodations as just one set of issues so that you can see the full span of the problem. I won’t bog you down with the details as they pertain to race, gender, class, etc. but here is an illustration of the numerous ways in which our classes have been designed to be ableist.

### **UDL Helps to Resolve Academic Ableism**

**1. To receive accommodations students must have a written letter from their physician with diagnostic details and recommendations**

* We know that medical professionals discriminate against minorities, especially women and BIPOC
* Screening has been put off for many students, and will likely continue to be put off, for the remainder of the pandemic, as it is not a medical priority

**2. Accommodations are designed to be implemented at the start of the school year**

* Students who seek screening for disabilities suffer a gap between their medical appointments, diagnosis, and implementation of accommodations
  + Accommodations are often only granted well into the school year
* Students are directed to screening only when we notice red flags (failing grades, inattention in class, etc)
  + We don’t know what to look for so we often don’t connect them with resources
  + We will not see them in person this year, so it will be harder to notice any changes in behavior or habit

**3. Students are not proactive about securing accommodations.**

* Students who need accommodations usually receive them in year 3 or 4 (see Jay Dolmage, *Academic Ableism* 2017)
* There are complicated identity politics involved in securing accommodations for a disability
* Parents may be unwilling to take their child for screening, or students may lack the resources to seek medical evaluation
  + This is especially pressing as most of our students are Off Grounds this term and will not be able to seek medical care through Student Health or screening for learning disabilities at SDAC

**4. Academic ableism persists**

* Students know that the academic community at large has framed accommodations as “hand outs”
* Students have a vague idea about what accommodations exist, what they include, and how they can help
* Discrimination on the basis of ability leads to negative mental health outcomes for disabled students

**5. We treat accommodations as labor**

* Educators continue to define accommodations as added labor. We tend to say “we’ll implement them when we need to” rather than “we’ll design them as a part of the course from the start”
* When we receive accommodation requests, it often takes us time to implement them (for example, securing a class notetaker usually takes weeks)
  + **This is a violation of the accommodation request**
* We often don’t check the quality of our accommodations to ensure they’re working as they should

### **Discussion of Benefits**

I’ve pointed out just some of the issues with accommodations above. The reality is that accommodations are not enough to ensure success for our disabled students. Likewise, classroom design as it stands is not enough to encourage the engagement and positive outcome of all our students.

UDL can help us subvert these norms and rise about the limitations of the ADA, just as it can help us subvert other diverse students. In a similar manner, it can help us engage in classroom discussions about diversity and equity.

When you design a course, or classroom activities, with UDL in mind, the implementation of accommodations generally unnecessary, because when you design using UDL accommodations are built into class structure**.** You front load the work in order to ensure that all students can access the course in an equitable manner.

UDL also forces instructors to rethink the learning goals of their course, and to plan backwards from this point. Do our planned activities really lead to our learning goals? Do we continue to recycle the same activity each week in section? How can we differentiate content and activities to keep our students engaged and ensure that they have the skills to meet our learning objectives?

UDL is also adaptable. It challenges us to ask “who are we failing?” in our classrooms. And since we’ve moved online, we need to seriously think about that question. For the coming term, if not the coming year, you will be teaching students in an unprecedented setting. Some will be managing childcare or other caregiver responsibilities. Some will not have a quiet place to work where they can turn on their microphone and speak to the class. Some will have trouble securing basic internet access. Some will get sick, witness family members fall ill, and suffer loss. Some might experience eviction or other traumatic changes. We need a classroom that acknowledges the fact that depression and anxiety rates are at a high already. And we need a classroom that acknowledges the range of privileges we each have while in isolation.

Universal design isn't just good for our students! We should make sure that we have accessible presentations for conferences and accessible documents up on our personal webpages so that we can maximize our own professional reach. Moreover, when we practice universal design, over time these formatting choices become more and more normative, and easier to implement from the outset. You'll find that once you begin using these templates and guidelines, it will soon come easily from the outset.

### **How to Start**

As a TA you won’t be able to influence the course design itself, but you have almost complete control over HOW to cover the materials. Your professor will already have chosen the reading assignments for your students, but you can help make sure that these are accessible and engaging.

The biggest thing that we have control over as TAs is the environment in which students will take part in learning. UDL demands that we think about the barriers inherent to the environment we’re teaching in, as well as the content we’re teaching. Since the majority of us will be teaching online come fall, I’ve outlined some starting points below. Please note that these are just suggestions and priorities that I would take. This is **not comprehensive** of full UDL design, it merely offers what I feel are the top five actions to take.

**1. Outline expectations and goals in a TA syllabus**

* Be explicitly clear about the expectations for the term
* Clearly describe in your TA syllabus how you expect students to engage, whether that take the form of discussion threads on Collab, synchronous Zoom meetings, or otherwise
* Ask yourself are these expectations fair? Do they transcend socioeconomic barriers? Do I know how to help a student access help to secure internet/computer services?
* If you are teaching on Zoom what will that look like? Synchronous/asynchronous? Will students engage in breakout sessions? In full class discussions? Let them know what to expect.
* How can students communicate with you? When should they expect to hear back from you? What modes of communication do you prefer?
* Point students to resources that they can access on Grounds and remotely:
  + SDAC ([Student Disability Access Center](https://studenthealth.virginia.edu/sdac))
  + CAPS ([Counseling & Psychological Services](https://studenthealth.virginia.edu/caps))
  + Bridge Scholarship ([funding for students affected by COVID-19](https://news.virginia.edu/content/new-scholarship-supports-students-whose-financial-means-are-affected-covid-19))
* Be very clear about your commitment to diversity and your commitment to implementing accommodations.
* Think about your classroom policies carefully:
  + Attendance: how can you balance an ease of attendance requirements with checking in with students and making sure they’re ok and they’re learning course content?
  + Late policies: I would argue that late policies only benefit us as graders. I think we should trust students with their own time management, and hold students accountable to finishing all graded work by the end of the term. I no longer have late policies, and I have two dates (one before midterms, the other after) where I check in and email students who haven’t handed work in.
  + Assignments: Do students have access to all of the classic assignments the professor might have left on the syllabus from previous years? Can they access library materials? Can you create a more accessible assignment or source base for them?

**2. Make sure students are comfortable with their learning environment**

* Give students a walkthrough of Zoom and all of its features
* Ensure that students know how to change their background if they desire
  + [How to display a virtual background in Zoom](https://support.zoom.us/hc/en-us/articles/210707503-Virtual-Background)
* Describe the accessibility guidelines I outline on page 11 of this document
* Create a parallel Google Doc sheet where students can take collaborative notes and write out questions – read after class and answer any questions that haven’t been addressed yet
* Ask students to give a brief recap of the previous week’s content at the start of each class

**3.** **Educate yourself on discrimination and microaggressions**

* Prep yourself to handle complicated discussions and debates in class
* In the first class, make sure to make a statement about what kind of behavior and language will be permitted in the classroom
  + Students are still learning how to be collegial (as we all are)
  + There will be mistakes – that’s ok but it’s important that we learn from them
  + Policing language is important, it is not an infringement upon freedom of speech
    - First and foremost, your students should feel safe in your class
* Be clear to model through your own behavior, and by casually correcting students
  + The point is not to call any student out, or to put blame on a student
* Microaggressions are so common that we often forget how much of an impact they have
  + They take the form of everyday slights, insults, or phrases we assume are normal but have been used to discriminate against individuals historically.
  + We usually don’t recognize them easily because of implicit biases.
  + They can be verbal or nonverbal
    - Ex. Staring at someone with a visible disability
* Read up on discriminatory language, and avoid phrases like “that’s insane” or saying “sorry I’m so OCD today”
  + Do not use language that’s been used to discriminate against individuals
    - Phrases like “that’s insane,” but also “turn a blind eye,” “bound to a wheelchair,” “deaf to,” “psycho”
    - See this [dictionary](https://www.autistichoya.com/p/ableist-words-and-terms-to-avoid.html) for a list of terms and alternative options
  + Do not use language that coopts disabled identities
    - “I’m so OCD today,” “wow this weather is really depressing”
* Practice de-escalation techniques so that you can intervene in a discussion/debate, correct behaviors, and continue the discussion without worrying
* Do not tokenize minority students
  + don’t ask them for opinions based on the topics you’re covering
* Don’t pressure students into answering questions by cold calling on them
* Offer alternative ways to participate for students who feel uncomfortable talking
  + We in the academy pride ourselves on developing discussion skills and speaking skills – this is incredibly ableist
  + We need to accept that alternative forms of communication are just as valid, relevant, and developed as speech

**4. Vary class engagement**

* When we change up section activities, it helps all of our students
  + Some students excel at small group work, others like speaking in full discussions, and others prefer written work
  + When we vary our assignments, we offer students with a range of learning styles a way to feel engaged and interested
  + This doesn’t just help students with disabilities, it also helps first generation students and ESL (English as a second language) students
  + It also forces students to learn to be flexible and adaptable, and to communicate with one another across a range of activities
* Try to split section up into different components, or add new forms of media so that it doesn’t feel like the same session again and again
* Use collaborative online platforms and tools from digital humanities to create interactive lesson plans
* Use videos, podcasts, and website exploration to vary assignments (make sure there are captions and transcripts for the podcasts)
* Make sure that students can contribute to class in ways beyond making a discussion point each class, give alternative assignment options, work with individual students to create a more accessible type of engagement

**5. Offer space and time for feedback**

* Continually assess and reassess the success of individual activities
  + What works for one section might not work for another
* Give students options to provide feedback throughout the course
* Agree to a set of goals with the class for the term
* Acknowledge that the pandemic is creating a major source of disarray and change in our everyday lives
  + Class expectations might change throughout the term, that’s ok, just be clear with your students
* Make sure students know frequently throughout the course how they are doing
  + Feedback should give potential for growth
  + Point out positive and negatives in written work
* Break assignments worth a large amount of credit into individual assignments for which you provide feedback

## **Creating Accessible Content**

When you create content for your course – such as a TA syllabus, a grading rubric, an essay prompt, a quiz, or a test – you need to make sure that your resources are accessible. Similarly, when you assign videos or other forms of media in your classroom, you should confirm that those types of content are accessible.

### **How to Ensure Zoom is Accessible**

1. Record the session

* Will you record discussion sections to keep those recordings as a resource for students? **Make sure you get their permission**

2. Caption the session

* At the bottom of your screen as a host, you can assign someone to **provide closed captions** for the session (like a notetaker)
* Or you can use [otter.ai](https://blog.otter.ai/zoom/) for real-time transcription
* If neither of these options work, you can contact SDAC for a third party closed captioning service
* Note: If your video is saved to the cloud, Zoom can use ASR (automatic speech recognition) but this usually require a lot of editing [Using Audio Transcription for Cloud Recordings](https://support.zoom.us/hc/en-us/articles/115004794983-Automatically-Transcribe-Cloud-Recordings-) (I would recommend otter.oi instead)

3. Accessibility features

* Zoom also allows you to share your screen, so students using AAC can communicate [Modeling AAC Virtually](https://www.buildingaac.com/post/modeling-aac-virtually)
  + AAC stands for Augmentative and Alternative Communication. AAC is a broad term for nonverbal communication methods, including sign language, picture boards, mobile apps, and speech-generating devices
  + Those who struggle with spoken language use AAC to communicate verbally for them
* Zoom has accessibility features for various keyboards and screen readers as well. Zoom offers their own page for [Accessibility Guides](https://zoom.us/accessibility) but University of Washington offers [Zoom Shortcuts](https://www.washington.edu/accessibility/zoom-shortcuts/) with screenshots which is helpful

4. Accessibility norms

* Mute your microphone when you’re not speaking
* Allow students to keep their video feed off
* Offer screen breaks for everyone to stand up, stretch, grab water partway through section

5. Monitor discussion

* Don’t allow students to jump topic to topic, make sure that students using the chat have time to make their comments
  + Slow down and remind your students to slow down
  + Embrace silence – allow your students to think, don’t feel you need to fill the void
* Use the chat feature to raise comments
* Use a method for moderating discussion
  + You can ask that students write “stack” or something of that nature in the comment box, and call on students in order to keep the conversation flowing
    - “stack” is commonly used a phrase to say “I’d like to speak next” but you can come up with any short phrase that can be quickly and easily typed in the comment box
* Ask students to repeat their name before speaking, throughout the entirety of the term

6. Give clear instructions

* If you are giving instructions make sure to sign post them in multiple ways – identify explicitly where you want students to go (don’t say “click here” or “see above”)
* When you do anything on a shared screen, verbally describe what you’re doing

7. Use the share my screen feature to share images, videos, or to offer instruction

### **Accessible Documents in Microsoft Word**

1. Learn how to convert PDFs into Microsoft Word documents, which are far more accessible
2. Use sans serif fonts
   * Times New Roman, Verdana, Arial, Tahoma, Helvetica, or Calibri
   * Make sure font is 12 ppt or greater
3. Use headings in a meaningful way
   * Screen readers can jump section to section, which saves students time, but only if these sections are properly delineated
4. Use lists frequently
   * Using lists will force you to think about information flow
   * Encourages you to avoid jargon and confusing language
5. Use meaningful hyperlinks
   * Copy and paste the URL
   * Right click to ‘edit hyperlink’
   * At the top of the pop up is a box ‘Text to display’
   * Type a meaningful descriptive line for the hyperlink here
   * Hit ok
6. Provide image descriptions/ alt-text for images/graphs
   * Right click image
   * Format picture
   * Alt text
   * Provide a detailed description of the image/graph
   * Note: When you provide alt-text (alternative text), imagine you are fully describing the image/graph. You need to provide the essential details in entirety to help those with vision impairments. See [How to Write Alt-Text and Image Descriptions](https://www.perkinselearning.org/technology/blog/how-write-alt-text-and-image-descriptions-visually-impaired) or [How to Create Alternative Text for Images for Accessibility](https://www.techsmith.com/blog/how-to-create-alternative-text-for-images-for-accessibility-and-seo/)
7. Limit table use
   * Tables are hard to use with screen readers
   * Use tables only when necessary
   * Try to make as simple as possible
8. Use accessibility checker (this may differ based on your version of word)
   * The Accessibility Checker is a Microsoft feature that provides a detailed list of accessibility issues within your document. Basically, it tells you if your document can be read by a screen reader, or if you forgot any accessibility measures. It’s an easy review for those new to designing for accessibility.
   * If you have an older version of Word
     + Go to File
     + Hit Info
     + Hit Check for Issues
     + Hit Check Accessibility
     + Make any corrections necessary
   * If you have an updated version of Word
     + Go to the Review Tab
     + Hit Accessibility Check
     + Make any corrections that are flagged and explained on the right-hand side

### **Accessible PowerPoint Presentations**

1. Follow the above guidelines for word documents
2. Choose slide template with good contrast and simple background
3. Change colors if contrast is not clear enough
4. Consider white text on darker background
5. Use accessibility check (same process as Word)

## **Brief List of Resources**

**Reading Recommendations**

* Thomas J Tobin and Kirsten T Behling, *Reach Everyone, Teach Everyone: Universal Design for Learning in Higher Education* (West Virginia University Press, 2018, eBook)
* Jay Dolmage, *Academic Ableism: Disability and Higher Education* (University of Michigan Press, 2017, eBook)
* *Universal access through inclusive instructional design: international perspectives on UDL* Ed. Susie L Gronseth and Elizabeth M Dalton (NY: Routledge, 2020)
* Kayla Lett, Andreea Tamaian, and Bridget Klest, “Impact of Ableist Microaggressions on University Students with Self-Identified Disabilities.” *Disability & Society* (2019): 1–16. Web.
* Katz Kattari, "Development of the Ableist Microaggression Scale and Assessing the Relationship of Ableist Microaggressions with the Mental Health of Disabled Adults" (2017). Electronic Theses and Dissertations. 1283. https://digitalcommons.du.edu/etd/1283

**Sources at UVA**

* Note: I’ve separated these out from the general list because you can get direct support from their authors if you’re on Grounds, the rest of the resources are sorted by category
* [Instructional Resources for Accessibility](https://accessibility.virginia.edu/instructional-resources)
* [Coordinator of Academic Accessibility homepage](https://provost.virginia.edu/subsite/coaa/instructional-resources)
* [UVa Library Accessibility Services](https://www.library.virginia.edu/services/accessibility-services/media-accessibility-resources/do-it-yourself-captioning/)
* [Creating Accessible Content](http://digitalaccessibility.vpit.virginia.edu/doc.php)
* Join the UDL@UVA email list by emailing [coaa@virginia.edu](mailto:coaa@virginia.edu)

**Introductions to Inclusive Teaching/Universal Design Learning:**

* [Universal Design Learning homepage](http://udloncampus.cast.org/home#.WJNWhVMrKUl)
* Access Computing: [A Checklist for Inclusive Teachin](https://www.washington.edu/accesscomputing/equal-access-universal-design-instruction)g
* Saint Louis University [Inclusive Teaching Course Design](https://www.slu.edu/cttl/resources/inclusive-teaching.php)
* University of Arizona [Ten Steps Toward Universal Design of Online Courses](https://ualr.edu/disability/online-education/)
* [Resources for new TAs](https://caitkirby.com/resources.html) written by Cait Kirby

**Guides to hosting accessible online meetings:**

* Washington University’s Guide [Hosting accessible online meetings](https://www.washington.edu/accessibility/online-meetings/)
* Rooted in Rights [How to make your virtual meetings and events accessible](https://rootedinrights.org/how-to-make-your-virtual-meetings-and-events-accessible-to-the-disability-community/)
* Harvard’s [In-Depth Zoom guide](https://harvard.service-now.com/ithelp?id=kb_article&sys_id=4c3290f6db5b845430ed1dca4896197f)
* AssistiveWare on [How to be a respectful communication partner](https://www.assistiveware.com/learn-aac/follow-their-lead-how-to-be-a-respectful-communication-partner)

**For Accessible Documents/Materials:**

* University of Washington: [Creating Accessible Documents](https://www.washington.edu/accessibility/documents/)
* National Center on Disability and Access to Education [One Page Cheatsheets for Accessible Content](http://ncdae.org/resources/cheatsheets/)
* Web Accessibility Initiative [WCAG 2.1 - Standards for Accessible Website Design](https://www.w3.org/WAI/standards-guidelines/wcag/new-in-21/)
* WebAIM [Introduction to Web Accessibility](https://webaim.org/articles/)
* Portland Community College: [Accessibility Handbooks - Working with Complex Images](https://www.pcc.edu/instructional-support/accessibility/handbook/)
* Dos & Don’ts on designing for accessibility: <https://accessibility.blog.gov.uk/2016/09/02/dos-and-donts-on-designing-for-accessibility/>

**Videos on Accessibility:**

I really like this video series from UA Technology Accessibility. The videos are long, but really comprehensive and easy to follow along with. I’d recommend watching them before the start of the term.

* [Creating Accessible Course Content](https://www.youtube.com/watch?v=YElPuk04Lck)
* [Creating Accessible Word Documents](https://www.youtube.com/watch?v=lWRaw7krQug)
* [Accessibility Testing for Content Creators](https://www.youtube.com/watch?v=YxIEfjilpvc)
* [PDF Remediation Basics](https://www.youtube.com/watch?v=ZPRhqbcd6Wo)