

## **Invited Article**

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# ***Tips for Creating Inclusive and Accessible Instruction for Adult Learners: An Overview of Accessibility and Universal Design Methods for Adult Education Practitioners.***

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### **Abstract**

The field of adult education is rooted in social justice, equity, and inclusion. Adult learners with disabilities face significant challenges to inclusion in educational environments. To promote teaching practice that is inclusive for all learners, adult educators should be knowledgeable of teaching practices that reduce barriers for learners with disabilities. The purpose of this article is to provide information about accessibility for adult learners with disabilities and to suggest methods that adult educators can employ to create inclusive learning environments. This article describes the background of disability laws, the principles of Universal Design for Instruction, and offers tips for creating accessible learning materials.

### **Importance of Promoting Accessibility in Adult Education**

According to the United States Census Bureau (2016), approximately 1 in 5 adults in the United States has a disability. “In the U.S., 1.7 percent of the population reports having a learning disability, totaling 4.6 million Americans” (Cortiella & Horowitz, 2014, p.29). For people

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with disabilities to participate in the workforce and engage within their communities, they need to possess the skills and knowledge prevalent in a 21st Century global economy (Carnevale, 2013; Morgan, Waite, & Diecuch, 2017). In order to obtain the skills necessary to be competitive in today's workforce, individuals with disabilities attend education and training programs that are available for all adult learners. The problem is that many learners with disabilities experience barriers to participation that interfere with their educational pursuits (Whitehouse, Ingram, & Silverstein, 2016).

The U.S. Census Bureau survey of Income and Program Participation (2016) notes that employment for adults with disabilities is significantly lower than for adults without disabilities (U.S. Census Bureau, 2016). According to the survey, "41 % of those age 21 to 64 with any disability were employed, compared with 79 percent of those with no disability." Along with the lower likelihood of having a job came the higher likelihood of experiencing persistent poverty; "that is, continuous poverty over a 24-month period" (U.S. Census Bureau, 2016). According to Whitehouse, Ingram, and Silverstein (2016), approximately 1 in 5 Americans live with a disability. To gain employment in the workforce, adults with disabilities need to possess a significant amount of reading, writing, calculating, and problem-solving skills (Carnevale, 2013). People with disabilities face particular barriers in regards to developing employability skills as well as finding, maintaining, and advancing in their careers (U.S. Bureau of Labor Statistics, 2012). These challenges include lower expectations from employers, misconceptions from society, and inaccessible programs and services (Whitehouse, Ingram, & Silverstein, 2016). In order to overcome the barriers to employment that exist, people with disabilities, need opportunities to participate in training and education environments that are equitable and promote development of all learners in a socially inclusive manner (World Health Organization, 2010). The U.S. Department of Labor, Office of Disability Employment Policy (2017), considers the investment in increasing community based and integrated employment opportunities for persons with disabilities a main priority. One integral piece of fulfilling this critical priority is to ensure that individuals with disabilities have access to programs and services available to all adults who seek various types of education and training (World Health Organization, 2010).

Although the development of basic literacy skills is a good step towards gaining employment, basic skills are often not sufficient to be competitive in today's 21st century workforce. In addition to pursuing

programs aimed towards employment skill development, many adults seek postsecondary credentials to gain the best paying employment positions (Ginsberg & Wlodkowski, 2010; Hong, 2015). At the Federal level, disability policy is focused on promoting employment and higher education is one of the pathways to improved financial status for individuals with disabilities (National Council on Disability, 2015; U.S. Census Bureau, 2016). The National Council on Disability (2015) states that postsecondary completion rates are lower for students with disabilities with only 34 percent completing a four-year degree in eight years. At all levels of adult education, learners with disabilities face unique challenges accessing and persisting in environments designed for non-disabled individuals (Cook, Rumrill, & Tankersley, 2009; Whitehouse, Ingram, & Silverstein, 2016).

Adult educators are an essential part of the academic accommodations landscape. Previous research has shown that student interaction with instructors is one of the factors related to the success of students with disabilities (Dallas, Sprong, & Upton, 2014; Hong, 2015). Since adult educators are often primary producers of academic content, they also share in the responsibility for making their content accessible (Carlton, Hertzfeld, & Yurcisin, 2017). Being able to acquire course material and participate without barriers in a learning environment is an important factor in the success of learners with disabilities. “Equitable participation is a means to a more just society” (Ginsberg & Wlodkowski, 2010, p. 32). The ability to provide instruction to all learners in the classroom is one of the most essential aspects of adult education practice (Ginsberg & Wlodkowski, 2010; Rocco & Delgado, 2011). However, many practitioners do not know how to identify students in need of accommodations and how to provide appropriate instruction to fit their learners’ needs (Dallas, Sprong, & Upton, 2014, Polson & White, 2001; Rocco & Fornes, 2010). When an adult educator observes a learner who is not progressing, they often try to accommodate to meet the learner’s needs (Polson & White, 2001). The instructor may have to take a trial and error approach to match the appropriate accommodation with the learner until the learner can successfully navigate their way through the curriculum. Although there is guidance regarding the ADA laws when it comes to academic accommodations, there are gaps in the information available on how to accommodate learners with disabilities in various learning environments (McGuire, Scott, & Shaw, 2006; Schelly, Davies, & Spooner, 2011).

## Laws Regarding Accessibility and Adult Education

The Federal laws that prevent discrimination against people with disabilities include the Rehabilitation Act of 1973, Section 504, and the Americans With Disabilities Act (ADA) of 1990 (Rocco & Fornes, 2010). The Americans with Disabilities Act of 1990 defines someone with a disability as a person who has an ailment, either physical or mental, that significantly limits one or more of their life activities. The laws associated with the ADA promote equal access for individuals with disabilities. The Americans With Disabilities Act (1990) ensures equal access by requiring that all public venues are accessible to persons with disabilities. The Act (1990) defines accessible as providing a person with a disability the opportunity to obtain the same information, have the same interactions, and participate in the same services as a person without a disability in an equal manner that is integrated within society. In addition to requiring accessibility within public spaces, the ADA (1990) also requires that information is easily obtainable in manners similar to those without a disability (ADA.gov, 2015). The ADA laws are designed to protect the rights of individuals with disabilities as equal members of society. These rights are extended to accessing public spaces, patronizing private businesses, and participating in programs that receive Federal funding from the U.S. Department of Education. The purpose of the Rehabilitation Act of 1973 was to prevent disability discrimination in federal programs and agencies, any program receiving government financial assistance, in federal employment, and with government contractors concerning work with persons with disabilities (The Americans With Disabilities Act of 1990, 2017). Section 504 of the Rehabilitation Act states that agencies that receive government funding are not allowed to discriminate against people with disabilities. The Americans with Disabilities Act, passed in 1990, included guidance from the Rehabilitation Act of 1973 and Section 504 to broaden the disability rights protection of individuals with disabilities.

Title II of the ADA ensures that programs of public education such as adult basic education classes provide qualified people with disabilities the right to participate in the services provided (Rocco & Fornes, 2010). The ADA also requires that all public facilities offer accommodations to persons with disabilities so that they can participate in the goods and services offered. Title III of the ADA requires that private entities also provide both physical and academic accommodations to individuals with

disabilities (“The Americans With Disabilities Act of 1990”, 2017). According to the ADA laws, the term accessible means that an individual with a disability is allowed to receive the same information, participate in the same interactions, and have the same services as a person without a disability (“The Americans With Disabilities Act of 1990”, 2017). The ADA laws ensure that participation for individuals with disabilities is carried out in equal and integrative ways. The Americans with Disabilities laws also include the guidance that an individual with a disability should have the opportunity to receive information completely and independently just as anyone without a disability would (“The Americans With Disabilities Act of 1990”, 2017). The ADA laws have been updated and amended to clarify the meaning and definition of the term disability to ensure that it would be broad reaching and applied without the need to consistently reanalyze the ADA laws.

Although the Americans with Disabilities Act has defined the rules regarding the participation of students with disabilities in educational programs, it is less clear on how institutions are to provide the necessary accommodations. The ADA protections that were developed from the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 requires that institutions allow reasonable accommodations to all qualified program participants (“The Americans With Disabilities Act of 1990”, 2017). The U.S. Department of Education considers a reasonable accommodation to be any adjustment or altering of a task, process, or environment that will allow equal participation for individuals with disabilities (2007). Each institution has to determine their accessibility policies and plans to meet the requirements of providing reasonable accommodations. For adult learners to qualify for reasonable accommodations, they must prove that their disability limits their participation. This burden of proof is often a barrier to learners who do not have the financial and medical resources to document their disability. In order to document a disability a person needs to be evaluated by a licensed psychologist (U.S. Office of Personnel Management, 2017). Individuals seeking disability status must provide documentation about their disability that includes details about the extent of the limitations. Also, individuals with disabilities must show that they are “otherwise qualified” for the program, meaning, “the person must be able to meet the essential eligibility requirements of a program with or without reasonable accommodation” (Rocco & Fornes, 2010, p. 383). Adult educators can assist individuals who are seeking disability documentation

by informing them of the resources available to them and creating an inviting atmosphere that readily implements accommodations for learners with disabilities.

### **Cultural and Institutional Barriers to Helping Adult Learners with Disabilities**

In previous studies, students with disabilities report that they have concerns regarding negative disability stereotypes and confidentiality from instructors (Barnard-Brak, Lectenberger, & Lan, 2010; Timmerman & Mulvihill, 2015). Individuals with disabilities often self-accommodate due to issues regarding the lack of trust and concern for negative consequence of disclosing their disability. The practice of non-disclosure and self-accommodation does not always offer the full spectrum of accessibility options that may be available to the student. There is considerable effort required in disclosing one's disability and it is viewed as a barrier to full participation because of the effort it takes to report and request assistance within the institution. Creating a disability-friendly institutional climate is one way to improve outcomes for learners with disabilities (Huger, 2011). The fact that "anyone can become disabled, whether it is temporary or an onset of a debilitating illness, genetically predisposed, or traumatically induced" is an important issue to consider when promoting change at the institutional level (Clark, 2006, p. 309). A disability friendly climate serves to increase sensitivity and acceptance of those who are different and offers increased value for all learners.

Promoting a disability-friendly institutional climate begins with understanding and addressing Ableism. As stated by Griffin, Peters, and Smith (2007) "Ableism is disability oppression, a pervasive system of discrimination and exclusion of people with disabilities. Like racism, sexism, and other forms of oppression, ableism operates on individual, institutional, and cultural levels to privilege temporarily able-bodied people and disadvantage people with disabilities" (2007, p. 335). An important step in addressing this form of inequity in education is to discover ways to change the idea that accommodations in the physical environment are an equitable solution to inclusion for learners with disabilities in academic programs. Providing access to their buildings and offering resources for learners with physical disabilities is something that most education institutions can provide. However, there is much more work that can be done to improve accessibility practices overall. Participation in education should not be limited by a person's disability

status. As proposed by Rocco and Delgado (2011), “Culture and belief systems support the attitude that disability is abnormal and pitiful” (p.7). As communities of educational practice, we have options for how we socially construct our views regarding disability. To promote accessibility within our educational institutions, the dialogue should be explored to understand the embedded expressions of ableism that exists in our culture. It is important to recognize that having a disability does not mean that a person is less capable, worthy, or able to perform as any other member of society. Universal Design for architecture and instruction addresses some of the barriers across institutions. More work is needed to share information with others about disability etiquette and how ableism affects our practices.

### **Tips for Creating Inclusive Learning Environments**

There is no one size fits all approach to determining the most effective accommodations for adult learners. To be most effective, adult educators should have some foundational information that describes different types of disabilities and understand that there are accommodations that they can provide for their learners (Grasgreen, 2013; Ingeno, 2013). Numerous different approaches exist for providing inclusive and accessible learning environments for adult learners. Instructor facilitated academic accommodations are often suggested based on the individual disability and possible instructional aids. As suggested by Rocco & Fornes (2010), if a learner has a hearing impairment they may need visual aids and have seating that places them where they can view the instructor. Students with learning disabilities may need the assistance of a note taker or extended time on exams and assignments. Other common classroom accommodations include large print materials, supplemental light, electronic textbooks and materials, and alternative testing arrangements. It is also important to consider room temperature, distractions from equipment sounds, and seating arrangements that allow for free movement around the classroom (Rocco & Fornes, 2010).

With the increase in online learning, accommodations for students with disabilities are expanding to include guidelines and options for online materials. If materials for classes are in digital format, it is important to ensure that videos include closed captions, images have alternate text, and that course materials are correctly formatted for compatibility with screen readers (WebAIM, 2017). Online course design should provide logical order for learning modules, ease of navigation throughout the

learning management system, and module overview pages that include clear directions on expectations (Burgstahler, 2017). Today's classroom frequently use digital learning materials and it is essential that educators take steps to ensure that their digital materials meet the accessibility standards (Burgstahler, 2017; WebAIM, 2017). Resources for instructors are available on topics related to online course design and other issues covering web accessibility. Web Accessibility In Mind, WebAIM, is an organization dedicated to helping organizations understand accessibility for their digital content. The resources section of their website, [webaim.org](http://webaim.org), offers accessibility checking tools, tips for instructional designers, videos on the experiences of students with disabilities, and simulations on navigating content with different disabilities (WebAim, 2017).

Each instructor should work with the learner to determine the best combination of accommodations to ensure their equal participation in the educational environment. Adult educators can benefit from information on reliable internet sources and disability service offices. Not all programs have access to experts with knowledge of accessibility practices and instructors often have limited time to devote to acquiring the knowledge and skill needed to serve learners with disabilities. It is important to share information and best practices to increase the knowledge and expertise of adult educators when it comes to creating inclusive learning environments. Because of the difficulties with managing the accessibility of course environments and materials, many educators seek to create barrier-free learning environments by utilizing the principles of Universal Design for Learning (UDL) to address the complexities involved in understanding and providing accommodations.

### **Universal Design for Learning**

One approach for broadening program inclusion is to include accessibility features from the beginning of the course development. Universal Design for Learning (UDL) is one name given to this inclusive program design and teaching strategy. Many training programs involved with promoting inclusive pedagogies recommend the use of Universal Design for Instruction (Schelly, Davies, & Spooner, 2011). The National Center on Universal Design for Learning, [udlcenter.org](http://udlcenter.org), guides education professionals on how to develop learning materials that are accessible by diverse audiences (CAST, 2011). The initial inspiration for UDL came from the field of architecture which promoted universal design of architecture that included built in accessibility features instead of adding



the features after the construction was completed (Lombardi & Murray, 2011). Universal Design techniques offer principles for creating a curriculum that is accessible to multiple audiences which includes detailed guidelines for those who design academic content to follow. The UDL framework was built from research in learning sciences. The National Center on Universal Design for Learning, created the three main principles of UDL, provide multiple means of 1) interpretation, 2) action and expression, and 3) engagement from a review of cognitive science and other aspects of human learning (CAST, 2011). The principles of UDL promote pedagogy that addresses individual differences in learning and recognizes that there are multiple pathways for acquiring and demonstrating knowledge.

With the increasing numbers of adult learners with varying types of disabilities and the need for a diverse array of associated accommodations, Universal Design has become an essential practice in many instructional design approaches. The application of Universal Design goes beyond the guidelines for meeting the Americans with Disabilities Act accommodation standards. Universal Design approaches intend to create barrier free instruction that promotes learning environments that view disability from a social model as opposed to a medical model (Dallas, Sprong, & Upton, 2014). Utilizing a Universal Design approach would support all students and decrease the need for reorganizing courses with academic accommodations for students with disabilities (Dallas, Sprong, & Upton, 2014). Universal Design for Learning promotes a socially inclusive approach to teaching by equally engaging all learners regardless of their physical, cognitive, cultural, and linguistic limitations.

Universal Design for Learning can benefit adult students by providing a variety of instructional techniques and offering a flexible curriculum that will engage learners with different abilities and backgrounds (TEAL Center, 2010). Adult education instructors can employ Universal Design principles to assist all learners, including those with special needs, in understanding content and demonstrating their abilities in multiple ways. Since instructors often have a heavy workload, applying Universal Design principles from the beginning of course creation could reduce the workload overall. Instead of operating from a trial and error approach, instructors can take steps to build accessibility features into their courses to benefit a variety of adult learners. By putting Universal Design into practice, adult educators can feel confident that they are using the best approaches for creating an inclusive teaching environment (Lombardi & Murray, 2011).

The Universal Design for Learning framework follows three principles that address the what, how, and why of learning (TEAL Center, 2010). The National Center on Universal Design for Learning (UDL) outlines a framework for the Universal Design Standards. The main principles for the standards are that the learning design provides multiple means of 1) interpretation, the “what” of learning, 2) action and expression, the “how” of learning, and 3) engagement, the “why” of learning (CAST, 2011). UDL offers guidelines for designing curriculum that provide equal opportunity for all learners regardless of their ability, cultural background, age, gender, and linguistic background. The “what” of learning relates to the knowledge domain where learners recognize concepts, recall facts, and categorize information from our senses. In defining the “what” of learning, UDL suggests that providing multiple means of perception, communication, and comprehension encourages resourcefulness and creativity in learning. The “how” of learning refers to the ways that learners plan and complete tasks. To demonstrate “how” they know, learners need to use planning and organization to solve problems, write essays, and complete other strategic tasks. In addition to varying the means in which learners demonstrate their knowledge, instructors can regulate the time allotted for task completion, encourage learners to manage their learning, and promote the organizational skills needed to be successful. The third principle of UDL describes the “why” or the affective components of the learning experience. These elements relate to motivation and emphasize ways to engage learners including promoting real-world examples, personal choice, and relevancy that encourage persistence.

The first principle of UDL is providing multiple means of representation includes giving learners options for perceiving, expressing, and comprehending information. Some learners may grasp information more readily through visual or auditory means while others may prefer printed text. Providing explanations for vocabulary words, explaining mathematical symbols, and providing background knowledge on topics can assist learners with interpreting information. Adult educators should aid learners in the translation of information into usable forms by providing flexibility in your teaching approaches and materials. By providing information in multiple formats, adult educators will be able to address different learning styles and promote learning transfer by allowing learners to make connections with concepts (CAST, 2011). Taking a flexible approach to learning design and delivery will also foster a safe and in-

clusive environment which can decrease apprehension and provide opportunity for engagement and participation for anxious learners.

The second principle of UDL, providing multiple means of action and expression, addresses the fact that learners can experience environments from various perspectives and that they can adequately express their knowledge in different ways (CAST, 2011). There is difference in the ways that learners utilize learning materials. Individuals with physical impairments may not be able to use a textbook and alternative materials should be available. In addition to providing access to alternate materials that can be used with assistive technologies, instructors should consider incorporating options for expressing knowledge. Some examples of varying the “how” of learning include allowing learners to complete activities as written text, narrative presentations, or visual formats, providing number tiles for mathematics calculations, use of concept mapping to encourage the connection of information, and offering sentence starters for aid in writing practice. The UDL concept of providing multiple means of action and expression also suggests including support for persistence and goal setting. Scaffold information to allow for learners to progress from simpler to more complex information to avoid frustration that may prevent them from reaching their goals.

The third principle of UDL states that individuals have multiple ways of engaging in the learning experience (CAST, 2011). Principle three focuses on the affective dimensions of motivation, and engagement. In order to engage all learners, adult educators should provide examples and explanations that would be relevant for diverse learners. Factors such as cognition, culture, and context will vary for different learners and instructors should take a variety of approaches to increase the likelihood of engagement. To connect with student interests adult educators should offer choices when determining topics, use a variety of activities, and create authentic learning outcomes that link to real world problems (CAST, 2011). In order to increase learner engagement instructors should also create a safe environment, free from distractions, to allow learners to feel included. An inclusive classroom environment will promote learner interaction, collaboration, and support persistence with learning tasks.

The implementation of UDL can complement many other teaching methods and provide support for facilitating the problem solving and critical thinking skills necessary for employment and participation in life-long education. UDL supports collaborative learning, project-based

learning, differentiated instruction, and performance-based assessment (TEAL, 2010). The primary principles of UDL promote flexibility and encourage the facilitation of learning with multiple options for engagement. “All students, including those learning English, older students, and those with disabilities appreciate the multifaceted ways content is presented, as well as options for demonstrating what they know” (TEAL, 2010, p.2). One way to transform educational access for all students, not only students with disabilities, is to practice the principles of Universal Design for Learning (Pilner & Johnson, 2004). According to Schelly et al., (2011) “Universal Design for Learning is promoted as a model for good teaching generally, and as such it is becoming an important part of a broader conversation about pedagogy” (p. 18).

### **Barriers to Adopting Universal Design of Learning**

Even though the concept of Universal Design has been suggested as a way to provide inclusive educational content, educational institutions have not fully adopted its practices. A few of the barriers cited by institutions as preventing the implementation of UDL include limited resources for training on accessibility issues, the expense of purchasing new technologies, and other competing priorities within the organization (Rau & Lewis, 2011). It is important to promote the use of Universal Design for Instruction to account for the need to accommodate learners with varying types of disability including physical, developmental, mental, cognitive, and sensory needs. By increasing one’s knowledge and use of inclusive design strategies adult educators can improve the accessibility of academic content encountered by learners, thus reducing the need to provide accommodations after the instructor has created the content. The implementation of universal design principles in learning environments can help to change the dominant paradigm that privileges specific learning methods over others. By modeling change at the institutional and program level, inclusive education practices such as Universal Design for Learning, can be shared with other adult educators to improve outcomes and further promote equality across learning institutions.

### **Recommendations for Increasing Accessibility in Adult Education**

In addition to taking a Universal Design approach in the classroom, adult educators can implement accessible strategies into their practice

and course materials. Adult educators are instrumental in the facilitation of accommodations for students with disabilities and inclusive education practices overall because they create and disseminate academic content. There are steps that adult educators can take to ensure that their instructional content is accessible to learners with disabilities. The following methods can be immediately applied to your instructional approach and will begin to reduce the barriers to inclusion that exist within common education practices.

One of the first steps that adult educators can take is to include a statement of accessibility in course syllabi and organizational materials. Take steps to identify alternative options for learners. If working in an adult literacy program, provide learners with information regarding the ADA and high school equivalency testing accommodations. In higher education environments, connect with the campus disability service office for guidance on providing accommodations and creating inclusive classroom environments. The practice of offering information for learners regarding accommodations shows learners that the instructor is knowledgeable about accessibility and accepting towards individuals with diverse abilities.

When creating learning materials, use headings & styles in Word documents instead of using bold and large print to signify important document sections. The preset headings and styles in Word are compatible with screen readers. The same principles are true with PowerPoint presentations. PowerPoint offers presentation themes which are already set up for compatibility with assistive technologies. For presentations and other course materials, use high-contrast styles. High contrast style involves making sure that the color content is appropriate for all learners. Dark writing on a dark background is difficult to read while light writing on a light background is similarly difficult to read. In addition to contrast issues, carefully consider the use of color in materials. Avoid using color as an identifier or to provide directions in course assignments. For example, do not have learners circle all of the blue words or all of the red numbers. Some learners cannot see color readily and the use of color as part of a course assessment can be limiting. Select fonts that are in the Sans Serif category. Sans Serif fonts such as Helvetica, Avant Garde, Arial, and Geneva do not have extending features, called serifs, at the ends of the letters. Fonts that do not have serifs are easier to read because they do not contain the additional extending details that serif fonts include.

When scanning documents to Portable Document Format (PDF) file, take steps to make them searchable by assistive technologies. PDF files create images of documents that are not readable by assistive technologies unless the instructor converts them to recognizable text. Instructors often copy materials into PDF format to share in the classroom without taking the steps necessary to make the PDF compatible with assistive technologies. In Adobe Acrobat Pro there is a recognize text option available in the software toolbar. For more information on how to ensure PDF accessibility refer to the Adobe Acrobat user guides available within the software. For graphics in learning materials, create Alternative Text for images (ALT text). ALT text describes pictures presented in online formats. With multi-media content, use videos that have closed captioning. Closed captioning is the text subtitles on the screen that provides the script of the narration in the video. If creating original videos include closed captioning. Websites such as YouTube offer instructions on how to caption videos in addition to offering auto-captioning features to videos that are labeled in public and unlisted domains. If closed captions on videos are not available, provide a transcript of the video as an option for learners.

In adult education programs that focus on preparing learners for high school equivalency testing, provide information about how to receive accommodations when taking the test. According to the Learning Disabilities Association of America, “some testing accommodations do not require documentation, such as earplugs, one test per day, priority seating, large-print test, straightedge, temporary adhesive with spatial directions, magnifying devices, colored transparent overlays, clear transparent overlays, highlighting, and the use of graph paper for working math problems” (2017).

It is essential to confirm that learners are aware of the various accommodations available to them and to provide assistance with accessing the appropriate services necessary for success. The Learning Disabilities Association of America, [www.ldamerica.org](http://www.ldamerica.org), provides resources for professionals who work with individuals with learning disabilities including testing accommodations, strategies for teaching learners with disabilities, and information about the different types of learning disabilities. The U.S. Department of Education provides resources for programs and educators regarding accessibility requirements and practices necessary to support learners with disabilities. Their website, [www.ed.gov](http://www.ed.gov), offers information about disability discrimination, laws regarding disability discrimination, and details relating to specific education environments.

### Promote Disability Etiquette

Even though institutions provide guidelines for disability etiquette, the practices are not fully integrated into the institutional culture. According to the Merriam Webster Dictionary, the term etiquette, means “the rules indicating the proper way to behave” (etiquette, n.d). Disability etiquette practices promote full inclusion of disabled persons in society and challenges ableism that is present in society. According to Griffin, Peters, and Smith (2007), “Perspectives on disability are shaped by cultural beliefs about the value of human life, health, productivity, independence, normality, and beauty. Such beliefs are reflected through institutional values and environments that are often hostile to people whose abilities fall outside of what is culturally defined as normal” (p.336). Modeling inclusive behaviors and reflecting upon able-bodied privilege is an important step for organizations to take when shifting to a disability welcoming approach. According to Tatum (2013), the direct implementation of the ADA is loosely enforced and that in order to address ableist practices individuals need to take steps to avoid ableism in daily life (Sec 6). For those in the dominant, temporarily, able-bodied, group, disability oppression is not easily recognized. According to Bell (2007), “members of dominant or advantaged groups also internalize the system of oppression and can operate as agents of the system by perpetuating oppressive norms, policies, and practices” (p.12). This internalization can lead to feelings of fear, guilt, and avoidance in order to continue to see society through a distorted lens (Bell, 2007). To change the institutional privilege, adult educators should evaluate the ways in which their practices ignore disability and continue to support privilege. According to Griffin, et al., (2007), “People with disabilities experience discrimination, segregation, and isolation as a result of other people’s prejudice and institutional ableism, not because of the disability itself” (p. 342). Discrimination has roots in individual fear and insecurity which creates stereotypes that persist in education and in society. Fairness in practice is an essential component of adult education practice. According to Brookfield and Holst, (2011), “Fairness requires a good faith commitment of people of very different racial group memberships, ethnic affiliation, and cultural identity to learn to appreciate the different ways members of each group view the world and consider what counts as appropriate action” (p. 13). The equality of education is supported by the notion that we can learn to live with “profound difference” and discover

how to exist with a collective identity designed to include instead of diminishing the rights of others (Brookfield & Holst, 2011).

### Conclusion

Adult educators should understand the different aspects of the accommodations needed for students with disabilities and utilize inclusive education principles such as Universal Design for Instruction. Just as architects design buildings to accommodate individuals with disabilities; adult educators can create academic content that has accommodative features built into the design. Accessibility practices and the rights of learners with disabilities to pursue education is an important issue for every educator to consider. There is a need for academic content to be accessible to all participants and for adult educators to promote inclusion in all aspects of the learning environment. Acquiring accessible course content is one of the most common barriers to success for students with disabilities (Timmerman & Mulvihill, 2015).

Universal Design for Instruction is an appropriate strategy to use to account for the need to accommodate students with varying types of disabilities. Increasing the knowledge and inclusive design tools of adult educators can reduce the need to provide accommodations after the content has been created. Universal Design for Learning approaches have been shown to improve the accessibility of academic content encountered by learners and to promote barrier-free learning. The implementation of Universal Design principles in adult learning environments can foster change in an educational system which values specific learning methods over others. We can share knowledge of inclusive practices, such as Universal Design for Learning, by modeling change at the institution and program level improving outcomes and further promoting equality for all adult learners.

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