



National Disability Center
for Student Success

The Campus Accessibility Measure:

Toward Better Research and Understanding of the Disabled Student Experience in Postsecondary Education

January 2025

RESEARCH MEASURE COMPANION

A companion document of "Access Leads to
Achievement: A National Report on Disabled College
Student Experiences"

Table of Contents

Acknowledgements	3
Research Team	4
Campus Accessibility Measure (CAM)	5
Exploratory Factor Analyses	6
Campus Accessibility Survey	11
Campus Accessibility Measure Scale Items	16
Recommended Reading	23

Acknowledgements

Funder Acknowledgement

This research was conducted by the National Disability Center for Student Success and was supported by funding from the Institute for Education Sciences (IES), U.S. Department of Education, under grant number R324C230008. The content and opinions expressed are those of the authors and do not necessarily represent the policy of or endorsement by the IES, the U.S. Department of Education, or the federal government.

Other Acknowledgements

The National Disability Center gratefully acknowledges the many individuals and organizations who contributed to the development of this report. We thank the research team for their dedication and expertise throughout this project. We also recognize the valuable contributions of mentors, reviewers, and designers for creating and translating data for this report. Finally, we acknowledge the individual contributions of each student who participated in our research and made this work possible.

Disclaimers & Limitations

- The majority of our research sample is students from 4-year institutions.
- Correlation does not imply causation, so results should be interpreted accordingly.
- These results are not generalizable to all U.S. undergraduate students who have disabilities.
- The authors caution against drawing conclusions or making policy decisions beyond the scope of these findings.

Suggested Citation

National Disability Center for Student Success. (2025). *The Campus Accessibility Measure: Toward Better Research and Understanding of the Disabled Student Experience in Postsecondary Education*. Institute for Education Sciences, U.S. Department of Education. nationaldisabilitycenter.org

Research Team

The National Disability Center’s interdisciplinary research team is led by people with disabilities – faculty members, researchers, and postsecondary students – who collaborate on a student-centered, asset-based approach that prioritizes understanding disabled students’ experiences and obstacles.

Stephanie W. Cawthon, PhD

Principal Investigator and Executive Director

Student Fellows and Graduate Research Assistants

Soren Aldaco, Undergraduate Student

Lily Alvarez, Doctoral Student

Maya Fela, Master’s Student

Desirée Lama, Doctoral Student

Ryan A. Mata, MA, Doctoral Student

Faculty Cadre and Leadership Team

Mike Bohlig, PhD

Maura Borrego, PhD

Shavonne Coleman, MFA

North Cooc, EdD

Andrew Dillon, PhD

Denisa Gándara, PhD

Earl Huff, Jr., PhD

Alison Kafter, PhD

Jen Moon, PhD

Greg Roberts, PhD

Kim T. Rodriguez, MA

The Campus Accessibility Measure (CAM)

The Campus Accessibility Measure (CAM) was designed to be used in research of U.S. postsecondary students enrolled in technical training, community college, and 4-year college programs.

In contrast with other surveys in the field, this measure is NOT designed to focus only on students with disabilities. Accessibility is experienced by all students in many ways, not just those who may request accommodations from the institution. Further, formal disability disclosure rates are quite low, meaning that a focus only on targeted supports misses a large proportion of the disabled population. Reflecting both the general and specific nature of accessibility in postsecondary settings, this measure includes questions that are answered by all students, with a subset that are only provided to students who self-disclose as having a disability.

There are a wide range of postsecondary programs in the U.S. Items related to program characteristics provide helpful context for how to interpret findings and, in some cases, for skip logic so that students are answering questions that are relevant to their learning environment. The range of postsecondary settings is also evident in the terminology used in the items, broadening out from what is traditionally only measured in a single campus or type of postsecondary program.

While not a part of the measure itself, our measure development process included significant work in creating demographic questions that are related to disability and higher education. These demographic items were piloted and the focus of significant rounds of revision through cognitive labs. These questions are provided here as examples of how disability constructs were measured in relation to the outcomes in the Campus Accessibility Measure. We provide these items for consideration in your future data collection efforts.

This survey is designed to be administered in an online format such as Qualtrics. We recommend a secure delivery platform that can reliably detect bots or other fake users, as online platforms are particularly susceptible to hacking when there is a financial incentive advertised as part of the survey protocol.

Survey Development

Development of the College Accessibility Measure (CAM) focused on the complexity of accessibility in postsecondary education across classroom, institution, and opportunities for interaction with other students and peers. CAM development was driven by previous research and an understanding that a holistic approach to accessibility necessarily reflects the systemic nature of postsecondary education.

CAM assesses student experiences in and out of the classroom and takes a particular focus on understanding disabled student experiences, including class participation, social engagement, accommodations use, and disability disclosure.

The measure went through multiple stages of development, including:

- Literature review (Summer 2023)
- Instrument item generation (Fall/Winter 2023)
- Cognitive labs for measure + demographic items (Winter 2023/24)
- Pilot sampling at a local university (Spring 2024)
- Item refinement and national pilot sampling (Spring/Summer 2024)
- Exploratory Factor Analysis (Fall 2024)
- Measure revision (Fall 2024)

Exploratory Factor Analyses

The following sections outline the most recent stage in the measure development process, exploratory factor analysis (EFA). The NDCSS conducted the EFA to understand the extent to which groups of CAM items represented latent (or underlying) concepts related to student experiences on campus). This work was led by Ryan A. Mata as part of his dissertation work on this project.

About the EFA Sample

EFA was conducted using the data from the national sample collected in Spring/Summer 2024. NDCSS recruited a total of 532 participants through Prolific.co to take the survey. Participants were eligible if they were at least 18 years of age, were currently enrolled in a 4-year college, 2-year college, or technical/trade program, and were in the United States. After removing incomplete responses and ineligible participants, the survey yielded 503 responses. The survey was administered online through Qualtrics and included a combination of multiple choice, Likert-scale, write-in, and open-ended questions. Participants took a median time of 6 minutes 51 seconds to take the survey.

About the CAM Factors

There are 18 items and three factors in the final model.

Factor #1: Classroom-level Accessibility.

The first factor is seven items and assesses perceptions and experiences of classroom-level accessibility. A sample item is: “My instructors facilitate conversations so that everyone has a chance to participate.” Students answered each question according to the number of instructors that exhibit the behavior/attitude/belief that is asked about in the question, with a response scale of 0 = None of my professors to 5 = Five or more of my professors. Responses were divided by the number of courses the student reports taking in the current semester to produce an average score ranging from 0 to 1, with higher scores representing higher levels of perceptions and experiences of classroom accessibility ($\alpha = 0.75$).

Factor #2: Campus-level Accessibility.

The second factor consists of six items that assess perceptions and experiences of campus-level accessibility. A sample item is: “College-wide online materials (e.g., websites, PDFs, videos) are easy for me to use.” Students rated their responses on a scale of 1 = Strongly Disagree to 5 = Strongly Agree. Items were combined into an average score, with higher scores representing higher levels of perceptions and experiences of campus-level accessibility ($\alpha = 0.73$).

CAM includes an additional set of items displayed to disabled students indicating on the survey that they are registered for accommodations through their institution. The items are intended for use in subset analyses of disabled student CAM responses and assess perceptions of the efficiency, usefulness, and satisfaction with disability services processes and accommodations. A sample item is: “The accommodations request process is easy to use.” Students rated their responses on a scale of 1 = Strongly Disagree to 5 = Strongly Agree. Items were analyzed individually as well as combined into average score, with higher scores representing more positive evaluations of disability services processes and supports.

Factor #3: Social Engagement and Belonging.

The third and final factor includes five items and assesses social engagement and belonging in higher education. A sample item is: “I participate in activities at my college.” Students rated their responses on a scale of 1 = Strongly Disagree to 5 = Strongly Agree. Items were combined into an average score, with higher scores representing higher levels of social engagement and belonging ($\alpha = 0.75$).

Demographics Items

A variety of demographic questions assess student social and academic profiles in the CAM. In terms of academic demographics, students reported their major, institution type (two-year, four-year, or technical/trade program), enrollment status (part-time or full-time), semester modality (in-person, hybrid, or online), number of courses enrolled, disability status, types of disability, method of disability diagnosis, type of high school attended (public, private, charter, home, or other), classification, accommodations use (in both high school and in postsecondary school), international and first-generation student statuses, and employment level (none, 1-10, 11-20, 21-40, or 40 or more hours per week). Additional social demographics such as student gender, sexual orientation, race, and ethnicity were also collected.

Factor Extraction

Before conducting the EFA, the data were assessed to ensure suitability for factor analysis. The overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.8, indicating very good adequacy for the EFA. Further, Bartlett's test of sphericity was significant at the $p < 0.001$ level, suggesting correlations between items were sufficiently large for the factor analysis.

The original pilot version of the CAM contained 34 items, including 13 questions worded to assess instructor and classroom-level attitudes, beliefs, and practices, and 21 items assessing broader student perceptions of campus access and social engagement.

The EFA was conducted using maximum likelihood extraction to identify the latent structure of the 34 survey items that assess accessibility. An initial scree plot indicated that factor analysis was likely to produce three factors with eigenvalues greater than one. An oblique rotation was employed to improve the interpretability of the factor solution, given that student experiences of accessible classrooms and campuses were theorized to be somewhat related.

Factor Retention

Based on the scree plot analysis and the theoretical interpretability of the factors, three factors were retained. The initial EFA indicated that the retained factors accounted for 30% of the total variance. However, after multiple iterations of item deletion based on weak factor loadings (< 0.3), ambiguous cross-loadings, and inspection of mean item complexity, a final three-factor solution was determined that included 18 items and accounted for 35% of the total variance.

Construct/Items	Factor Loading			α
	MR1	MR3	MR2	
Overall Measure				0.79
Classroom-level Accessibility				0.75
My instructors are helpful and ready to support me.	0.66			
I fully participate in class activities.	0.39			
My instructors have a welcoming and positive attitude about disability.	0.47			
My instructors use a variety of activities and materials in class (e.g., readings, discussions, group activities, projects).	0.51			
My instructors facilitate conversations so that everyone has a chance to participate.	0.71			
My instructors are flexible and responsive to different student learning needs.	0.51			
My instructors are willing to help create flexible seating arrangements and workspaces.	0.49			
Campus Accessibility				0.73
All online materials in class (e.g., websites, PDFs, videos) are easy for me to use.		0.58		
I witness bullying or judgment of others related to their disabilities at my college.		0.45		
Our online course system (e.g., Canvas, Blackboard, etc.) is easy for me to use.		0.54		
College-wide online materials (e.g., websites, PDFs, videos) are easy for me to use.		0.67		
I can get to my campus with a reasonable time and effort.		0.56		
Once on campus, I can get to my classes with a reasonable time and effort.		0.52		
Social Engagement and Belonging				0.75
I am likely to ask for help from college resources if I need it (e.g., advising, financial aid, tutoring, career planning, or wellness).			0.33	
I am friends with my classmates.			0.72	
I participate in activities at my college.			0.71	
I feel like I belong at my college.			0.52	
I participate in activities at my college.			0.66	
SS Loadings	2.27	2.15	1.94	
Proportion of Variance	0.13	.012	.011	
Cumulative Variance	0.13	0.25	0.35	

Factor Structure

The oblique, rotated factor matrix determined that seven items loaded strongly onto Factor 1, which was interpreted as Classroom-level Accessibility, with loadings between 0.39 and 0.71. The second factor included six items and was interpreted as Campus Accessibility with loadings ranging from 0.45 to 0.67. Factor 3 was interpreted as Social Engagement and Belonging and included five items with loadings between 0.33 and 0.72.

Reliability Analysis

Internal consistency was evaluated using Cronbach's alpha. The reliability coefficients of the three factors were $\alpha = 0.75$, $\alpha = 0.73$, and $\alpha = 0.75$, respectively, indicating acceptable reliability given this initial stage of the CAM development. The overall scale reliability was $\alpha = 0.79$, reflecting acceptable-to-good internal consistency.

Interpretation and Implications

The identified factor structure aligns with theoretical expectations that perceived accessibility may vary based on evaluations of the classroom environment versus attitudes, beliefs, and practices espoused or demonstrated at the college-wide level. Further, a third factor provided a novel angle of access in higher education accounting for the social relatedness, connection, and engagement of students at their institutions.

Items that were not retained in the EFA include a subset of items shown only to disabled student respondents. The items include questions about satisfaction and ease of access with the accommodations process, negative instructor beliefs towards disabled students, and experiences with bullying or discrimination based on disability. Educators, researchers, or other practitioners utilizing the CAM may retain these items when administering the CAM to analyze subsets representing disabled student responses, even if they are not part of the overall CAM factor structure.

Campus Accessibility Survey

The items below were used in the full implementation of the Campus Accessibility Measure. This includes demographic items, items that are for all participants and some that are only for students who self-disclose as having a disability, and open ended questions. The items that were part of the final factor loading for the three construct levels are in the table on page 9.

- Text provided in » *with italics* are instructions to researchers.
- Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.
- Items with (Reverse) are reverse coded in analyses, so that positive responses receive a higher score.
- We encourage the use of bolding (and not italics) to emphasize key ideas in survey items.

Survey Introduction and Eligibility Questions

Section Introduction Text: Welcome! This survey asks about your college experience. Before starting, you will receive a consent form to review. You can provide your consent at the bottom of the next page. After agreeing, the survey will begin. Your answers will be kept confidential.

Are you currently an undergraduate enrolled in a technical training program, college, or university in the United States?

- Yes, I am enrolled in a technical training program or technical college.
- Yes, I am enrolled in a 2-year or community college.
- Yes, I am enrolled in a 4-year college or university.
- No, I am not enrolled in a training or higher education program at this time.

Are you currently 18 years of age or older?

- Yes, I am currently 18 or older.
- No, I am not yet 18 years old.

What kind of high school(s) did you attend? (Please select all that apply.)

- Public high school
- Charter high school
- Private high school
- Home schooled
- Other (please describe):

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Demographic items

» *Our focus on disabilities that persisted for at least 4 months was tied to focusing on disabilities that may require academic support of one semester or longer. We included direct mention of chronic health and mental health because many people do not see those as disability categories, even though they can qualify a student for accommodations and support services.*

Disability Status

Do you have a disability, chronic health, or mental health condition that has lasted 4 months or longer?

- Yes
- No
- Unsure
- Prefer Not to Say

» *If YES or UNSURE to Disability Status, go to the next section. If NO or PREFER NOT TO SAY, skip to the full CAM measure items.*

Disability Type*

How would you describe your disability or chronic conditions?

(Please select all that apply. From here forward in the survey we will use the term “disability” to refer to all disabilities and chronic conditions.)

- ADD/ADHD
- Autism
- Blind or low vision
- Deaf or hard of hearing
- Health-related disability
- Learning disability
- Mental health condition
- Mobility-related disability
- Neurodivergent
- Speech-related disability
- Other: Please describe

» *These response options include categories that are both from ADA and from current identity labels, such as neurodivergent. Some students preferred seeing disability/ies throughout the survey.*

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Disability Diagnosis*

How was your disability diagnosed or identified? (Please select all that apply.)

- Medical diagnosis from a doctor
- Psychological/academic testing
- Therapist or mental health clinician
- Self diagnosis
- Parent or family member
- Teacher referral
- I don't know
- Other. Please describe:

Disability Time*

Was your disability first diagnosed or identified during college?

- Yes
- No
- Prefer not to say

Disability Disclosure*

Have you shared information about your disability with anyone at your college?

- Yes
- No
- Prefer not to say

» *IF NO ANSWER:*

If you have not shared information about your disability with anyone, why not?

» *IF YES ANSWER the following:*

Disclosure Friends*

Have you shared information about your disability with your friends at your college?

- Yes
- No
- Prefer not to say

Disclosure Instructors*

Have you shared information about your disability with instructors or teaching assistants at your college? (Please select all that apply.)

- Yes, with an official letter from an accommodations office
- Yes, but without an official letter from an accommodations office
- No, I have not shared information with my instructors or teaching assistants
- Prefer not to say

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Disclosure Institution*

Have you shared information about your disability with the Disability Services office at your college? (e.g., the people who create the accommodation letters)

- Yes
- No
- Prefer not to say

Accommodations High School*

Did you have a 504, IEP or any accommodations in high school?

- Yes
- No
- Prefer not to say

» *IF YES ANSWER:*

Accommodations High School Type*

What kind of accommodations did you use in high school?

(Please select all that apply.)

- Extra time on tests and assignments
- Dictionary or glossaries
- Directions read aloud
- Large print or braille
- Sign Language Interpreters
- Quiet or separate settings for assignments and tests
- Graphic organizers or structured instructions
- Speech to text for assignments
- Captioning
- Note taking support
- Assistive technology
- Socialization training
- Alternative formats (course materials or assignments)
- Other. Please describe:
- None of the above

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Do you currently use accommodations at your college?*

- Yes
- No
- Prefer not to say

» *IF YES ANSWER:*

What kind of accommodations do you currently use in college?

(Please select all that apply.)

- Assistive technology
- Extra time on tests and assignments
- Dictionary or glossaries
- Directions read aloud
- Large print or braille
- Sign Language Interpreters
- Quiet or separate settings for assignments and tests
- Graphic organizers or structured instructions
- Speech to text for assignments
- Captioning
- Assistive technology
- Socialization training
- Alternative formats (course materials or assignments)
- Note taking support
- Other. Please describe:
- None of the above

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Campus Accessibility Measure Scale Items

» *This next section includes the items that make up the main Campus Accessibility Measure, including items in the three factors as well as additional items specific to students who identify as having a disability. Because experiences may vary across instructors, the measure begins with a question that establishes the number of classes taken in that semester or term:*

How many classes are you enrolled in this semester or term?

- 1 class
- 2 classes
- 3 classes
- 4 classes
- 5 or more classes

» *This item is important because for a number of the Campus Accessibility Measure items, the responses are tied to the number of classes. This helps to capture the range of experiences that may vary from class to class, as well as the variation in how many classes students might take. When cleaning up the data and preparing for analyses, be sure to create new variables with the number of classes as the denominator and the item response as the numerator.*

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Classroom Level Accessibility

Section Introduction Text: The next set of questions asks about your experiences in class. Please think about your [current] classes and instructors when answering these questions. Thank you!

Unless otherwise noted, items use this scale:

None of my instructors	One of my instructors	Two of my instructors	Three of my instructors	Four of my instructors	Five of my instructors
---------------------------	--------------------------	--------------------------	----------------------------	---------------------------	---------------------------

My instructors are helpful and ready to support me.

I fully participate in class activities.

My instructors have a welcoming and positive attitude about disability.

My instructors express negative attitudes about people with disabilities or mental health conditions.

My instructors have negative attitudes about my own disability or mental health conditions.*

My instructors use a variety of activities and materials in class (e.g., readings, discussions, group activities, projects).

My instructors facilitate conversations so that everyone has a chance to participate.

My instructors provide enough time to complete assignments and tests.

My instructors are flexible and responsive to different student learning needs.

My instructors are willing to help create flexible seating arrangements and workspaces.

My instructors use captions on the videos they share in class.

All online materials in class (e.g., websites, PDFs, videos) **are easy for me to use.**

None of their materials	A few of their materials	Some of their materials	Most of their materials	All of their materials	Not applicable
----------------------------	-----------------------------	----------------------------	----------------------------	---------------------------	-------------------

» *Note that this item gets coded on a scale of 1 to 5 and “not applicable” is not included in scoring.*

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Campus Level Accessibility

Campus Culture

These items use the following scale:

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure
-------------------	-------------------	----------------	----------------	----------

My college is welcoming of people with disabilities.

I experience bullying or judgment related to my disability at my college.* (Reverse)

I witness bullying or judgment of others related to their disability at my college.

(Reverse)

» *Note that “Not Sure” gets coded as a 3 on the scale of 1-5 even though it is presented as the last item for students to select.*

Campus Technology

These items are rated on the following scale:

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not sure	Not applicable
-------------------	-------------------	----------------	----------------	----------	----------------

Videos shared on campus (e.g., the gym, in hallways, or student centers) **have captions.**

Our online course system (e.g., Canvas, Blackboard, etc.) **is easy for me to use.**

College-wide online materials (e.g., websites, PDFs, videos) **are easy for me to use.**

Physical Plant

Do you go to a physical campus or training site as part of your program or college experience this semester?

- Yes, I got to a physical campus or training site.
- Part of my learning is online – my time is split between online learning and going to a physical campus or training site.
- All of my learning is online – I do not go to a physical campus or training site.

» *If ALL LEARNING IS ONLINE, participants skipped to the next block.*

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

The following items use this scale:

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not applicable
-------------------	-------------------	----------------	----------------	----------------

Classrooms at my campus are free of distracting noise.

Classrooms at my campus have adaptable seating and workspaces.

I can get to my campus with a reasonable time and effort.

Once on campus, I can get to my classes with a reasonable time and effort.

Parking at my campus is easy for me to use.

Institution Support Services

» *These questions are about support services at the institution.*

The following items use this scale:

Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not applicable
-------------------	-------------------	----------------	----------------	----------------

All students were asked:

I feel supported by the programs and resources at my college (e.g., advising, financial aid, tutoring, career planning, or wellness).

I am likely to ask for help from college resources if I need it (e.g., advising, financial aid, tutoring, career planning, or wellness).

» *If “currently use accommodations” is YES, the participant answers the following questions:*

The accommodations request process is easy to use.

My college accommodation approvals are fast and timely.

I have consistent service providers (e.g., note-takers, sign language interpreters, mental health counselors).

My accommodations meet my needs.

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Social Engagement

The following items use this scale:

Strongly
disagree

Somewhat
disagree

Somewhat
agree

Strongly agree

Not applicable

I am friends with my classmates.

I participate in activities at my college.

Social activities at my college are easy to participate in and inclusive.

I feel like I belong at my college.

Additional Demographics

» *These items provided additional context for more nuanced analyses by researchers.*

Section Introduction Text: Next, we would like to know a little bit more about you. We are almost at the end of the survey!

What is your enrollment status?

- Part-time (fewer than 12 credit hours)
- Full-time (12 or more credit hours)
- I have a Course Load Reduction

Are you an international student?

- Yes
- No
- Prefer not to say

Are you a first-generation college student? (e.g., the first person in your family to attend college.)

- Yes
- No
- Unsure
- Prefer not to say

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Are you currently employed outside of school?

- Yes, 1 to 10 hours each week
- Yes, 11 to 20 hours each week
- Yes, 21 to 40 hours each week
- Yes, 40 hours or more
- No

What best describes your gender identity? (Please select all that apply.)

- Agender/I don't identify with any gender
- Gender-Queer or Gender-Fluid
- Man
- Non-binary
- Questioning or Unsure
- Transgender Man
- Transgender Woman
- Two-spirit
- Woman
- Prefer not to say
- Two options selected
- My gender is not listed. My gender is:

What best describes your sexual identity/sexual orientation?

(Please select all that apply.)

- Aromantic
- Asexual
- Bisexual
- Fluid
- Gay
- Lesbian
- Pansexual
- Queer
- Questioning or Unsure
- Straight/Heterosexual
- Prefer not to say
- Not listed. My sexual orientation is: (Write-in)

Are you of Hispanic, Latino/a/e, or of Spanish origin? (Please select all that apply.)

- No, not of Hispanic, Latino/a/e, or of Spanish origin
- Yes, Mexican, Mexican-American, Chicano/a
- Yes, Puerto Rican
- Yes, Cuban
- Yes, other Hispanic, Latino/a/e, or of Spanish origin (e.g., Argentinean, Dominican, Nicaraguan, Salvordian, Spaniard)

Text provided in » *with italics* are instructions to researchers.

Items with an asterisk (*) were provided only to participants who self-disclosed as having a disability.

Which of the following best describes you? (Please select all that apply.)

- Black, African, or African American
- American Indian, Indigenous, Native American or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- White
- Prefer not to say
- Race not listed. I identify as: (Write-in)

Please share your ethnicity.

(Please select all that apply. Specifying in the text box is optional.)

- White (e.g., German, Irish, English, Italian, Polish, French, etc.) If you wish, please specify in the text box below:
- Black or African American (e.g., American African, Jamaican, Haitian, Nigerian, Ethiopian, Somali, etc.) If you wish, please specify in the text box below:
- Asian (e.g., Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese, etc.) If you wish, please specify in the text box below:
- American Indian or Alaska Native (e.g., Navajo Nation, Blackfoot Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, etc.) If you wish, please specify in the text box below:
- Middle Eastern or North African (e.g., Lebanese, Iranian, Syrian, Moroccan, Algerian, etc.) If you wish, please specify in the text box below:
- Native Hawaiian or Other Pacific Islanders (e.g., Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese, etc.) If you wish, please specify in the text box below:
- Some other ethnicity. If you wish, please specify in the text box below:
- Multiple ethnicities. If you wish, please specify in the text box below:

Intersectionality

Section Introduction Text: Thank you so much for filling out this survey. We have one question left before we get to the end. Please think about what words or phrases come to mind when you think about this question. There are no right or wrong answers!

What does it mean to you to have a disability/ies? How does your disability experience overlap with other identities (e.g., race, ethnicity, gender, sexual orientation, country of origin)?*

Recommended Reading

While not a comprehensive list, the following readings provided important perspectives that informed the development of the Campus Accessibility Measure. This list also includes methodological resources used in the measure development process.

1. Americans with Disabilities Act of 1990, 42 USC § 12131-12134 (1990).
2. Aquino, K. C., & Bittinger, J. D. (2019). *The self-(un)identification of disability in higher education*. *Journal of Postsecondary Education and Disability*, 32(1), 5-19.
3. Berghs, M., Atkin, K., Hatton, C., & Thomas, C. (2019). Do disabled people need a stronger social model: a social model of human rights? *Disability & Society*, 34(7-8), 1034-1039.
4. Biesta, G. (2021). Pragmatism and the philosophical foundations of mixed methods research. *The SAGE Handbook of Mixed Methods in Social and Behavioral Research*. Sage Publications Ltd.
5. Bogart, K. R., Logan, S. W., Hospodar, C., & Woekel, E. (2019). Disability models and attitudes among college students with and without disabilities. *Stigma and Health*, 4(3), 260-263.
6. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
7. Bromley, K. W., Murray, C., Rochelle, J., & Lombardi, A. (2020). Social support among college students with disabilities: Structural patterns and satisfaction. *Journal of Student Affairs Research and Practice*, 58(5), 477-490.
8. Brown, K., Peña, E., Broido, E., Stapleton, L., & Evans, N. (2019). Understanding Disability Frameworks in Higher Education Research. *In Theory and Method in Higher Education Research* (Vol. 5, pp. 19-36). Emerald Publishing Limited.
9. Carroll, J. M., Pattison, E., Muller, C., & Sutton, A. (2020). Barriers to bachelor's degree completion among college students with a disability. *Sociological Perspectives*, 63(5), 809-832.
10. Cawthon, S. W., & Cole, E. V. (2010). Postsecondary students who have a learning disability: Student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and Disability*, 23(2), 112-128.
11. Cawthon, S.W., Ramesh, G., Mata, R.A., Lama, D., Guerra, M., & Freels, J. (2023). *Connecting the Dots: Community Engagement in the Implementation of the Ally Accessibility Platform*. [Conference presentation]. 2023 Annual Convention of the Association for the Study of Higher Education.
12. CAST. (2018). *Universal Design for Learning Guidelines Education*, Minneapolis, Minnesota.
13. Cole, E. V., and Cawthon, S.W. (2015). Self-disclosure decisions of university students with learning disabilities. *Journal of Postsecondary Education & Disability*, 28(2): 163-179.
14. Creswell, J. W., & Poth, C. N. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (3rd ed.) SAGE.

15. Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research*. (3rd ed.). SAGE.
16. Creswell, J. W. (2022). *A Concise Introduction to Mixed Methods Research*. (2nd ed.). SAGE publications.
17. Cech, E. A. (2023). Engineering ableism: The exclusion and devaluation of engineering students and professionals with physical disabilities and chronic and mental illness. *Journal of Engineering Education*, 112(3), 462-487.
18. Dolmage, J. T. (2017). *Academic Ableism: Disability and Higher Education*. Ann Arbor, MI: University of Michigan Press.
19. Dryer, R., Henning, M. A., Tyson, G. A., & Shaw, R. (2016). Academic achievement performance of university students with disability: Exploring the influence of non-academic factors. *International Journal of Disability, Development and Education*, 63(4), 419-430.
20. Fleming, A. R., Oertle, K. M., Plotner, A. J., & Hakun, J. G. (2017). Influence of social factors on student satisfaction among college students with disabilities. *Journal of College Student Development*, 58(2), 215-228.
21. Given, L. M. (2008). Pragmatism. *The SAGE Encyclopedia of Qualitative Research Methods* (Vol. 0, pp. 672-675). SAGE Publications, Inc.
22. Gordon, R. (2019). 'Why would I want to be anonymous?' Questioning ethical principles of anonymity in cross-cultural feminist research. *Gender & Development*, 27(3), 541-554.
23. Grimes, S., Southgate, E., Scevak, J., & Buchanan, R. (2019b). University student perspectives on institutional non-disclosure of disability and learning challenges: reasons for staying invisible. *International Journal of Inclusive Education*, 23(6), 639-655.
24. Hsiao, F., Zeiser, S., Nuss, D., & Hatschek, K. (2018). Developing effective academic accommodations in higher education: A collaborative decision-making process. *International Journal of Music Education*, 36(2), 244-258.
25. Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14-26.
26. Kafer, A. (2013). *Feminist, queer, crip*. Indiana University Press.
27. Kerschbaum, S. L., Eisenman, L. T., & Jones, J. M. (Eds.). (2017). *Negotiating Disability: Disclosure and Higher Education*. University of Michigan Press.
28. Kohli, J., & Atencio, M. (2021). 'The person with a disability gets to define their disability': exploring identity formation through the voices of university students. *Disability & Society*, 38(5), 819-841.
29. Lama, D., Mata, R. A., Cawthon, S.W. (2024) *Access for all? Including the student perspective in measures of campus accessibility*. [Paper Presentation]. American Educational Research Association 2025 Annual Conference. Denver, Colorado.
30. Lillywhite, A., & Wolbring, G. (2022). Undergraduate disabled students as knowledge producers including researchers: Perspectives of disabled students. *Education Sciences*, 12(2), 77.

31. Lowenthal, P. R., Humphrey, M., Conley, Q., Dunlap, J. C., Greear, K., Lowenthal, A., & Giacumo, L. A. (2020). Creating accessible and inclusive online learning: Moving beyond compliance and broadening the discussion. *Quarterly Review of Distance Education*, 21(2).
32. Majid, M. A. A., Othman, M., Mohamad, S. F., Lim, S. A. H., & Yusof, A. (2017). Piloting for interviews in qualitative research: Operationalization and lessons learnt. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073-1080.
33. Marchetti, S., Schley, S., O'Neil, J., Elglaly, Y., Zuchegno, A., Mousley, K., Atkins, S. & Cawthon, S. (2019). Faculty perspectives on developing strategies to improve access in diverse post-secondary classrooms. *Learning Communities Journal*, 11(1).
34. Mata, R.A. & Borrego, M. (2024). *Disabled students in U.S. postsecondary education*. National Disability Center for Student Success.
35. Matthews, N. (2009). Teaching the 'invisible' disabled students in the classroom: disclosure, inclusion and the social model of disability. *Teaching in Higher Education*, 14(3), 229-239.
36. Mead, C., Price, C., Gin, L. E., Anbar, A. D., Collins, J. P., LePore, P., & Brownell, S. E. (2023). A comparative case study of the accommodation of students with disabilities in online and in-person degree programs. *PLoS one*, 18(10), e0288748.
37. Merchant, W., Read, S., D'Evelyn, S., Miles, C., & Williams, V. (2020). The insider view: tackling disabling practices in higher education institutions. *Higher Education*, 80(2), 273-287.
38. Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1), 48-76.
39. Newman, L. A., Madaus, J. W., Lalor, A. R., & Javitz, H. S. (2021). Effect of accessing supports on higher education persistence of students with disabilities. *Journal of Diversity in Higher Education*, 14(3), 353.
40. Nunes, Laliberté, N., & Rawle, F. (2023). The case for flexibility in online science courses: Strategies and caveats. *Biochemistry and Molecular Biology Education*, 51(1), 89-93.
41. Scherman, V., & Zimmerman, L. (2023). Harnessing mixed methods for research instrument development and legitimation. In *The Sage Handbook of Mixed Methods Research Design*. Sage Publications Ltd,
42. U.S. Department of Education, National Center for Education Statistics. (2018). *Characteristics and outcomes of undergraduates with disabilities*.
43. U.S. Department of Education, National Center for Education Statistics. (2023). *National Postsecondary Student Aid Study: 2020 Undergraduate Students*.



National Disability Center for Student Success

nationaldisabilitycenter.org

[↑ BACK TO TOP](#)

Suggested Citation:

National Disability Center for Student Success. (2025). *The Campus Accessibility Measure: Toward Better Research and Understanding of the Disabled Student Experience in Postsecondary Education*. Institute for Education Sciences, U.S. Department of Education.
nationaldisabilitycenter.org