

# Accessibility and Inclusive Teaching

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<http://www.sjsu.edu/cfd/teaching-learning/accessibility>

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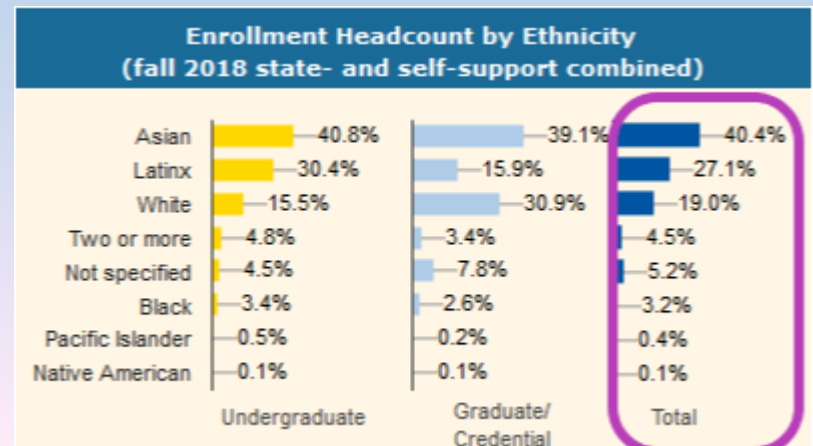
# Meet Two SJSU Students

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- Karen's story
- Sarina's story

# Who are Our Students?

- Individuals bring in different religion, culture background, skills, experiences, learning preferences/needs, and other characteristics to learning. View [Variability Matters](#) video. Is there an average student?
- According to [SJSU Fall 2018 ethnicity statistics](#), our students include Asian (40.4%), Latinx (27.1%), White (19%), Two or more (4.5%), Not specified (5.2%), Black (3.2%), Pacific Islanders (0.4%), native Americans (0.1%) ethnic background.
- 25.23% First Generation, 0.84% student vets, 1.26% student athletes, and 9.6% international students.
- Diversity also includes a wide range of physical, visual [sensory], hearing, learning [cognitive], attention, and communication abilities.
- In Education, does one size fit all?



# Disability Demographic Information

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- According to the [US Census Bureau report](#), about 56.7 million people — 19 percent of the population — had a disability in 2010
- The percentage of undergraduates who reported having a disability was **19.4 percent** in 2015-16.
- **26** percent of undergraduates who were veterans reported having a disability, compared with 19 percent of undergraduates who were not veterans.

~ [Fast Facts from National Center for Education Statistics](#)

# AEC Student Registration Data at SJSU

Data of students registered with Accessible Education Center (AEC) at SJSU from 2005 to 2018.

- An increase from 3% in Fall 2005 to 3.67% in Fall 2018

Semester	AEC Registered Students	SJSU Student Enrollment
Fall 2005	890 (3%)	29,975
Fall 2006	933 (3%)	29,604
Fall 2007	1073 (3%)	31,906
Fall 2008	1124 (3%)	32,746
Fall 2009	1127 (3.6%)	31,280
Fall 2010	1058 (3.6%)	29,076
Fall 2011	1127 (3.7%)	30,236
Spring 2012	1102 (3.9%)	28,002
Spring 2013	1125 (4.1%)	27,503
Spring 2015	1142 (3.8%)	29,954
Spring 2016	1069 (3.6%)	29,594
Spring 2017	1096 (3.75%)	29,200
Fall 2018	1300 (3.67%)	35,400

# Student Disclosure Issue

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- ...a gap between the reported national disability statistics
  - 19.4% of undergraduates nationally vs. 3.67% of SJSU data
  - 26% of student vets nationally vs. 0.84% of SJSU student vets
  
- Only about 35% of students choose to disclose their disability in college...

## Sources:

- Getzel, E., 2014
- Wagner, M., Newman, L, Cameto, R., Garza, N., & Levine, P., 2005
- Newman, L.A., & Madaus, J.W. (2014)

# Why Do So Many Student Not Receive Support?

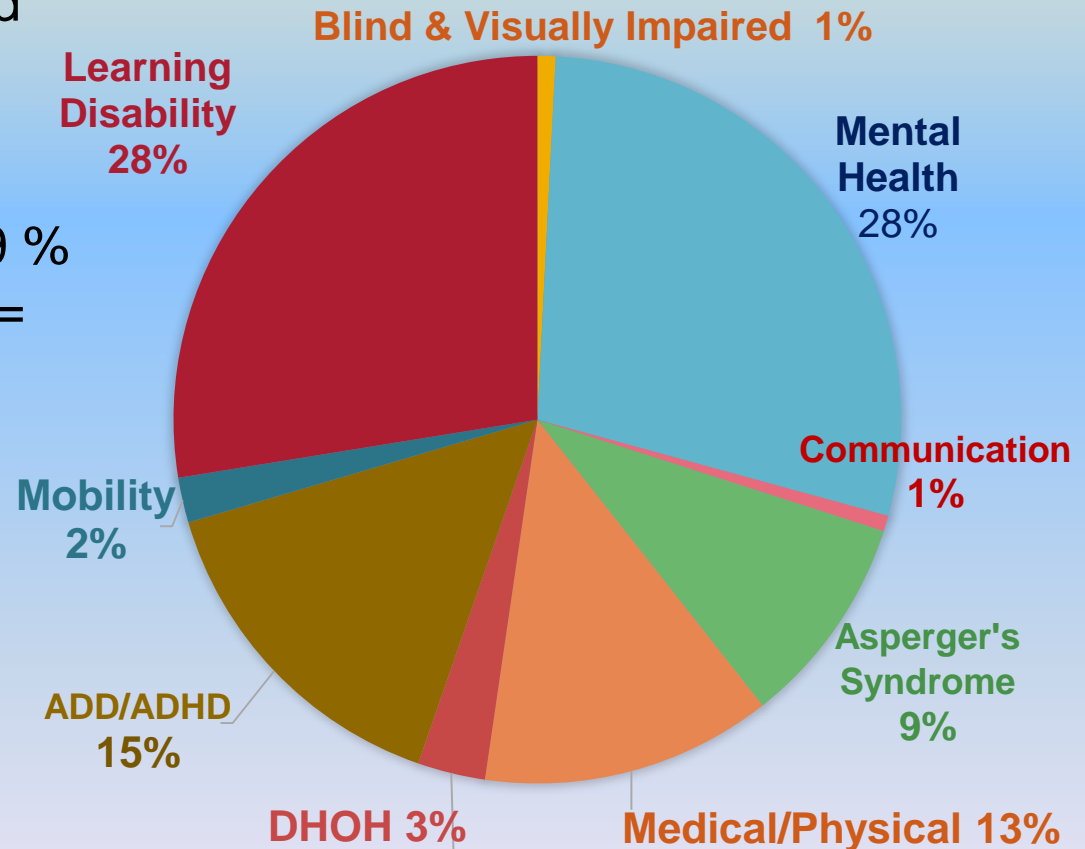
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- **Registration is voluntary:**
  - Different landscape than K-12. Many students opt to not “disclose.”
- **Students have never had supports before:**
  - Their needs are “new”, and/or were not recognized before.
- **They have difficulties accessing the services available to them:**
  - Locating the relevant units; completing assessments; following through in a timely way.
- **They prefer to eschew the process and forego the supports.**
  - They find the process of disclosing to each faculty member & in each class humiliating and stigmatizing
  - They deny needing support
  - They avoid the responsibility of managing accommodations
  - They want to turn over a new leaf – see if they can do without

# SJSU AEC Student Distribution

Type of disabilities registered at AEC in Fall 2018

- ADD/ADHD = 15%
- Asperger's Syndrome = 9 %
- Blind & Visually Impaired = 1%
- Communication = 1%
- DHOH = 3%
- Learning disability = 28%
- Medical/Physical = 13%
- Mental Health = 28%
- Mobility = 2%



Total = ~1300 (February, 2019)



# Types of Disabilities

Disabilities	Types
<u>Visual</u>	Blindness, low vision & color blindness
<u>Auditory</u>	Degree of hearing loss, deaf-blindness
<u>Motor</u>	<ul style="list-style-type: none"><li>• Traumatic Injuries: Spinal cord injury, Loss or damage of limb(s)</li><li>• Diseases &amp; Congenital Conditions: Cerebral palsy, Muscular dystrophy, Multiple sclerosis, Spinal bifida, ALS (Lou Gehrig's Disease), Arthritis, Parkinson's disease, Essential tremor</li></ul>
<u>Cognitive</u>	<ul style="list-style-type: none"><li>• Functional: Memory, Problem-solving, Attention, Reading, linguistic, and verbal comprehension, Math comprehension, Visual comprehension</li><li>• Clinical Cognitive disabilities: Autism, Down Syndrome, traumatic brain injury (TBI), and even dementia. Less severe cognitive conditions include attention deficit disorder (ADD), dyslexia (difficulty reading), dyscalculia (difficulty with math), and learning disabilities in general</li></ul>

➤ Source: [Web Accessibility in Mind](#) (WebAIM)

# In a Nutshell...

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- It is likely that somewhere between **10-20% of college students would qualify** for – and benefit from – accommodations suited to their learning needs. Yet typically, most campuses report that **3-4% of their students are registered** to receive such supports.
- Faculty are more open to providing additional supports for students with “**visible**” disabilities than to students with “**invisible**” disabilities.
- Faculty are generally **unaware** of – **but can readily learn and come to implement** – relatively simple practices and adjustments that can make a significant difference (e.g., UDL).

# The Laws

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- Americans with Disability Act (ADA) of 1990
- Section 504 of the Rehabilitation Act of 1973
  - "No otherwise qualified individual with handicaps in the United States . . . shall, solely by reason of her or his handicap, **be excluded from the participation in, be denied the benefits of, or be subjected to discrimination** under any program or activity receiving Federal financial assistance...."
- Section 508 of the Rehabilitation Act of 1973
  - Provides standards and guidelines to ensure all information and communication technology (ICT) supports accessibility for people with disabilities
- Title II of the ADA: (State and local governments)
  - "...prohibits discrimination on the basis of disability in all services, programs, and activities provided to the public by State and local governments..."
- California Government Code 11135



# Litigation Cases and Risks

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- 2016 Office of Civil Rights (OCR) web accessibility cases from across the nation.
  - [Miami University's web content & LMS](#) – DOJ decree
  - [MIT/Harvard edX's lack of captioning MOOCs](#) – settlement agreement
  - [Berkley's inaccessible online content](#) – DOJ Letter
  
- 2018 - 2019
  - Four CSU campuses received OCR complaint letters
  
- Risks from External Sources
  - [Ms. Lipsitt](#) – thousands of complaints from this civil rights activist
  - [50 Colleges Hit With ADA Lawsuits](#) by Jason Camacho, a blind resident of Brooklyn, N.Y.

# What do these schools have in common?

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- Montana School for the Deaf and Blind
- Arizona State University
- University of Montana
- Atlantic Cape Community College
- Harvard University
- MIT
- Princeton University
- Case Western Reserve University
- College of the Siskiyous
- University of California, Berkeley
- Reed College
- South Carolina Technical College System
- Florida State University
- Youngstown State University
- edX
- University of Colorado at Boulder
- Louisiana Tech University
- University of Phoenix
- Miami University (Ohio)
- Penn State University
- University of Cincinnati



# What We CAN Do

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- *Courses designed with UDL “strive to **focus on the strength of individuals... what they CAN do** rather than on what they cannot” and “proactively address the needs of people with the broadest range of characteristics...”*  
(Emmert, M. A. 2008)
- *Knowing our students , think about their diverse learning needs... and Variability Matters*

# What is Universal Design?

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➤ *“Universal Design” was coined by Ronald Mace in the 1970s.*

*“...the design of products and environments to be **usable by all people, to the greatest extent possible**, without the need for adaptation or specialized design.”*





# The Three Principles – (from CAST)

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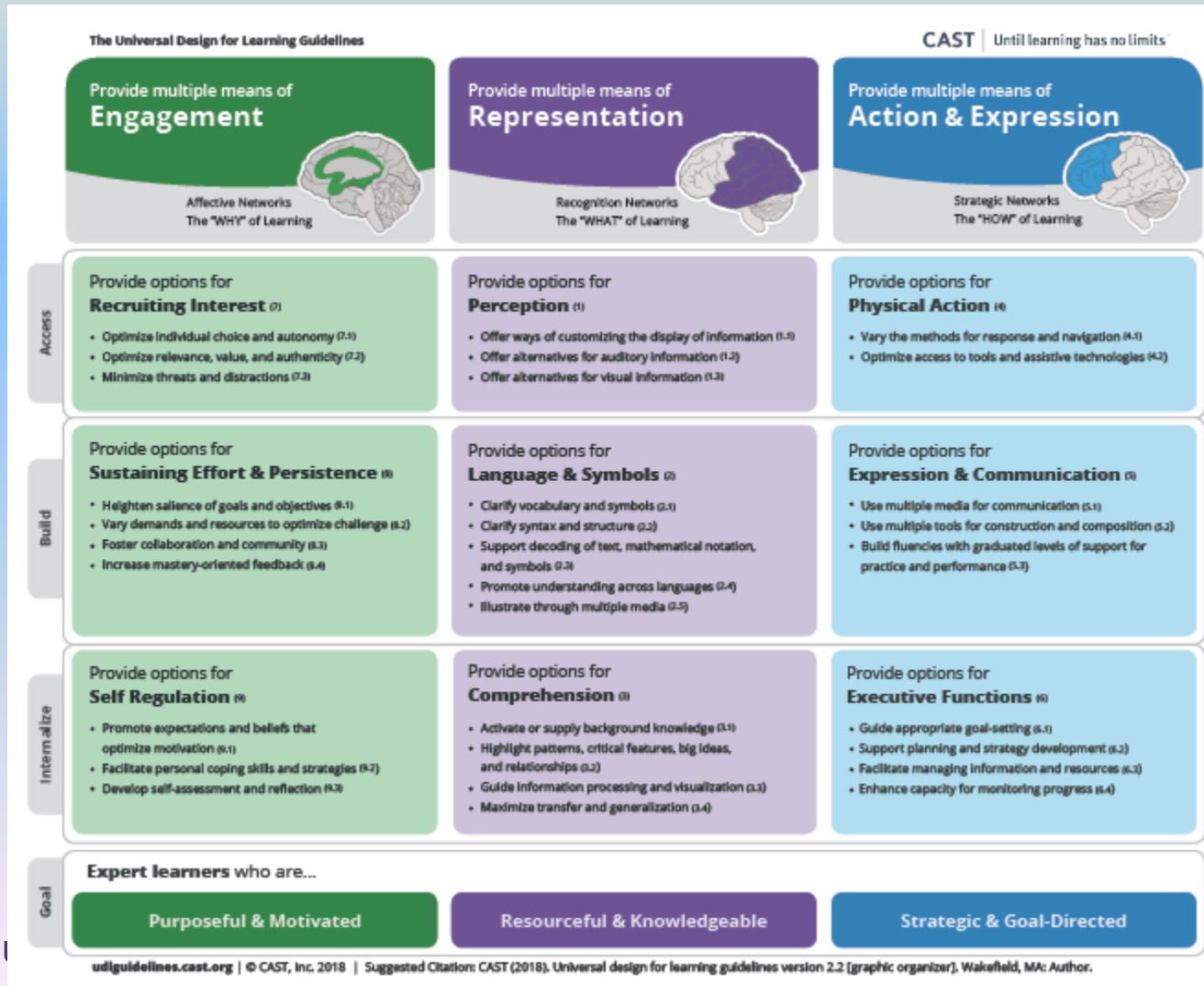
## Think Universally!

Designing a learner-centric and barrier-free learning environment

- Multiple means of **Engagement**: to engage or motivate your students
  - *Different strategies or technologies to recruit students' interest, sustain their continuous effort to participate in their learning activities (e.g., iClicker, active collaborate team learning, online, hybrid, flipped classroom)*
- Multiple means of **Representation** of your **content**
  - *Different or multi-modal ways to present, describe, or organize course content information (e.g., lecture, video, online, group discussion, road map, graphic organizers, field trip, etc.) to help them comprehend*
- Multiple means of **Action/Expression**: to allow options/choices for **students** to be in control of or express their learning
  - *Different ways to allow learners to express, demonstrate or control their learning (e.g., Quizzes, exams, projects, papers, multimedia presentations)*



# The Three Principles – Graphic Organizer from CAST





# Inclusive Course Design Checklist

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Be mindful of who our students are or who the “average students” may be by viewing [Variability Matters](#) and visit [Understanding Our Students](#).

Use checklists below to prepare for your teaching:

- [The 7-step for preparing accessible/inclusive teaching](#)
- [Accessibility guidelines for text materials](#)
- [Accessibility guidelines for multimedia materials](#)
- [Inclusive Course Design checklist](#)



# Accessibility Guidelines & Best Practices for Printed Materials

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Per [University Policy S16-9](#), follow accessibility guidelines in creating your syllabus. The same guidelines apply to any text-based printed course handouts, worksheets, slides,

- Follow [Accessibility Guidelines](#) – the L.I.S.T. mnemonic to create your text based course materials
  - **L**inks: Provide meaningful label for web link
  - **I**images, graphs, diagrams, charts, photos: Describe or explain any images, diagrams, charts, photos or graphical information
  - **S**tructure: Include structure for your document by using heading style feature
  - **T**ables: Avoid complicated or nester tables; include and repeat header row for long tables over one page; and check the logical reading order of your table
  
- Best Practices:
  - Use more legible san serif fonts (e.g., Arial, Calibri, Helvetica, etc.)
  - When formatting, use heading style, lists, bold, uppercase in addition to colored texts
  - Check color contrast between text and background ([WebAIM color contrast checker: http://webaim.org/resources/contrastchecker/](http://webaim.org/resources/contrastchecker/))

Source: Web Content Accessibility Guidelines [\(WCAG\) 2.0 Requirements](#) – the Four Principles



# Best Practices for Multimedia or Non-printed Information

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For non-print multimedia course materials

- Include closed captions for your instructional videos
- Include a transcript for your audio materials
- Avoid using color Only to convey information
- Use simple slide transition to reduce distraction
- Avoid animation or Flash; if used, describe the information
- Avoid flashing graphics that may cause epileptic seizures

Captioning support available at [CFD's Captioning Support web page](#).

Source: [Section 508 Standards Chapter 2 E205.4](#) and [WCAG 2.0](#)

# Point of Contact

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[Elizabeth.Tu@sjsu.edu](mailto:Elizabeth.Tu@sjsu.edu) or 408 924-3093

[CFD's Accessibility and Inclusive Teaching page:](http://www.sjsu.edu/cfd/teaching-learning/accessibility)

<http://www.sjsu.edu/cfd/teaching-learning/accessibility>



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# The Importance of Structure or Description of Links

- Some screen readers can list all the web links for the document. (See screenshot on the right.)
- If only urls are listed, it's difficult for users to relate the urls to your web references. (See upper half of this screenshot.)
- It's more meaningful for screen reader to read the website name or label. (See lower half of this screenshot.)

