

# CEOSE Mini-Symposium



## Supporting Students with Disabilities in Post Secondary STEM

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# Students with Disabilities in Post Secondary STEM



## Three facts you already know:

- Invest in STEM education from kindergarten through graduate school. Make all aspects of STEM a national priority.
- Align K-12 Education with College and Workplace Expectations. Support P-16 councils.
- Recruit and train high quality and effective math and science teachers.

# The Obvious: Remove Barriers

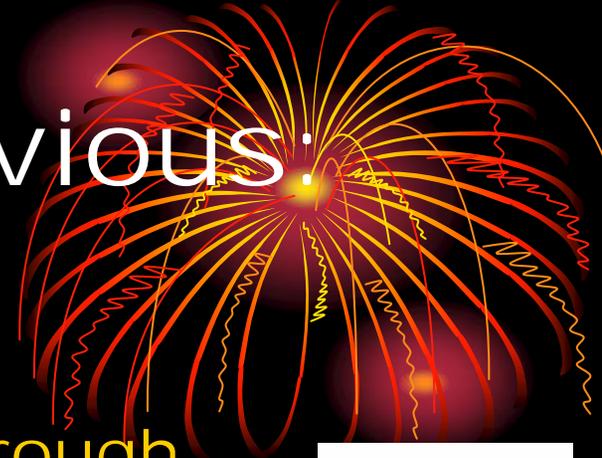


- Improve access to physical environments (buildings, paths of travel)
- Improve access to the curriculum (labs, equipment, texts, fieldtrips)

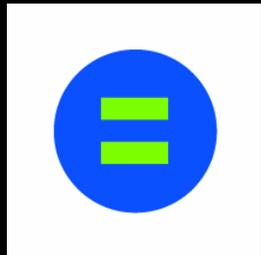
Dennis Fantin, Chemistry Professor  
Cal Poly, San Luis Obispo



# Perhaps, Not So Obvious: Universal Design



- Implement universal design through making electronic and information technologies usable by all people
  - Accessible web design (*i.e. compliant with web accessibility standards*)
  - Accessible instructional materials (*textbooks, learning management systems*) (*Blackboard, Web CT, usable PDF's, PowerPoint*)
  - Procurement: Purchasing Electronic and Information technologies that are accessible or can work with assistive technology.



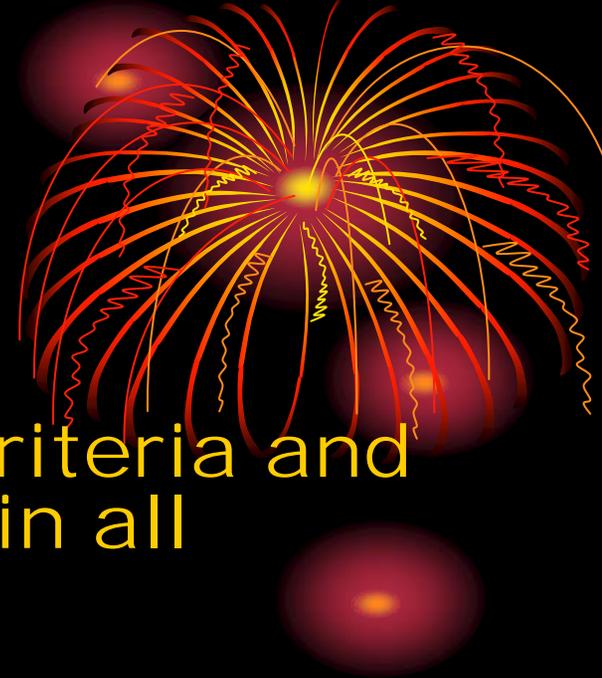
# Infiltrate the Infrastructure

- Include universal design criteria and accessibility components in all STEM funded projects

- Grant Proposals/Funding

Criteria for selection includes:

How does this project incorporate the principles of universal design such that products and environments will be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design?

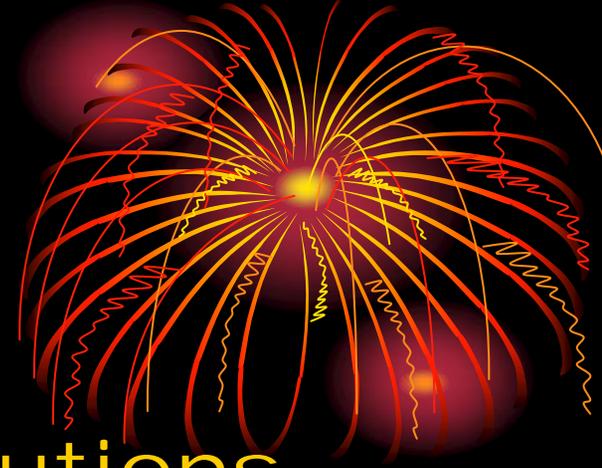


# Beware of the Gorilla



- Higher education disability services programs need to expand knowledge and resources for serving students with physical and sensory disabilities, not only learning related disabilities

# One-Stop Ghetto



- Higher education institutions adopt universal design principles for meeting the needs of students with disabilities rather than expecting a small, under-funded disability services program to address every aspect of accessibility

# Who Are These Guys?



National Center for  
Education  
Statistics

(K-12)

13.7%

Profile of Undergrads in  
U.S. Postsecondary  
Institutions

11.3%

(National Center for Education Statistics)

HEATH 2001 College  
Freshman with  
Disabilities  
Biennial Survey

6.0%

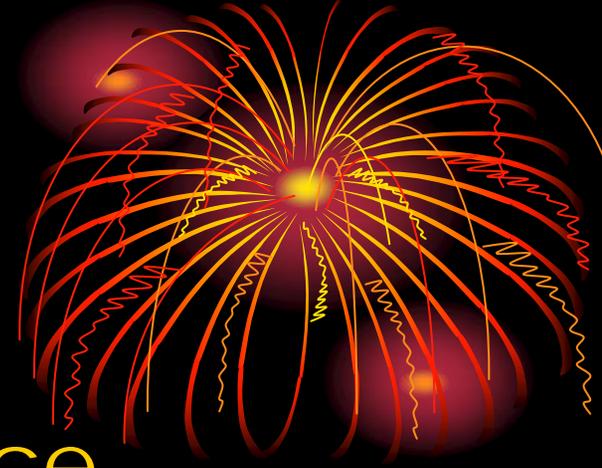
California State  
University System

2.58%

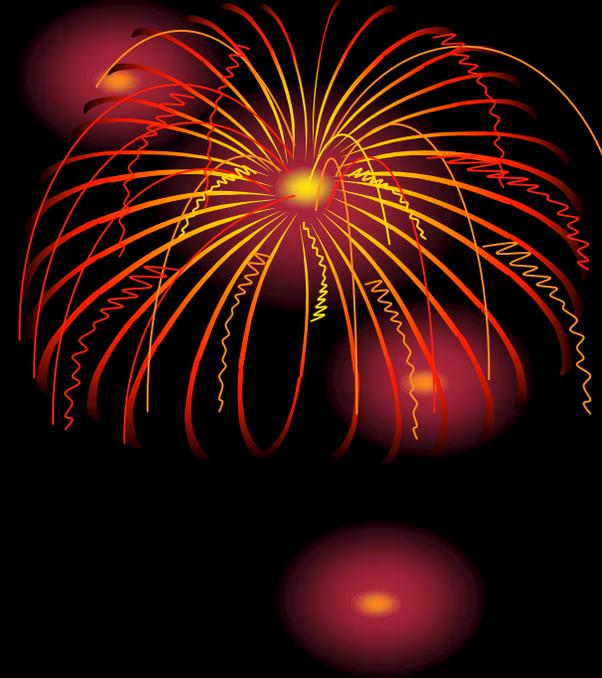
# In conclusion

- Make STEM a National Priority and Invest In It
- Remove Barriers to the Physical Environment
- Work Towards Making Electronic and Information Technology Accessible to All





- College disability service programs and personnel need to improve understanding and expertise with complex accessibility issues
- Universal design, universal design, universal design



The End

Thank you

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