Building a More Accessible & Inclusive Learning Environment in Higher Education: Outcomes of a Training Program for Faculty and Staff

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AHEAD Conference 2021
Learning Objectives:

01 Understand the components of a pilot program for training faculty in creation of inclusive course content/materials.

02 Understand the methodology to measure effectiveness of the training.

03 Become aware of resources available for training faculty in creation of inclusive course content/materials.
Agenda:

• Overview of CSU and the ATRC
• Past and current training approaches
• Pilot training program regarding electronic inclusivity
• Research methods and outcomes
• Future plans
Colorado State University

- Over 34,000 students (approx. 2,200 with identified disabilities)
- 8 colleges
- Land grant university
- ATRC sits in the College of Health and Human Sciences (CHHS)
Assistive Technology Resource Center (ATRC)

• 5 full time staff, 1 research director, and 2-4 OT graduate students

• OT lens

• Collaborations
  – Student Disability Center: student referrals
  – Office of Equal Opportunity: employee referrals
ATRC Mission

• Ensure equitable access to technology & electronic information for students and employees with disabilities by fostering a technological climate that is inclusive and welcoming to a diversity of learners and workers.

• Works to ensure that CSU students and employees are aware of and can access assistive and mainstream technology options available to them

• Provide consultation, education, and advocacy regarding inclusive design, access to mainstream and instructional technologies, and best practices for assistive technology supports in higher education

• Supports assistive technology competencies in the Occupational Therapy curriculum
Electronic inclusivity training is important!

- Increased use of electronic course delivery
- Increased number of students with disabilities in higher ed
- COVID as a catalyst
Training History

• Couching accessibility training into faculty development
• Focus was on accessibility
• Minimal impact, low participation
Change in training strategy

- Attach our training efforts to Diversity, Equity, and Inclusion (DEI)-related activities

- University strategic plan:
  - University goal: embed diversity & inclusion in curriculum and research
  - College (CHHS) goal: enhance inclusively designed electronic communication
Electronic Inclusion Training Pilot

• Components:
  – Train the trainer
  – 22 faculty & staff
    • 2-3 participants from 8 CHHS departments
      (recruited by the dean’s office)
  – Pre and post measures
  – 8 hours of training (four 2-hour sessions)
  – 2 trainers
Training Content

• First-person storytelling videos
• Electronic content types:
  – Word, PDF, PPT, Web, E-books, Video
• Technology in the classroom & assistive technology
• Action plans developed and supported
  – Plan to build capacity in their unit

Training was built on content and tutorials from Accessibility by Design Website (http://accessibility.colostate.edu)
Methods

• Sources:
  – Untrained cohort: All-college survey 2019 and 2021

• Survey delivery: Qualtrics

• Statistics: Descriptive, paired-samples t-tests, and Repeated Measures ANOVA
Of all the documents you create and edit, estimate the percentage that fall into the following types of electronic content [Q3]

Pre
- MS Word 18%
- Canvas 19%
- Website 26%
- Video 5%
- PPT 7%

Post
- MS Word 25%
- Canvas 14%
- Website 22%
- Video 5%
- PPT 11%

2 yr. follow-up
- MS Word 25%
- Canvas 14%
- Website 12%
- Video 6%
- PPT 20%

Trained cohort
Rate your **understanding** of what makes the following types of electronic content accessible and inclusive (Q4)

Trained cohort all significantly increased pre to post (p<.05)
Rate your **understanding** of what makes the following types of electronic content accessible and inclusive (Q4, trained vs. untrained)

![Bar chart showing comparison of different content types for trained and untrained cohorts.](chart)

*Trained vs. untrained cohorts*  *p*<.05
Rate your **ability** to make the following types of electronic content accessible and inclusive (Q5)

- All (except videos) significantly increased* pre to post.
- Only PPT significantly increased* post to follow-up

* *p*<.05

**Trained cohort**

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**Colorado State University**
Rate your ability to make the following types of electronic content accessible and inclusive (Q5, trained vs. untrained)

Trained vs. untrained cohorts *p<.01
Estimate **how often** you make the following types of electronic content accessible and inclusive to students who use Assistive Technology. (Q6)

Trained vs. untrained cohorts *p<.001
If resources are provided (e.g. training), how likely are you to make your electronic course content accessible and inclusive? [Q8]

1. Extremely likely
2. Somewhat likely
3. Neither likely nor unlikely
4. Somewhat unlikely
5. Extremely unlikely

Average rating:
- 1.1 [follow-up]
- 1.4 [post]
- 1.8 [pre]
Ability to develop accessible content

All significantly increased (p<.05)
### Average change (increase) in average ratings across all content areas

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<th>Question</th>
<th>Item</th>
<th>Mean change</th>
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<tr>
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Future Plans

- Build an “Electronic Inclusivity” course in Canvas in partnership with our online division (just completed in June! 😊).
- Partner with VPD office to offer same training program/course across additional 7 colleges through university strategic plan.
- Examine training data and outcomes in a larger faculty and staff population.
Thank you!

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• Accessibility by Design Website (http://accessibility.colostate.edu)