Engineering Inclusive Teaching

Faculty Professional Development

POWERED BY WEPAN

Year 3 Evaluation Results

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June 2014- Oct. 2015

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EIT Program Goal & Strategies

To create inclusive engineering learning environs, especially for women and minority men

Via “live” and recorded faculty professional development webinars that:

- Distill research findings
- Share master-teaching advice, and
- Provide easy-adoption *Action Check-lists* & resources

Program Promotion Strategies

- WEPAN websites, listserv & newsletter
- Professional Societies
- NAPE Co-sponsorship
- Conferences
- "Dissemination Partners"

NAPE
National Alliance for Partnerships in Equity Education Foundation

Dissemination Partners	
1. Cornell*	2. University of Colorado—Boulder*
3. Iowa State*	4. University of Rochester*
5. Michigan Tech	6. University of Texas-Austin
7. Mississippi State University	8. University of Wisconsin-Platteville
9. The Ohio State University	10. Virginia Tech
11. Rutgers School of Engineering	12. Purdue

*Note = Center for Integrative Research, Teaching & Learning (CIRTL) member: http://www.cirtl.net/

EIT Webinars To-Date

Inclusive Educator Award

Engineering Inclusive Teaching: Faculty Professional Development Webinar Series			
May 19 2015		Creating a Positive Climate for Learning: Dealing with Incivility and Conflict in the Classroom	Mark Chesler, Ph.D.; Alford Young Jr., Ph.D. & Joanna Millunchick, Ph.D. (Michigan State University)
Apr. 22 2015		STEMming the Confidence Gap: Mitigating Social Judgement and Isolation	Pooja Sankar, (CEO) & Jessica Gilmartin (CBO) (Piazza Technologies) David Gries, Ph.D. (Cornell)
Apr. 9 2015		Active Learning: 'Live' and Online	Rebecca Brent, Ed.D. (Education Designs, Inc.) & Richard Felder, Ph.D. (North Carolina State Un.)
Mar. 25 2015		Counteracting Stereotype Threat: Research-based Tools & Tactics	Catherine Good, Ph.D. (Baruch College, CUNY)
Feb. 19 2015		The Power of Personal Vision: Linking Undergraduate Engineering Education and Professional Persistence	Kathleen Buse, Ph.D. & Diana Bilimoria, Ph.D. (Case Western)
Nov. 20 2014		Thriving vs. Surviving: A Four-Frame Model for Creating an Inclusive Learning Environment	Beth Holloway, Ph.D. (Purdue University)
Oct. 28 2014		Engineering Self-Efficacy: What it is, Why it Matters, and How to Encourage it!	Margaret Beier, Ph.D., (Rice University) Jack Lesko, Ph.D. & Catherine Amelink, Ph.D. (Virginia Tech)
Aug. 25 2014		How Learning Works: 7 Research-Based Principles for Smart Teaching	Susan Ambrose, D.A. (Northeastern University)

Example Certificate of Participation

Certificate of Participation

Engineering Inclusive Teaching
Faculty Professional Development
POWERED BY WEPAN

Your Full Name

Engineering Self-Efficacy:
What it is, Why it Matters, and How to Encourage it!

June 10, 2015

Thank you for participating in an *Engineering Inclusive Teaching* (EIT) webinar. The EIT project has produced a series of webinars aimed at helping educators apply research-based best practices to create inclusive engineering learning environments that support the persistence and success of ALL students, especially women and underrepresented men. In this webinar, learn about research on the importance of self-efficacy, along with tools to help faculty support student self-efficacy within, and outside, the classroom! Information on future and past EIT webinars can be found at http://www.WSKC.org/EIT.

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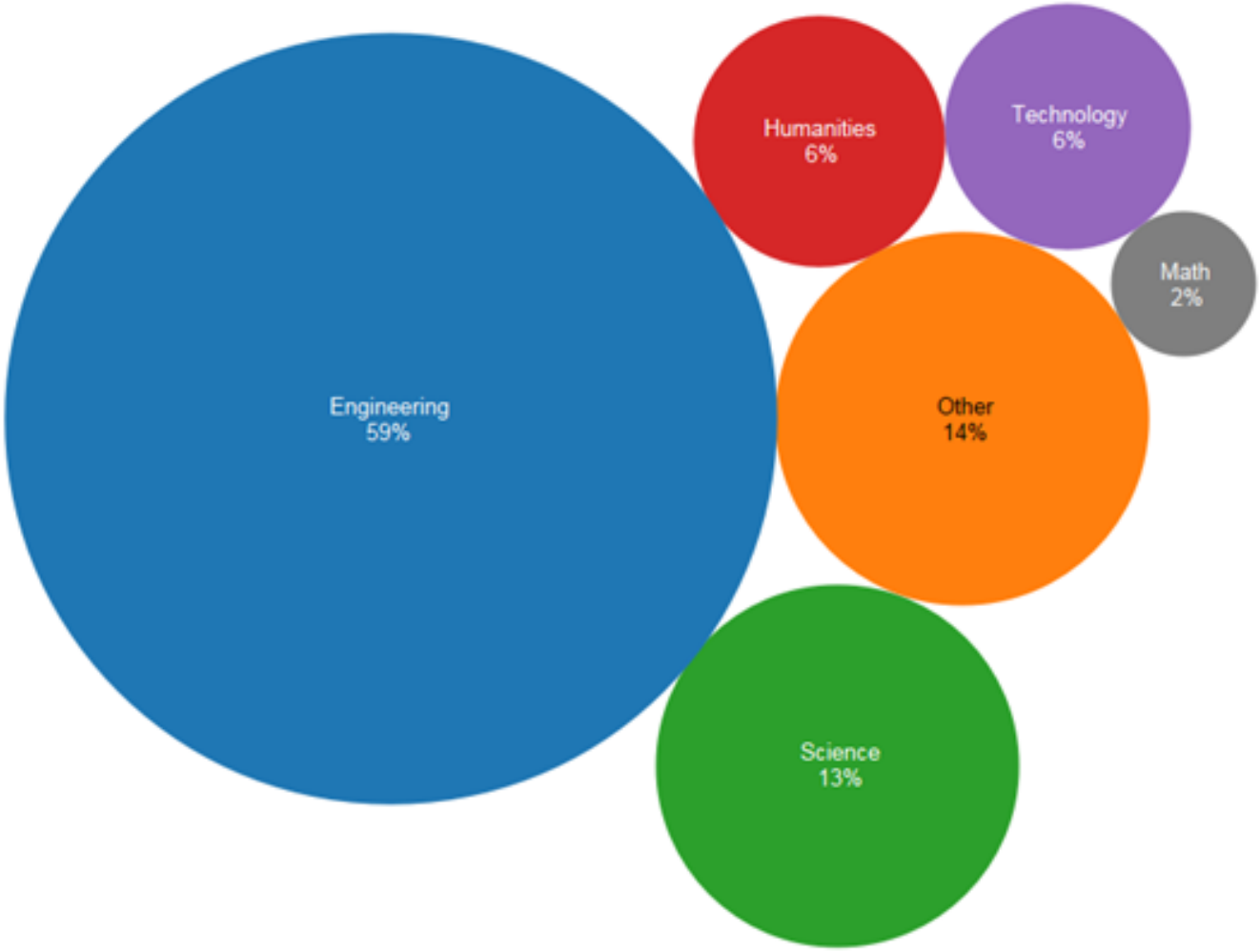
NAPE

Participant Engagement Highlights

- ≈ 10,000 downloads of resource materials
- 1,343 webinar registrations, from 265 institutions and over 33 countries
- 1,521 webinar views
- 935 “on demand” webinar recording views
- 586 “live” webinar attendees (i.e. 73/webinar aver.)
- 26% of participants attended, watched a recording or registered to attend multiple webinars
- 1,524 unique EIT homepage views
- 1,895 unique EIT webinar page views

Participant Engagement (Continued)

- Most participants were engineering educators.



Participant Engagement (Continued)

- % Attendance at multiple webinars

	Number of Unique Attendees	Percentage of Attendees
Attended one EIT webinar	330	81%
Attended two EIT webinars	60	15%
Attended at least three EIT webinars	15	4%
Total	**405**	**100%**

Webinar Evaluation

Post-webinar participant survey responses:

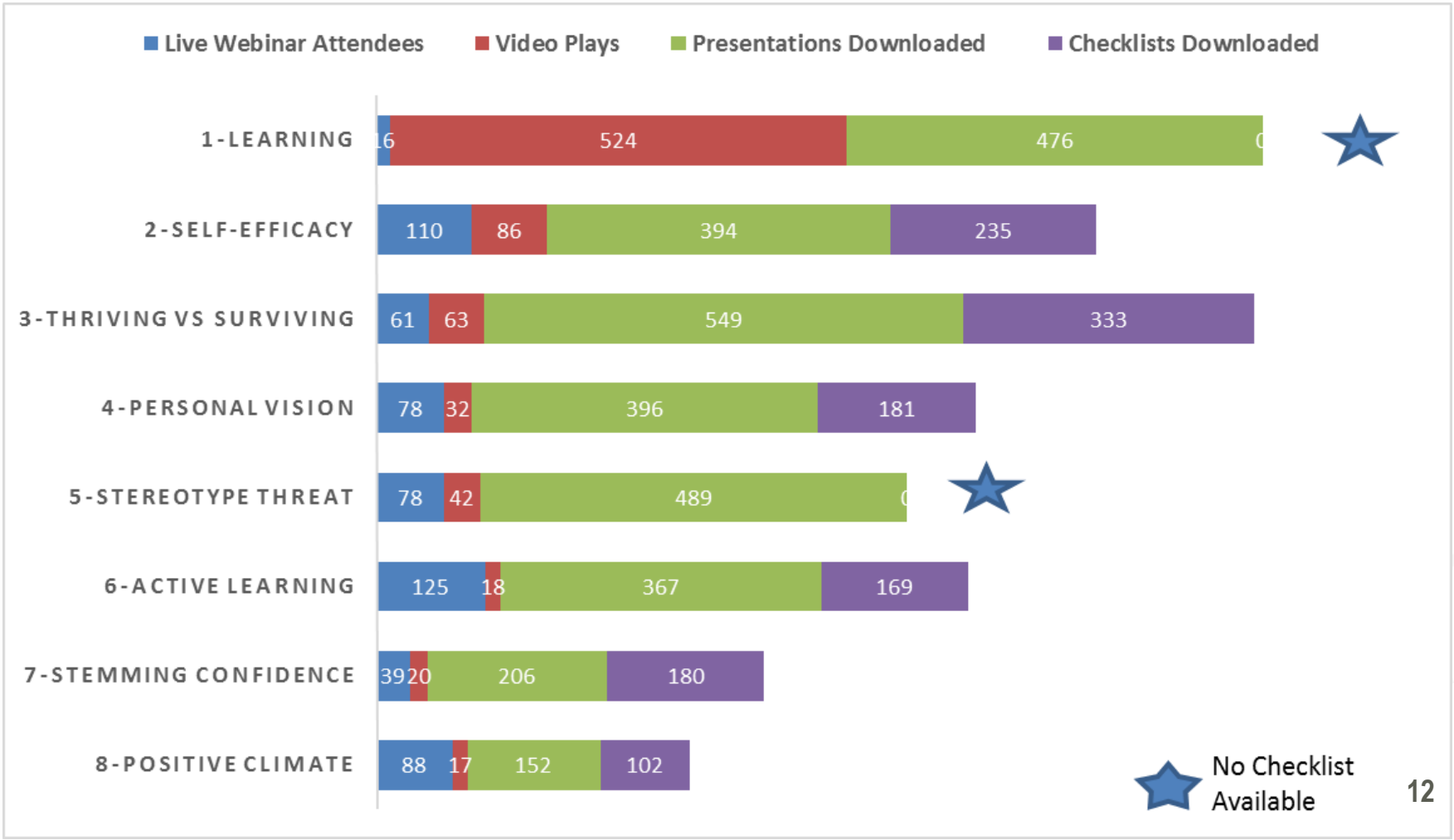
- ✓ The webinar was of high-quality
  - 97% “Agreed” or “Strongly Agreed”
- ✓ Content “Highly applicable” to participants’ work
  - 98% “Agreed” or “Strongly Agreed”
- ✓ Participants planned to share what they learned
  - 94% “Agreed” or “Strongly Agreed”

Resources Accessed: Highlights

- ✓ Most video plays: *How Learning Works*
- ✓ Most presentation downloads: *Thriving vs. Surviving*
- ✓ Most Action-Checklist downloads: *Thriving vs. Surviving*
- ✓ Most well-attended "live" webinar: *Active Learning*
- ✓ Most "chat" downloads: *Positive Climate*
- ✓ Most recommend reading downloads: *Active Learning*

Resources Accessed (Continued)

General overview of resources used:

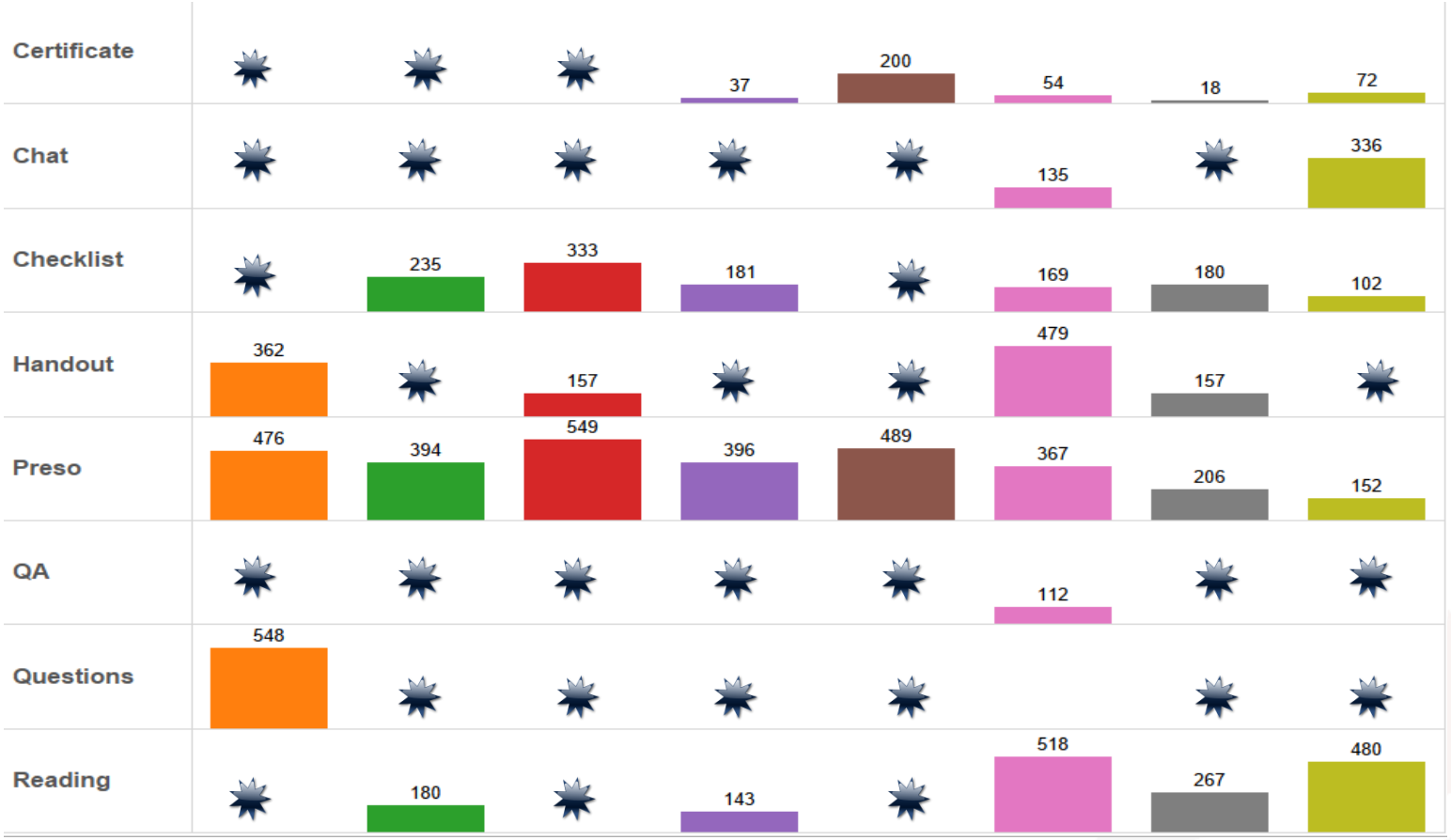


Resources Accessed (Continued)

Types of downloadable resources accessed:

Resource Type	Downloads
Presentation Slides	3,029
Action Checklists	1,200
Certificate of Participation	387
"Other" Downloads (e.g., Recommended Readings, related articles, case studies, chat logs, discussion questions)	4,608
TOTAL	9,224

Overall Downloads x Webinar



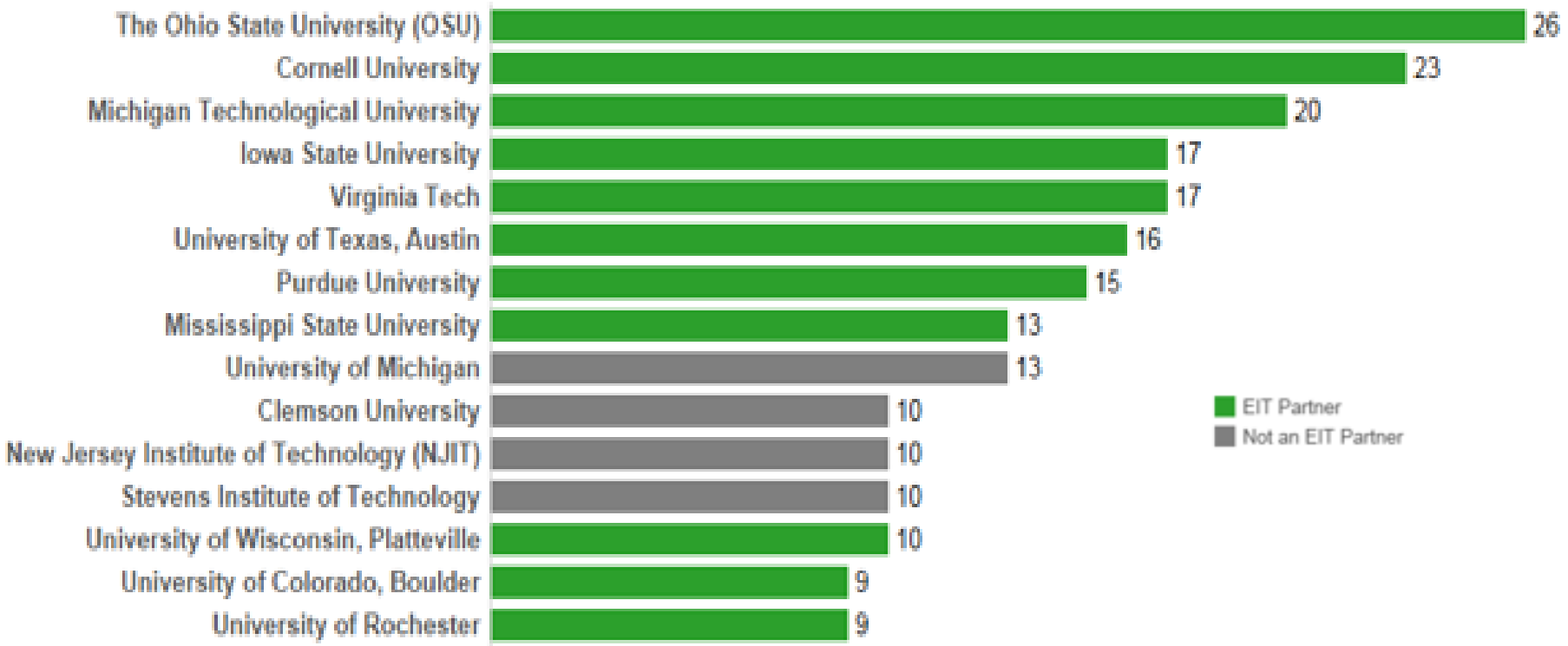
Resources Accessed: Downloads

Webinar (Most downloads to least)	Total Downloads (Excluding Certificates)	Number of Resources (Excluding Certificates)	Most Downloaded Resource		% total resources
#6 Active learning	1,780	9	367	Presentation	21%
#1 How Learning Works	1,386	3	549	Discussion Questions	40%
#8 Positive Climate	1,070	7	178	Recommended Reading; 2 Chat Logs	17%
#3 Thriving vs. Surviving	1,039	3	549	Presentation	53%
#7 Stemming the Confidence Gap	810	4	206	Presentation	25%
#2 Self-Efficacy	809	3	394	Presentation	49%
#4 Personal Vision	720	3	396	Presentation	55%
#5 Stereotype Threat	489	1	489	Presentation	100%

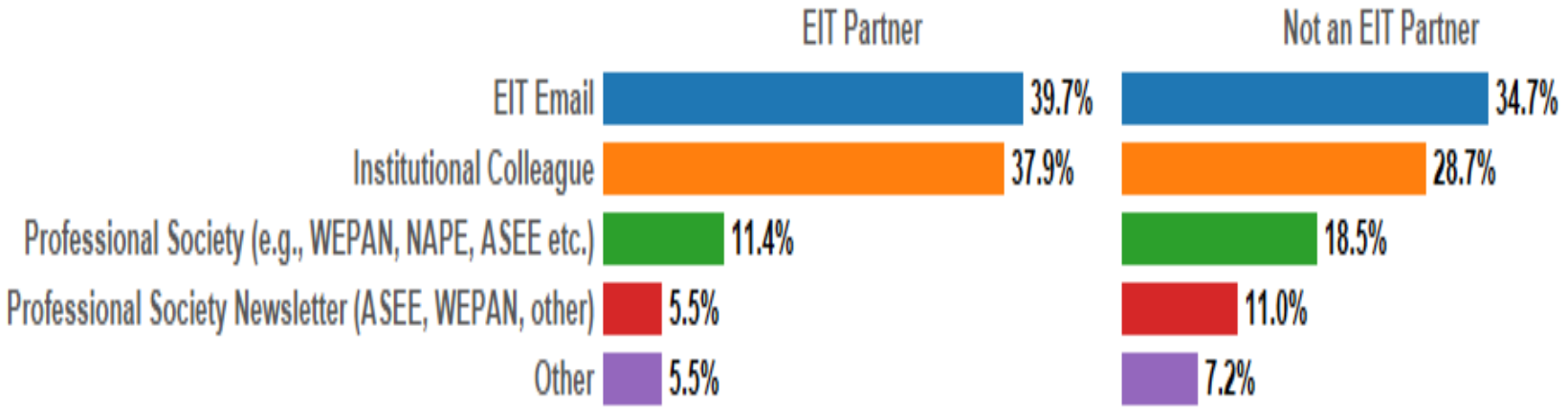
Impact of Dissemination Partners (DP)

- ✓ Webinar participants from DP institutions were more likely to learn about a webinar from an institutional colleague (37.9%) then non DP institutions (28.7%)
- ✓ 38% of webinar registrants were from DP institutions
- ✓ Registrants from DP institutions were more likely to follow-through and attend a webinar (49% vs. 43%)
- ✓ 8 of top 10 schools with the most attendance were DP institutions.
- ✓ 1/3 of all webinar attendees (i.e., 191) were people from the 12 DP intuitions; remaining attendees were from 164 different institutions of higher education.

Impact of DP's (Continued)



EIT Marketing



Rogers' (2003) Adoption Model

Stages of Faculty Adoption:

1. Awareness—Aware of the innovation, but lacking information.
2. **Interest—Growing interest and seeking information.**
3. **Evaluation—Deciding whether or not to try the innovation based on present and future situation.**
4. **Trial—Making use of the innovation.**
5. Adoption—Continued full use of the innovation.

Note: Primary EIT adoption emphasis

Impact of Webinars

- ✓ **INCREASED INTEREST**
  - Participants' increased self-rated knowledge (p<.001) and interest in the topic.
- ✓ **INCREASED EVALUTION INTENTION**
  - 98% participants were "Very Likely" to *consider implementing* strategies presented
- ✓ **INCREASED TRIAL INTENTION**
  - 97% participants were *planning* to implement what they learned

Participant Suggestions

- ✓ Additional resources or information
- ✓ More practical information, ideas and examples, and
- ✓ More support from their school or peers, (e.g., a learning community working together at their school to implement these practices.)

Areas of Consideration

- Broaden marketing efforts for existing EIT resources
- Support DP's to help develop and engage a faculty community targeting inclusive teaching
- "Continue the Conversation" w participants via post-webinar emails on research-based actionable items
- 1-2 month follow up query to participants re: application practices
- Work to change institution-level support for inclusive faculty development

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Together we can engage all minds in engineering the future!

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