Revealing Value: New Directions for Assessing the Impact of Undergraduate Research

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AAC&U Annual Meeting, San Francisco, CA
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Council on Undergraduate Research

- International organization of individual (>11,000) members drawn from close to 900 institutions
- Eleven disciplinary divisions: Arts & Humanities, Biology, Chemistry, Education, Engineering, Geosciences, Health Sciences, Mathematics & Computer Science, Physics & Astronomy, Psychology, Social Sciences
- Two multidisciplinary divisions: At-Large and Undergraduate Research Program Directors
- National office in Washington, D.C.

The mission of the Council on Undergraduate Research is to support and promote high-quality undergraduate student-faculty collaborative research and scholarship.
Agenda

1. What we know and what we Know about undergraduate research
2. CUR resources
3. Assessment strategies
4. CUR support for assessment
N of One

What is the impact of undergraduate research (UR)?
- Why does UR matter?
- What does it do?
- What are the outcomes for students, faculty, institutions, job market, society…?

On a sticky note, write what you believe the impact of UR is
- One sticky note per outcome
What we know and what we Know

1. N of 1
   - My gut feeling about the impact of UR

2. Supported by Research
   - Research has shown this is an outcome

3. Rigorously Supported by Research
   - Rigorous research has supported this outcome (would qualify for What Works Clearinghouse)
What we know and what we Know

Sort sticky notes of outcomes on the wall from

1. N of 1: gut feeling
2. Supported by Research
3. Rigorously Supported by Research (experimental design or equivalent)
CUR Assessment Resources

- **Publications:**
  - *CUR Quarterly* publishes articles on assessment of undergraduate research impact
  - Characteristics of Excellence in Undergraduate Research (COEUR) identifies 12 general areas, 64 characteristics, and 203 assessable outcomes that can be used to evaluate institutional undergraduate research settings
  - CUR’s NSF CCLI III grant (09-20275) resulted in monograph on assessment of consortia and system-wide undergraduate research progress

- **Online resources:**
  - *Zotero bibliography* – more than 200 references annotated by CUR’s practitioner basis and keyword searchable (https://www.zotero.org/groups/curassessmentbibliography/items)
  - CUR’s *assessment task force* has produced multiple information resources and archived discussions
  - *Higher Logic CUR community site* fosters active discussion threads on assessment

- **Conferences and Institutes:**
  - All CUR conferences include assessment as a key theme
  - Current institutes include assessment themes
CUR Quarterly – Spring 2012 issue highlighted how much we DON’T Know about the numbers of students engaged in UGR

www.cur.org
UGR student presentations - robust measure
CUR Quarterly – Spring 2015 issue highlighted how much we DO KNOW about undergraduate research’s impact….and how much more we need to investigate

www.cur.org
Coming in Fall 2017:
NEW CUR JOURNAL

- “Scholarship and Practice in Undergraduate Research” – SPUR
- Relaunch/rebrand of CUR’s flagship peer-reviewed journal
- Scholarly articles on studies of undergraduate research impact will be sought for each issue
- For more information: contact Beth Foxwell at emfoxwell@cur.org
Create an Assessment Plan

✔ In groups of 4-6, pick an outcome that matters to your campuses
  - See topic ideas on the flip chart

✔ Discuss the following issues:
  - Why are you assessing?
  - What are you assessing?
  - How do you assess it?
  - What do you need?
    ✧ What support, training or resources would you need to conduct this assessment?

✔ How could CUR provide support for your assessment plans?
Create an Assessment Plan

Why are you assessing?
- Who is the audience?
- What is the purpose?

What are you assessing?
- Who is the audience for this assessment?
- What type of assessment would you use?
- How would you measure this outcome?

How do you assess it?
- What do you need?
  - What support, training or resources would you need to conduct this assessment?

How could CUR provide support for your assessment plans?
Moving Forward

what do you need?
- How could CUR provide support for your assessment plans?

What are the big questions that need answering?
- What are the key questions for assessment to really know what the impact of undergraduate research is?
CUR Upcoming Events

• CUR Dialogues – February 16-18, 2017
  • Renaissance Capital View Hotel, Arlington, VA
  • Opportunity to meet with grant officers

• National Conference on Undergraduate Research – April 6-8, 2017
  • University of Memphis
  • More than 4,000 student researchers and faculty mentors expected

• Undergraduate Research Program Directors’ Conference – June 27-29, 2017
  • Opportunity to learn more about UR programs, assessment, etc.
Assessment: CUR Grants

- “Dissemination of a Novel Undergraduate Research Evaluation Model”
  - NSF DUE WIDER 13-47727
  - PI/PD – Dr. Jill Singer – SUNY Buffalo State
  - Assessment of student and faculty perspectives on skill acquisition through intensive UR
  - Pilot testing will take place in summers of 2017 and 2018
  - Opportunities to be part of secondary pilot testing effort post 2018

- “Integrating and Scaffolding Research into Undergraduate STEM Curricula”
  - NSF DUE IUSE 16-25354
  - PI/PD – Dr. Mitch Malachowski
  - Transformation of 24 departments at 12 institutions to offer research-based, scaffolded curricula
  - Assessment of faculty and student perceptions of transformation process
  - Pre-proposals solicited by March 1, 2017
Please join us tomorrow for AURA Honor Reception

- Garden Room B
- 530 p.m.
- Food and drink!
- Honoring Clemson University, University of Wisconsin-Eau Claire, Furman University

www.cur.org
Thank you!

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