

# *The Journey to Define Undergraduate Research: An Institutional Process, Outcomes, and Implications*

2023 ConnectUR Annual Conference

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# *Key Takeaways*

Through engaging in this session, participants will:

- *Confirm or reconsider their institutions' present terms/definitions, and/or gain new knowledge for additional definitions.*
- *Learn about a process adaptable to their own institution, to either create or improve their UR definitions.*
- *Create definitions transferrable to their institution or identify nuances to definitions for their institutional uses.*



This QR code will take you to the website:

(<https://purdue.edu/undergrad-research/conferences/CUR2023.php>)

that contains information from multiple ConnectUR presentations by staff in the Purdue University Office of Undergraduate Research.

# *Outlines*

## ConnectUR Presentation

- Issues and motivations to pursue institutional definitions
- Process
- Terms and Definitions

## Institutional White Paper

- Overview
- Key Factors
- Process
- Terms and Definitions
- Recommendations
- Limitations
- References

# Issue #1: Definition of Undergraduate Research



Undergraduate research, scholarship, and creative inquiry is fundamentally a pedagogical approach to teaching and learning. With an emphasis on process, CUR defines undergraduate research as:

A <sup>?</sup>mentored investigation or creative inquiry conducted by undergraduates <sup>and professional students</sup> that seeks to make a scholarly or artistic contribution to knowledge.

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Council on Undergraduate Research

# *Issues #2 to \_\_ with UR Terms*

- Misconceptions about *what is (and is not) undergraduate research?*
- Broad use of “research” and impacts of its use on:
  - Inclusion | exclusion of experiences
  - Inconsistencies
- Categories/types of research and impacts of their use on:
  - Inclusion | exclusion of experiences
  - Inconsistencies; not comprehensive
- Inaccurate reporting:
  - Misinterpretations
  - Incomplete datasets
  - Underreporting

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...2,000 research projects  
completed every year.

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Unknown

# *Purpose*

Motivated to be inclusive and comprehensive, the purposes of this endeavor are to:

1. ensure all communication from the Office of Undergraduate Research (OUR) consistently uses terms,
2. encourage our campus community to consistently use the same terminology, and
3. enable our campus community to adapt their perceptions of undergraduate research.

These efforts - in pursuit of increasing access to undergraduate research - represent a continual work-in-progress to adapt to changing conditions.

*We encourage readers to send feedback to [ugresearch@purdue.edu](mailto:ugresearch@purdue.edu).*

# *Structure for Definitions*

- A functional definition understandable to those not familiar with the topic
- Sample values
- Context
- Cautions or clarifications
- Standard uses and misuses
- Links to other definitions, sites, or sources
- Keywords (same for all)



# *Processes*

## Iterations

Started internal to the OUR with the terms we used, then:

1. With campus partners, sharing our progress and seeking feedback
2. Within the OUR:
  - a. Integrating feedback into our documentation
  - b. Revising, based on interconnections between terms
3. Repeating the cycle

## Term Groupings

- Establishing the foundation
- Finding the bigger picture (e.g., context)
- People and their relationships
- Categories of undergraduate research
- Models of undergraduate research
- Reporting

# ***Term Groupings: Establishing the Foundation***

What is undergraduate research?

## **Undergraduate Research**

The PWL definition of undergraduate research is based on the Council on Undergraduate Research but adapted for PWL as follows:

Undergraduate research, scholarship, and creative inquiry is fundamentally a pedagogical approach to teaching and learning. With an emphasis on process, CUR defines undergraduate research as: A mentored investigation or creative inquiry conducted by undergraduate and professional students that seeks to make a scholarly or artistic contribution to knowledge.

UR also represents people and their relationships:

- Undergraduate Research Experience
- Undergraduate Researcher
- Mentorship (mentoring)

**This is the functional definition for UR.**

*What about the sample values? Context? Cautions or clarifications? Standard uses and misuses? Links to other definitions, sites, or sources? Keywords?*

# ***Sample Definition: Undergraduate Research***

**Context:** There are variable contexts for undergraduate research but most fit within one of the models of undergraduate research experiences. The experience, regardless of context, is formally labeled as an undergraduate research experience but may also be referred to by the specific program or project.

## **Clarifications:**

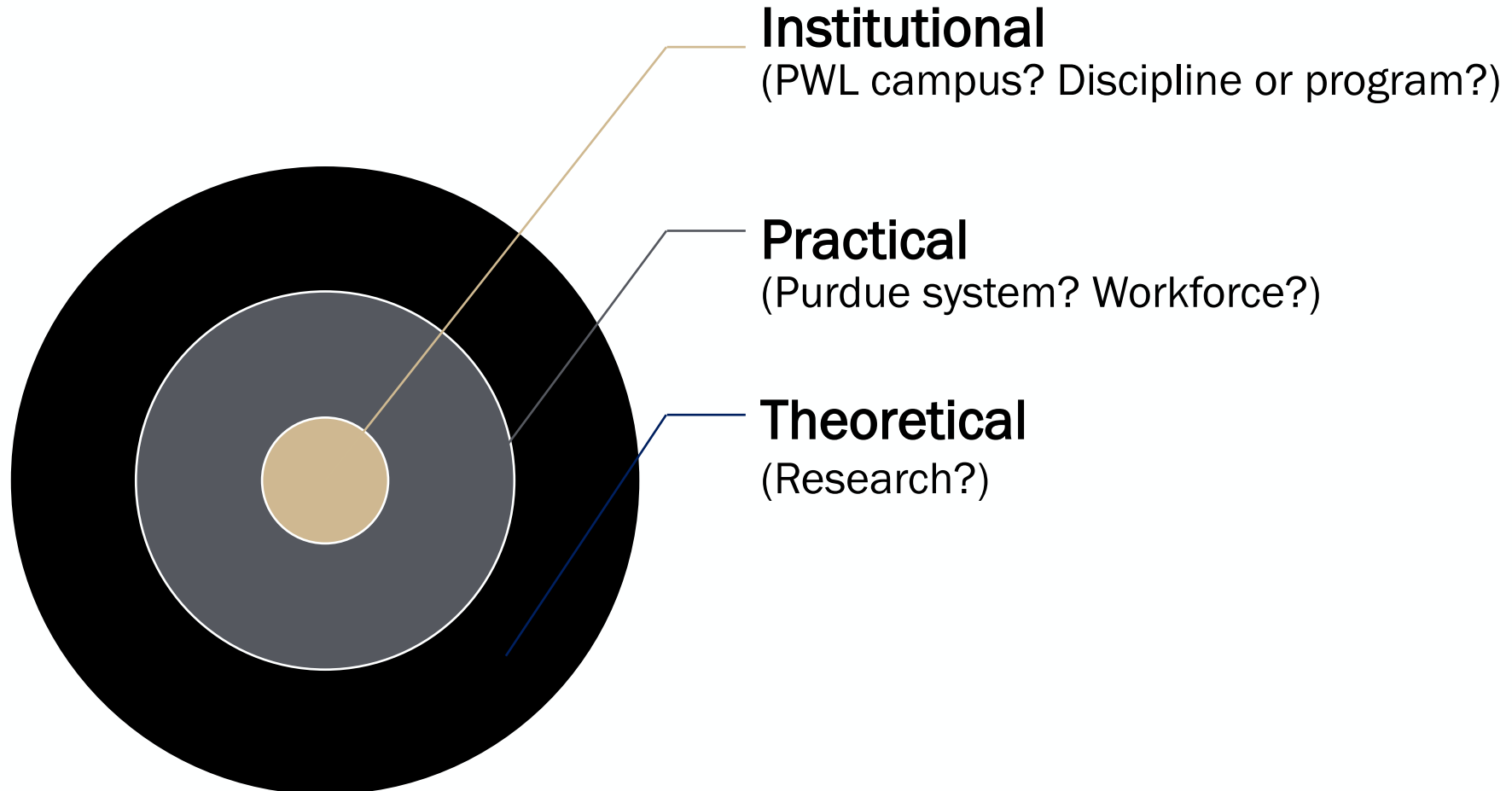
- "Research" is commonly used at PWL and in literature to broadly include any research, scholarship, creative, study, or inquiry within any category of undergraduate research from any discipline.
- Although "undergraduate" appears in the name and definition, refer to undergraduate researcher for clarifications about who is included or excluded.
- "Undergraduate research" is commonly used on campus and in literature to label any research experience that fits the definition.
- Although "mentored" is part of the definition, an unmentored experience could fit the definition as part of a student-led research experience.

## **Standard misuses often relate to:**

- General use of "research" where it does not fit the intended scope. For example, conducting a literature review may be a component of an undergraduate research experience but this step alone does not constitute "... a scholarly or artistic contribution to knowledge."
- General use of "research" when it is not perceived as inclusive of any scholarship, creative, study, and inquiry we intend to include.

# *Term Groupings: Finding the Bigger Picture*

What defines the contexts?



# *Term Groupings: Categories and Models*

## UR Categories

Undergraduate research categories distinguish and describe the nature of undergraduate research experiences at PWL within categorical labels.

Categories are:

- Creative
- Humanities
- Social Science
- STEM
- Business Case Study

## UR Models

Models provide scope to the experience:  
*Questions? Scale? Structure? Enrollment?*  
*Timing? Setting? Mentoring Relationship?*  
*Formal Reward?*

Models are:

- Research apprenticeships
- Research-based coursework
  - (CUREs are a subset)
- Student-led

# *Where do we go from here?*

## Other definitions, for ex:

- **UR experience status:** identifies a students' standing within an undergraduate research experience or their standing with an OUR program/initiative.
- **Faculty/staff role:** defines how a PWL employee is associated with an undergraduate research experience or OUR program

## Testing terms/definitions

- Use with all OUR communications.
- Adaptions within OUR AER and reporting.
- Engaging PWL.
- Exploring where we are not yet inclusive and comprehensive.
- Gather feedback & revise, gather feedback & revise, gather feedback & revise...

# *What are your questions...*

Possibly...

- *How do I get the white paper?*
- *Why should we do this on our campus?*
- *How do/will these terms impact access to undergraduate research?*



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