

UREP: Model for Implementing and Validating Undergraduate Research and Other HIPs

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UNIVERSITY LIBRARIES
VIRGINIA TECH™



OFFICE OF UNDERGRADUATE RESEARCH

What We Were Noticing...

- Students doing research across campus in many different formats

BUT...

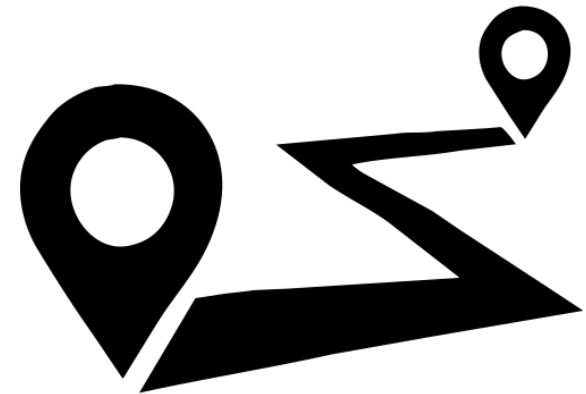
- Nothing organized or coordinated
- Disconnect between students/faculty and information/resources available
- Varying levels of preparedness to do research
- Students not recognizing they they were doing research
- Students not knowing how to “sell” their research experience

What UR Looks Like @ VT



Why Develop a New Program?

What does it need to have?



Track
Student
Progress



Increase
Student
Participation



Recognize
Student
Efforts



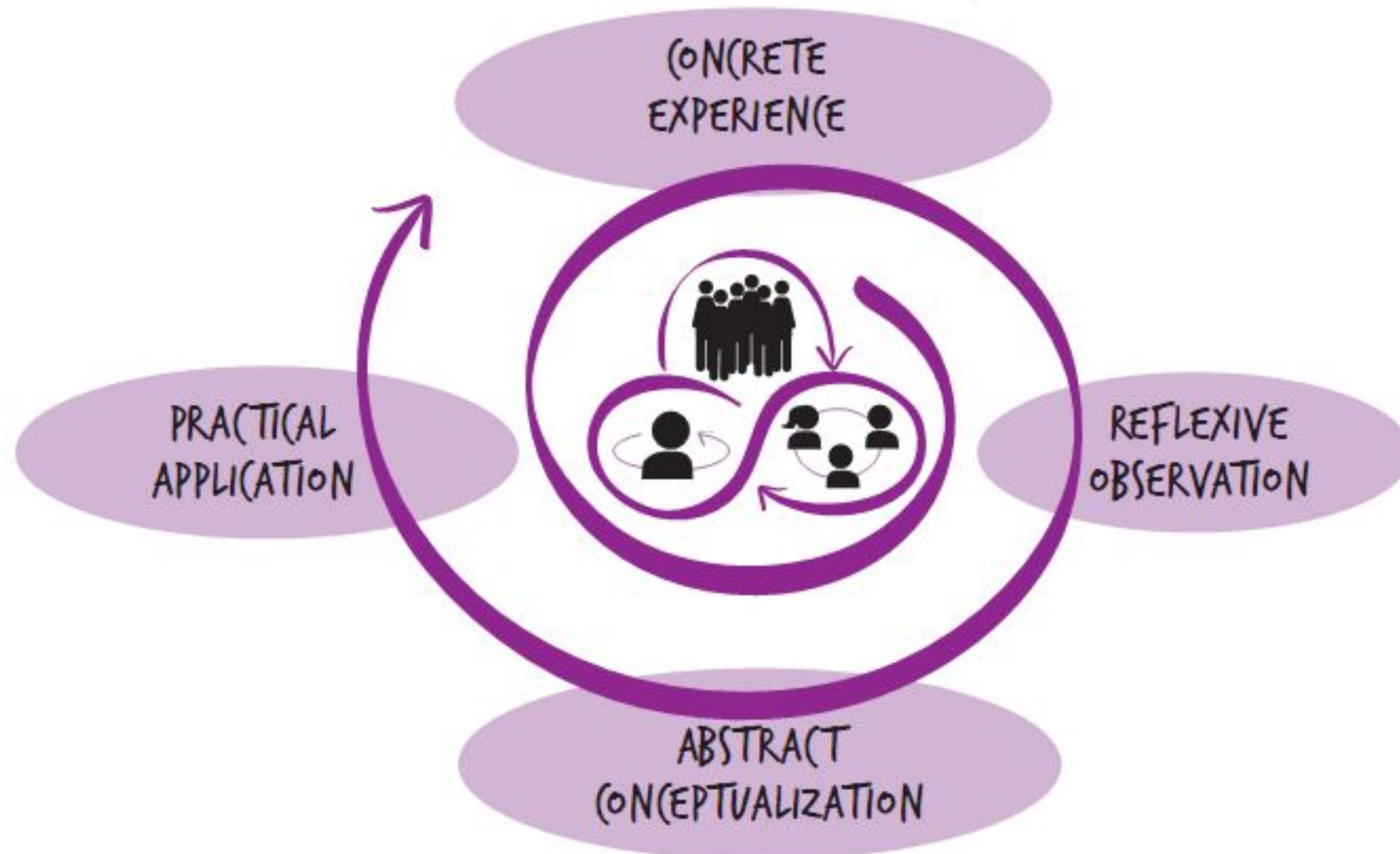
Incentivize
Students to
Share
Experiences

Context: Existing Infrastructure

- Mentored research across campus
- Research Training available:
 - Library's successful Advanced Research Skills Program
 - Research preparatory courses, such as UH 1604
- Office of Undergraduate Research
 - Ambassadors
 - Symposia
 - Summer programming
- CANVAS platform

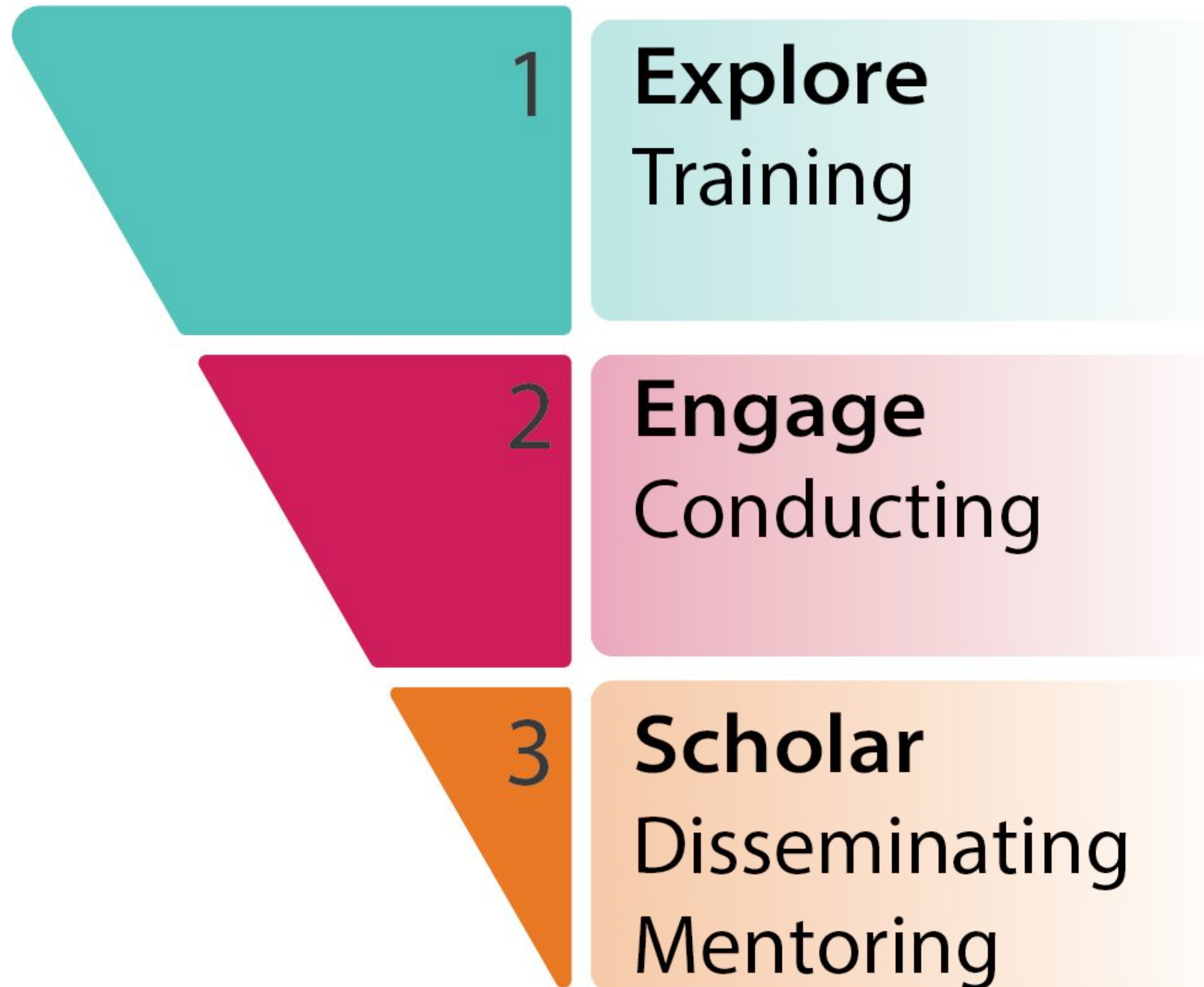
Theoretical Framework - Fitting in with Experiential Learning

Kolb's Cycle of Experiential Learning

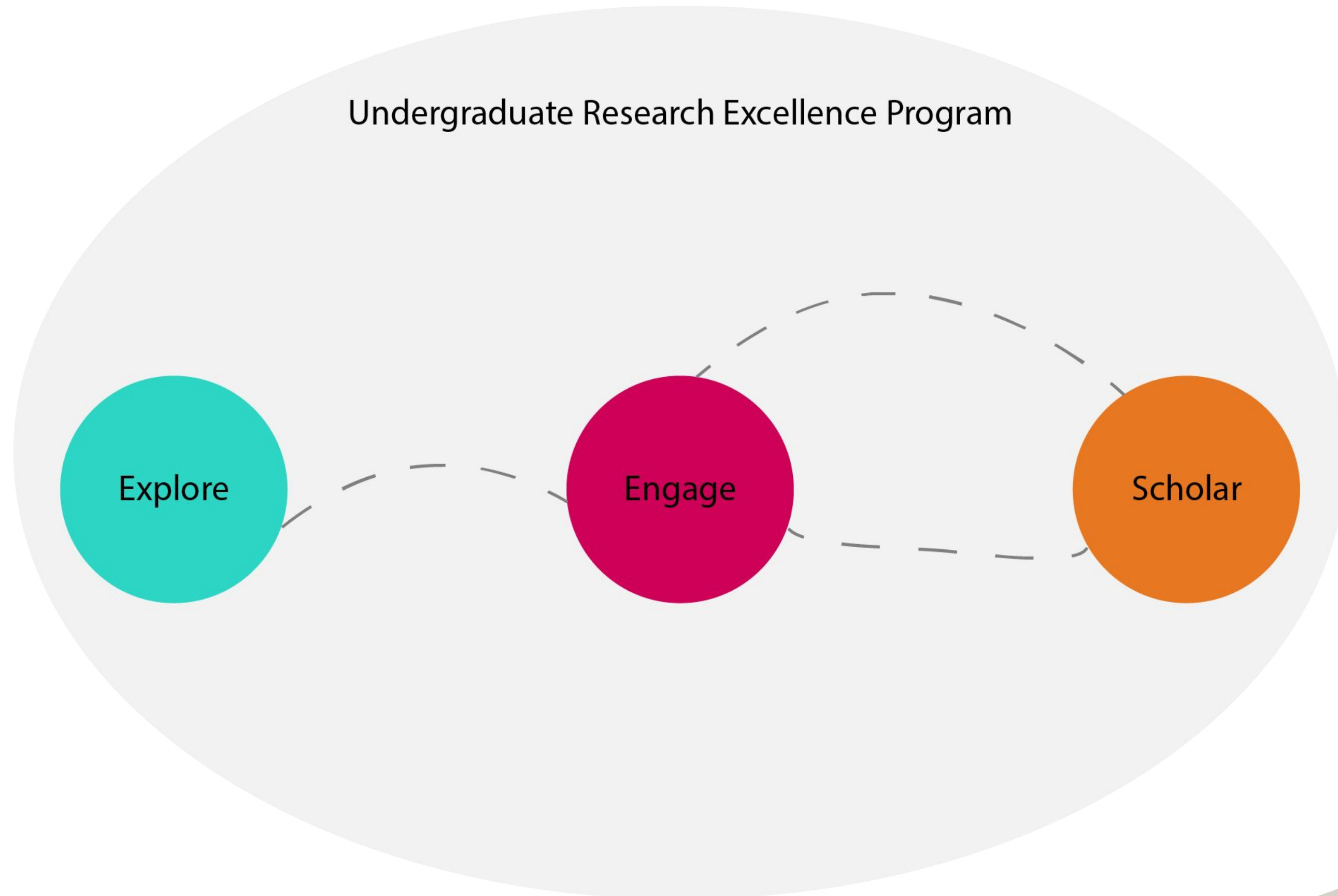


Overview of Framework

Undergraduate Research Excellence Program



Student Journey with Research



How does UREP function for the student?

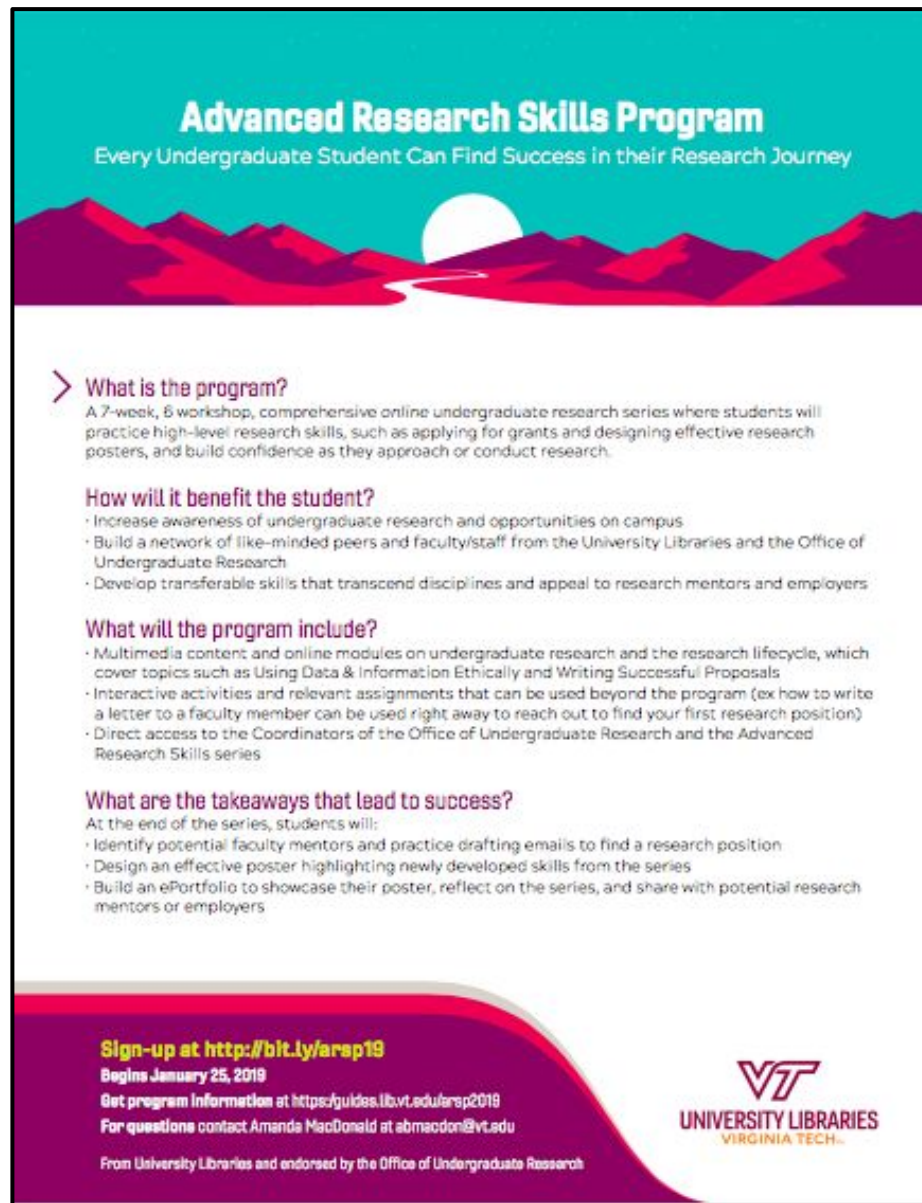
1. Be interested in UR
2. Click link - Sign Up!
3. Accept Canvas invitation
4. Upload verification + reflect
5. Pick up cord!



Get your Undergraduate Research
Graduation Cord



How do students learn about UREP?



Advanced Research Skills Program
Every Undergraduate Student Can Find Success in their Research Journey

> **What is the program?**
A 7-week, 6-workshop, comprehensive online undergraduate research series where students will practice high-level research skills, such as applying for grants and designing effective research posters, and build confidence as they approach or conduct research.

How will it benefit the student?

- Increase awareness of undergraduate research and opportunities on campus
- Build a network of like-minded peers and faculty/staff from the University Libraries and the Office of Undergraduate Research
- Develop transferable skills that transcend disciplines and appeal to research mentors and employers

What will the program include?

- Multimedia content and online modules on undergraduate research and the research lifecycle, which cover topics such as Using Data & Information Ethically and Writing Successful Proposals
- Interactive activities and relevant assignments that can be used beyond the program (ex how to write a letter to a faculty member can be used right away to reach out to find your first research position)
- Direct access to the Coordinators of the Office of Undergraduate Research and the Advanced Research Skills series

What are the takeaways that lead to success?
At the end of the series, students will:

- Identify potential faculty mentors and practice drafting emails to find a research position
- Design an effective poster highlighting newly developed skills from the series
- Build an ePortfolio to showcase their poster, reflect on the series, and share with potential research mentors or employers

Sign-up at <http://bit.ly/arsp19>
Begins January 25, 2019
Get program information at <https://guides.lib.vt.edu/arsp2019>
For questions contact Amanda MacDonald at amacdona@vt.edu

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Digitally!



Program at a glance:
Topics to be covered in this research series

-  **Using Data & Information Ethically:** Discover methods of ethical data use including in-text quotations, citations, consent, misconduct, human subjects training, and IRB information
-  **Managing & Organizing Data:** Explore data management principles, practices, and tools alongside strategies to consider when working with research data of all shapes, sizes, and formats
-  **Managing & Organizing Information:** Learn about citation managers such as EndNote, Mendeley, and Zotero for managing and organizing your citations, research articles, and other research information
-  **Writing Successful Proposals:** Practice drafting proposals and abstracts for publishers, conference organizers, and grant funders, as most require proposals and abstracts before publishing, accepting, and/or funding your research
-  **Sharing Your Research:** Walk through the process of planning, designing, developing, printing, and presenting your research by creating a poster, activating your ePortfolio, and perfecting your elevator pitch
-  **Becoming A Researcher:** Meet the Coordinator of the Office of Undergraduate Research, explore opportunities available to VT students, identify potential research mentors, and explore strategies for locating a mentor, such as crafting an email

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Your **undergraduate research** journey can start today!

Ask us how!

From University Libraries and the Office of Undergraduate Research

Example of Training Category - Outlined Point System

TRAINING: Minimum 5 points; maximum 12 points	
Advance Research Skills (ARS) Program*	10 points
Intro to Research class (such as UH1604 or comparable)	8 points <input type="checkbox"/>
Undergraduate research related workshops (offered by the OUR or University Libraries)	1 point per workshop
Training certification (such as RCR, COI, Health and Safety) specific to student's research project	1 point per certification
Introductory undergraduate research course (XXX-2994)	6 points

What Do Students See in Canvas

What is UREP?

UREP is a novel way for any undergraduate student in any major to connect with resources and support, and ultimately receive recognition for their engagement in undergraduate research.

UREP will allow you to:

- Track your undergraduate research journey.
- Validate your experience.
- Get recognized for your research efforts and achievements.
- Showcase your experience for potential employers and professional/graduate schools.

Additional benefits:

- Access to advising and mentoring from the Office of Undergraduate Research (OUR).
- Guidance from University Libraries in developing research skills.
- Support from University Libraries to create an amazing ePortfolio to track your research journey.
- Earn a beautiful graduation cord reserved exclusively for students who complete UREP.

How does UREP work?

UREP understands that every undergraduate student's research journey is unique, so there are many avenues for students to become involved throughout their academic careers. To complete UREP, students will earn points from each of the categories listed on the [Modules](#) page, in any combination, for an overall total of at least **50 points**.

UREP Credit Tracker

Undergraduate Research Excel...



What Do Students See in Canvas

☰ ▾ TRAINING: Minimum 5 points; maximum 12 points

- ☰ **Advanced Research Skills (ARS) Program**
May 2, 2018 | 10 pts
- ☰ **Intro to Research Class (e.g. Uh 1604 or comparable)**
May 2, 2018 | 8 pts
- ☰ **Individual Undergraduate Research Related Workshops (i.e. offered by the OUR or University Libraries)**
May 2, 2018 | 10 pts
- ☰ **Training Certification (e.g. RCR, COI, Health and Safety) that is specific to student's research project**
May 2, 2018 | 10 pts
- ☰ **Introductory Undergraduate Research Course (xxx-2994)**
May 2, 2018 | 6 pts

Advanced Research Skills (ARS) Program

Due May 2, 2018 by 11:59pm **Points** 10 **Submitting** a text entry box or a file upload

Available Mar 5, 2018 at 12am - May 5, 2018 at 11:59pm 2 months

This assignment was locked May 5, 2018 at 11:59pm.

Upload your digital certificate of completion from the Advanced Research Skills Program or upload a document stating your first and last name and the semester and academic year you completed the program.

How Does UREP Support UR & the Research Lifecycle

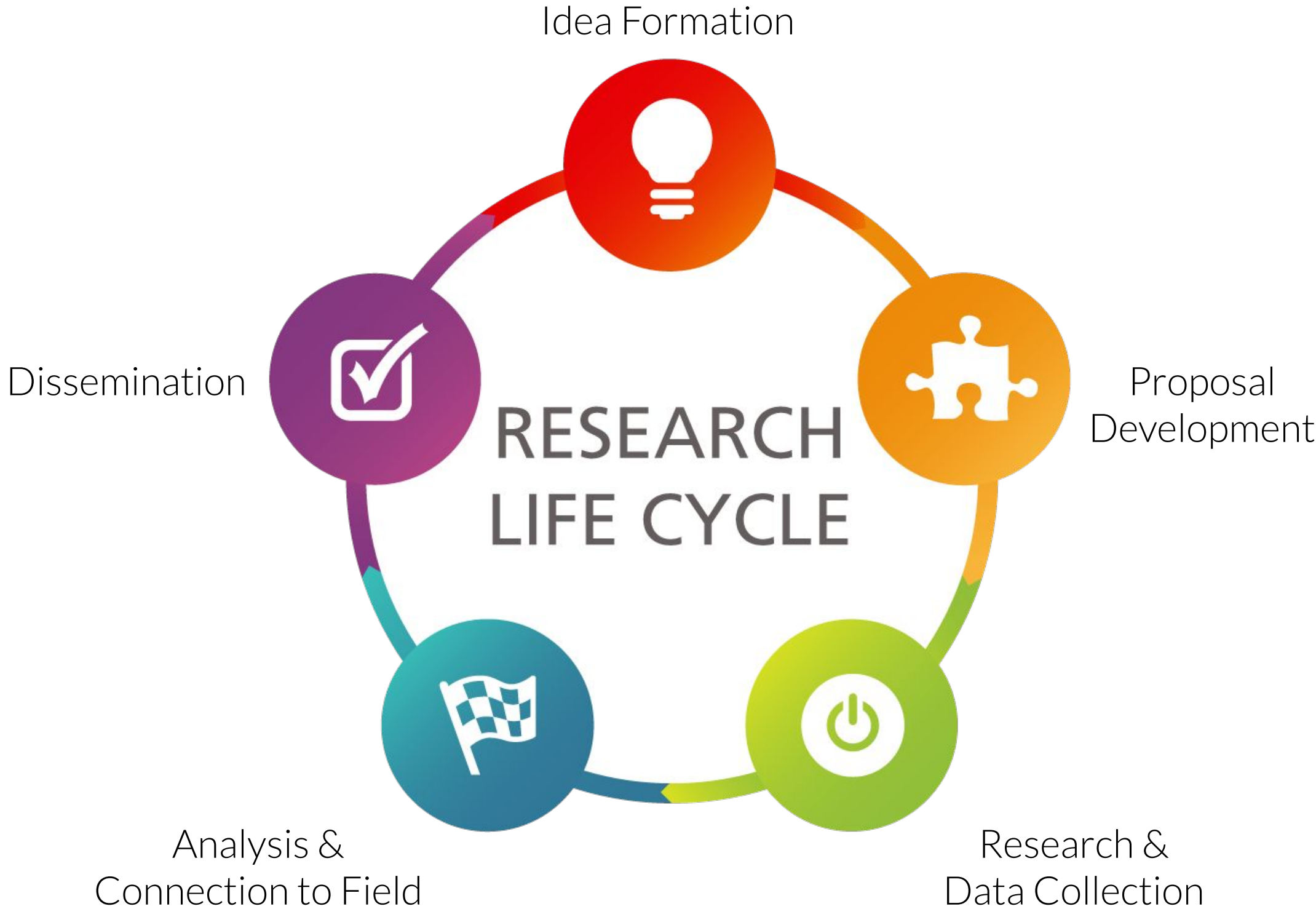


Image retrieved from <https://www.noclor.nhs.uk/research-life-cycle>

What Does Success Look Like?

We're working on it..

36

Got Cord
SP 2018

237

Signed Up

27

Signed up
SP19



2X by
2020

With focus on
completion
rates

Where we can improve...

**Transfer
Students**

**Activities
Petition**

**Ramps for
access**

But... the Data & Assessment!

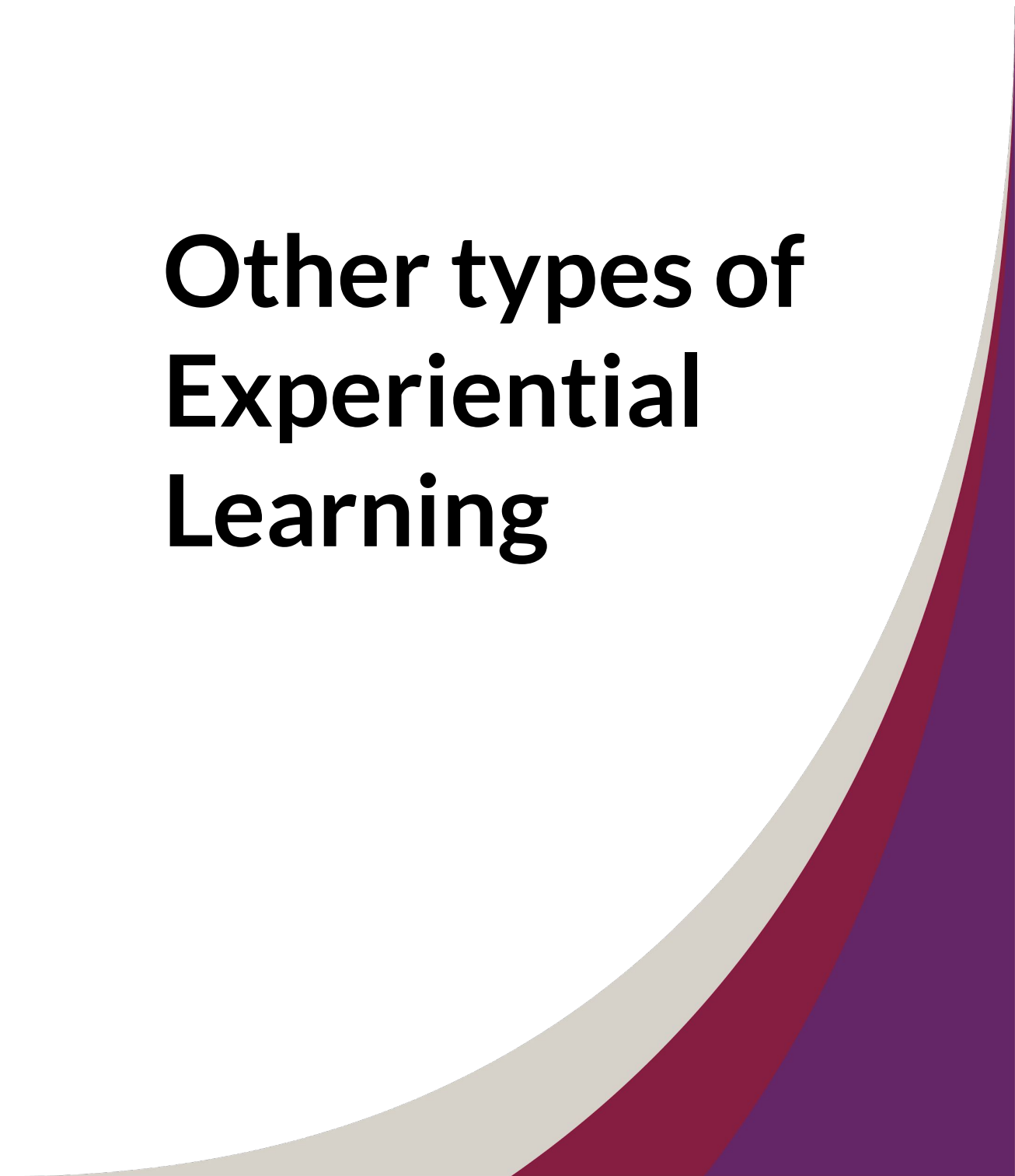
**What Majors
are we
missing?**

**Barriers to
Participation**

**Involvement
Factors?**

Outcomes?

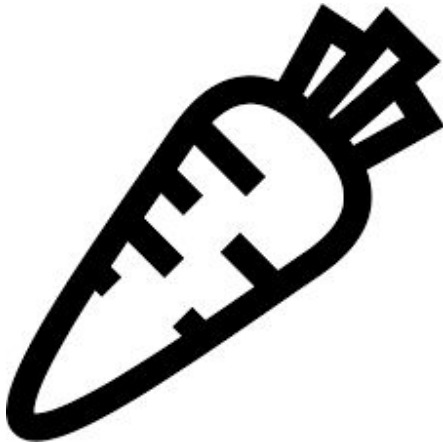
**Other types of
Experiential
Learning**



Takeaways & Future Directions



Material Creation & Sharing



Find the “Carrot”



Build off Current Resources?



Adaptation at Other Institutions



Assessment



Graduation Survey?



Celebrating Outcomes



Celebrating Students & Promoting Research Best Practices

Questions, Other Ideas?

Acknowledgements to
Dr. Stephanie (Nikki)
Lewis (Honors College,
Virginia Tech)



ARS Videos
<https://bit.ly/2BbkT4M>

Contact Us! We'd Love to Collaborate!



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