Lobos Connect: UNM Provost Challenge for Excellence and Equity

General Education Initiatives

https://provost.unm.edu/initiatives/lobos-connect.html

REQUEST FOR PARTICIPATION

Please complete the online participation-application form by 5:00 pm, February 18, 2021.

Click here to apply

*Lobos Connect: The Provost's Challenge for Excellence and Equity* challenges us to deliver fully:
1) an excellent research education that contributes to equity
2) equity in educational experience that contributes research excellence.

Provost James Holloway and Vice President for Equity and Inclusion Assata Zerai invite you to participate in a challenge focused on strengthening general education at UNM. Entry-level and general education courses often close the door to higher education for structurally disadvantaged students. These courses are meant to serve as portals, but, both nationally and at UNM, they present more barriers to persistence and success for first generation students, low-income students, transfer students, and students of color than for their advantaged peers. The challenge comes in the form of two research-based and grant-funded projects designed to provide faculty with specific resources to improve equity in entry-level courses:

**The Student Experience Project (SEP)** offers faculty easily implemented tools to support students in the classroom by creating an inclusive environment for resilience and persistence.

**Expanding Course-Based Undergraduate Research Experiences (ECURE)** introduces students in STEM general education courses to entry-level undergraduate research experiences, with the goal of providing equitable, engaging and inclusive access to research and investigation. For this purpose, STEM is defined as those disciplines which can be supported by NSF funding (which includes economics, sociology, psychology and anthropology, in addition to engineering and traditional science disciplines).

*If you teach general education or other entry-level courses at UNM’s Central Campus, we invite you to apply to become Teaching Fellows in either the Student Experience Project or the ECURE Project.*

*For questions, please email Joe Suilmann at suilmann@unm.edu.*
What is SEP?

The Student Experience Project is designed to improve classroom performance and persistence to completion of degree among structurally disadvantaged students, including first-generation students and students of color. SEP is a national, multi-institution effort to improve student success and equity by increasing belonging, growth mindset, and other learning mindsets. Faculty participants in SEP will collaborate with peers, student success leaders, and social psychologists interested in informed research and practice. Participants will collaborate with peers to apply the science of learning mindsets to changes in the classroom that increase social belonging, convey a growth mindset, foster inclusivity and institutional trust and reduce social identity threat. By participating in the SEP collaborative, members of this network will play a leading role in helping to build scalable models and tools that increase equity in higher education. The project is being sponsored and coordinated by the Association of Public and Land Grant Universities (APLU) and the Coalition of Urban Serving Universities (USU), with a number of other national organizations and universities. The tool kit interventions have been developed from a base of published socio-psychological research. For more, including information about the collaborating institutions and the research base, see https://studentexperienceproject.org.

THE STUDENT MINDSET CHALLENGE ADDRESSED BY SEP INTERVENTIONS

Adapted from diagram designed by Mindset Scholars Network
What are the types of SEP fellowships, and how are they compensated?

**Exploratory Fellows.** Faculty participating at this level are considering further involvement and are able to make some but not all changes required of full implementation fellows. Receiving a $400 stipend, Exploratory Fellows will:

- Engage in a faculty development workshop series via asynchronous delivery and participation in synchronous workshop events (total 5-6 hours). Brief descriptions of the workshops are below, for more information [click here](#).
  - Syllabus Revision / Social Belonging and Growth Mindset Foundation
  - Interactive Workshops on Classroom Practices (Assessment and Inclusive Climate)
  - Measuring Student Experience using Copilot-Ascend
- Prepare and implement **at least one of the classroom practices from each area** in the list of interventions (a total of four from the list below) over the course of the semester.
- Utilize a validated student survey tool "Copilot-Ascend" **at least 2 times** throughout the semester, once in the beginning and once near the end. Copilot-Ascend is a professional learning platform that allows faculty to understand student experience in their course(s).
- Attend monthly meetings with peers to share change ideas, reflect on Copilot-Ascend data, and learn from one another

**Implementation Fellows:** To be eligible for SEP implementation fellow funding of $1,000, a faculty member must commit to:

- Engage in a faculty development workshop series via asynchronous delivery and participation in synchronous workshop events (total 5-6 hours). Brief descriptions of the workshops are below, for more information [click here](#).
  - Syllabus Revision / Social Belonging and Growth Mindset Foundation
  - Interactive Workshops on Classroom Practices (Assessment and Inclusive Climate)
  - Measuring Student Experience using Copilot-Ascend
- Prepare and implement **5-7 classroom practices** over the course of the semester, including at least one from each area in the list of interventions (below).
- Utilize a validated student survey tool "Copilot-Ascend" **at least 4 times** throughout the semester. Copilot-Ascend is a professional learning platform that allows faculty to understand student experience in their course(s).
- Attend monthly meetings with peers to share change ideas, reflect on Copilot-Ascend data, and learn from one another

**What are SEP interventions?**


1. **Syllabus Review**
   - Evaluate the messages about instructor mindset and student belonging conveyed through course policies, design, and phrasing in your syllabus.
2. Social Belonging and Growth Mindset Foundations
   1. Effective Social Belonging Messages
      • Assure students that academic challenges and concerns about belonging are normative and do not signal a lack of fit or academic potential, and communicate that belonging gets better over time.
   2. Effective Growth Mindset Messages
      • Communicate that ability is something that students develop, is not the result of innate qualities, and provide assurance that ability can be improved over time.
   3. Policy Review: Creating Student-Centered Course Policies
      • Review policies and remove, revise, or create new policies to promote equitable learning for all student groups and address unmet learning needs.
   4. Establishing Expectations: A Growth Mindset Approach
      • Based on the expected student learning outcomes for your course, create growth mindset messaging to communicate expectations and connect students to available feedback opportunities and resources.
   5. Creating a Belonging Story
      • Share your own, or find past students to share, a short story about a challenge encountered in academic or professional experience that provides students with an opportunity to reflect on their own experiences and provides them with a framework for interpreting the common challenges they are likely to face in rigorous academic environments.
   6. Encouraging Connections in the Classroom
      • Take steps to facilitate greater connections, focusing on how students connect with each other, and overcome the intimidation that often inhibits students from approaching instructors and other members of the instructional team.

3. Practices to Foster Academic Engagement and Growth
   1. Creating an Attuned Assessment Wrapper
      • Create a review exercise for students to reflect on an assessment and plan for the next one.
   2. Creating a Wise Feedback Framing Statement
      • Create a brief statement that you can include with comments on key assignments and exams that communicates that you are providing the feedback because you have appropriately challenging standards for the course, and you believe that the student is capable of meeting them.
   3. Integrating Self-Relevance and a Sense of Purpose into Your Course
      • Develop and activity to highlight self-relevance and purpose to help students identify the relevance of the coursework to their broader goals or a personal sense of purpose.

4. Social Belonging and Growth Mindset Foundations
   1. Ensuring Classroom Identity Safety
      • Incorporate practices that create an identity safe classroom, such as Establishing Norms for Course Conduct, Acknowledging Diverse Identities, Addressing Social or Historical Context, and Employing Routine Inclusive Teaching Practices.
   2. Addressing an Identity Threatening Incident
      • Identify resources on campus that can help students who experience an identity threatening incident, and prepare for the possibility that you may need to address such an incident in your class.
What are the obligations for the SEP fellows?

Exploratory and Implementation Fellows commit to attending a faculty development workshop series via asynchronous delivery or participation in synchronous workshop events). This professional development program will introduce instructors to the SEP framework and assessment mechanisms, the SEP implementation Library, as well as active learning strategies and culturally inclusive instruction. UNM faculty may have some voluntary opportunities to meet with participating faculty from other SEP institutions.

Exploratory and Implementation Fellows commit to meeting monthly in a community of practice. These meetings may be more or less frequent as determined by the participants.

All Fellows commit to incorporating their selected level of immersion (at the Exploratory or Implementation levels) in their section(s) of general education or portal course(s) during the Fall 2021, and Spring 2022.

Implementation Fellows commit to assigning their students a Copilot-Ascend survey at least 4 times (for Exploratory Fellows, 2 times) throughout the semester. Copilot-Ascend is a professional learning platform that allows faculty to understand student experience in their course(s). The survey will take students 5-10 minutes, can be administered in class or as an online homework assignment, and will monitor student growth mindset, self-efficacy and sense of belonging. We request that instructors provide incentive for students to complete the survey, possibly through points.

Implementation and Exploratory Fellows commit to completing an instructor survey at the conclusion of Fall 2021 and Spring 2022. This survey will not take longer than 25 minutes to complete.
UNM ECURE Project

What is ECURE?

ECURE (Expanding Course-Based Undergraduate Research Experiences) is an NSF-funded grant designed to leverage UNM’s research mission to enrich undergraduate education in STEM general education\(^1\) and portal\(^2\) courses. ECURE is a program of the General Education Initiative within the Provost Challenge for Excellence and Equity. It is led and supported by Academic Affairs, the Office of the Vice President for Research, the Division of Equity and Inclusion, and the Office of Student Affairs. ECURE is based on the following key concepts:

- Engaging students in undergraduate research (UGR) experiences will positively impact their science literacy, science identity, and research self-efficacy, as well as their likelihood to persist and graduate at UNM.
- Engaging students in UGR in general education and portal courses will allow us to serve more students than co-curricular programming alone, and will help students connect course content to professional, community and research applications.
- Engagement in undergraduate research can be offered at varying levels of research immersion. These levels range from students learning about research without actually conducting research to students implementing all stages of their own authentic research projects (see descriptions of the levels below). All levels of early research immersion are useful to achieving desired student outcomes described above, and to creating more effective and diverse pathways to more advanced co-curricular research engagements within their majors.

To this end, ECURE will support instructors in incorporating UGR components into their general education and portal sections, and will study the impact of these enriched engagements on student perceptions and behaviors.

What are the levels of undergraduate research engagement?

Over the past two years, the UNM Academic Affairs General Education Teaching Fellows UGR Group has developed an expanded course-based undergraduate research experiences (CURE) framework. This framework conceptualizes three distinct levels of student immersion in UGR, all of which will have positive impact on students (see figure below). We believe that each of the three levels of student research immersion will have significant positive stand-alone benefits, but ECURE funding will allow us to measure these impacts across immersion levels and academic disciplines using the same student outcomes.

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\(^1\) Defined as a course that counts towards student general education requirements in a STEM field. For a list of STEM fields, please see: [http://stem.unm.edu/about-stcc/what-is-stem.html](http://stem.unm.edu/about-stcc/what-is-stem.html)

\(^2\) Defined as the first one or two courses students typically complete once they begin their major courses, generally at the 200 or 300 level.
Preparatory Immersion (PREP). In the ECURE Framework, PREP is defined as teaching students how research is conducted (including explaining the connection of foundational skills to research processes), but without actual engagement in research. PREP can be taught in either lecture or active learning environments. Throughout the course of the semester, students in PREP sections will participate in at least ten separate activities, assignments or focused lectures addressing research skills or research-applied foundational skills during the course of an academic term. Examples include teaching students to differentiate between correlation and causation, exploring the value of peer-based literature compared to Wikipedia, or learning how an important course concept is used in solving real-world problems.

Partial Immersion (PARTIAL). In the E-CURE framework, PARTIAL is defined as engaging students in selected components of research, without engaging in all of the essential elements of full CUREs. An example of PARTIAL might include a class where students are provided a research problem by the instructor (rather than identifying one themselves), are provided a summary of existing knowledge (rather than conducting their own lit reviews), are provided with a research method (rather than selecting their own), are required to collect & analyze data individually, and report their findings to the instructor in a research journal (rather than sharing with research peers). Throughout the course of the semester, students in PARTIAL sections will engage in at least two research steps, where students ask or answer questions to which the answers are unknown. These research steps will be defined by the instructor, as appropriate for their academic discipline. One example of research steps from the University of Houston includes: Define the problem, Review the literature, Form problem statement, Select research design, Carryout the research, Interpret research, Report the research, and Repeat. We define “answers are unknown” as the divergent experiences, with multiple possible correct results, rather than convergent experiences, with single or limited correct results. The instructor may know which results are most likely, but not which results are pre-determined if the research is conducted correctly.

Full Immersion (FULL). FULL experiences fit the traditional definition of CUREs, where students participate in authentic research experiences. In FULL experiences, students participate in all stages of
The research project. These projects should not be individual or independent projects. They should be group-based projects, where each student participates in all of the stages. In general education and portal courses, these projects will most often be small research projects. As with PARTIAL, the research steps will be defined by the instructor, as appropriate for their academic discipline. In addition, to some extent the research projects should include all of the elements in the following table.

<table>
<thead>
<tr>
<th>Elements of Undergraduate Research³</th>
<th>Scientific practices</th>
<th>Uses generally accepted scientific practices to answer research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovery</td>
<td></td>
<td>Generates new knowledge, insights or understanding (focuses on questions where the answers are unknown).</td>
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<tr>
<td>Broadly relevant or important work</td>
<td></td>
<td>Findings are meaningful and important beyond the classroom</td>
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<tr>
<td>Collaboration</td>
<td></td>
<td>Involves teams of researchers working together</td>
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<tr>
<td>Iteration</td>
<td></td>
<td>Builds upon previous research and current knowledge</td>
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</tbody>
</table>

**Questions?** While the ECURE model is flexible to meet the needs of instructors in different course types (lectures, labs, active classrooms) in different academic disciplines, it is likely you have questions about how this framework would fit with your plans and goals for your own sections. We would love to chat with you about your ideas, so please contact Tim Schroeder (ECURE Director) at timschroeder@unm.edu to arrange a virtual chat via Zoom. We will also hold Zoom-based Q&A sessions the weeks of April 27 and May 11, 2010. Contact Tim Schroeder for session dates and times.

**What are the types of ECURE fellowships, and how are they compensated?**

For 2021-22, ECURE will support 20 Implementation Fellows and 12 Exploratory Fellows. Implementation Fellows will develop and implement ONE of the three levels of immersion in at least one section of a STEM general education or portal course in the Fall 2020, Spring 2021 and/or Summer 2021. Each Implementation Fellow will receive a $4,000 summer stipend. Exploratory Fellows will explore the use of the ECURE framework in their courses by observing their peers implement projects, but will not commit to an implementation themselves. Exploratory Fellows will be encouraged to apply as Implementation Fellows next year, if they feel this is an appropriate framework for their course(s). Exploratory Fellows will receive a $1,000 summer stipend. Starting in summer 2021, former Implementation Fellows will also be encouraged to apply as Publication Fellows. Publication Fellows will be supported in submitting their course project findings and results for publication.

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What are the obligations for the ECURE fellows?

Implementation Fellows and Exploratory Fellows commit to attend the virtual ECURE Summer Institute between May 24th and June 18th, 2021, with synchronous sessions scheduled only on Monday afternoons during this timeframe. All other engagements during the Summer Institute will be asynchronous, and can be arranged to meet your individual schedule. You should expect to spend 10-15 hours per week on the ECURE Summer Institute between May 24 and June 18. This professional development program will introduce instructors to the ECURE framework and assessment mechanisms, as well as active learning strategies and culturally inclusive instruction.

Implementation Fellows and Exploratory Fellows commit to meeting monthly with the ECURE community of practice. These meetings may be more or less frequent as determined by the participants.

Implementation Fellows commit to incorporating their selected level of immersion (PREP, PARTIAL or FULL) in their section(s) of STEM general education or portal course(s) during the Fall 2020, Spring 2021 or Summer 2021.

Implementation Fellows commit to assigning their students to complete an ECURE pre and post assessment survey. This survey will not take longer than 30 minutes to complete, and can be assigned as an in-class activity or as out-of-class homework. We request that instructors provide incentive for students to complete the survey, possibly through points towards the final grade or through extra credit points.

Implementation Fellows commit to allowing classroom observations by members of the community of practice, and ECURE staff/researchers. These observations will be at the discretion of the instructors, and will be scheduled based on instructor preferences.

Exploratory Fellows commit to observing at least three classroom sessions in Fall 2021, Spring 2022 and/or Summer 2022.

Implementation and Exploratory Fellows commit to completing an instructor survey at the conclusion of Summer 2022. This survey will not take longer than 25 minutes to complete.

Implementation Fellows commit to completing a two-page summary of their project at the end of Summer 2022. A template will be provided for the report.

OPTIONAL: If Implementation Fellows would like to share their curriculum modules with peers at UNM and other institutions, we will provide a module template for doing so. We will post these modules on the ECURE website, and will distribute to other non-UNM sites as appropriate.