

Frequently Asked Questions

CUR Transformations Project

General Questions

Q: How do we know if we have the capacity for transformational change? How do we assess readiness for the transformational process?

A: There should be evidence that some type of transformation has occurred involving the departments and faculty that you are selecting for your institutional proposal. There also should be a strong commitment to undergraduate research already in place. To help determine readiness, go to the CUR website at http://www.cur.org/publications/publication_listings/COEUR/. Also, see slides 20-21 from the Webinar.

Q: What is the institutional self-assessment resource mentioned in the webinar?

A: It is *Characteristics of Excellence in Undergraduate Research* (COEUR), and it's available for free on the CUR website. There are some surveys and additional materials available on the CUR website that center around the COEUR. Please see http://www.cur.org/publications/publication_listings/COEUR/.

Q: Are two-year colleges eligible to participate in the project?

A: Two-year colleges cannot participate independently, but we encourage partnering between four-year institutions chosen to participate and two-year institutions that work closely with them on curricular redesign projects for first- and second-year courses, thereby ensuring more seamless and successful transitions for students who transfer.

Q: Are you planning to have a mix of liberal arts/PUI institutions and research institutions? Or more of one or the other?

A: We are looking for a diversity of institutional types and sizes to be involved in this project and will not be expressly giving preference to PUIs, comprehensive universities, and/or research-intensive/doctoral granting institutions.

Q: We are a primarily online college, although we do have a four-year science degree. We do not have laboratory facilities. Could we be considered?

A: If you are an accredited institution that awards baccalaureate degrees in at least two of the primary disciplines included in the project (biology, chemistry, physics, psychology), then we would certainly entertain an application from you. It will be imperative that you address the lack of lab facilities and how you intend to develop a curriculum that is research-rich.

Q: Do you see these efforts as laying the groundwork for securing more funding for these efforts in the future?

A: Certainly we do. As the project develops, we intend to seek additional sources of funding as we identify areas that are ripe to be pursued. We also hope that institutions submit well-informed and compelling requests for additional funding, either from their institution or from outside sources.

Q: Are there good examples of existing programs with curricula that we might reference to see highly successful approaches to this type of transformation?

A: One source of courses and programs is CUR's monograph, *Developing & Sustaining a Research-Supportive Curriculum*.

Questions about Departmental Identification and Eligibility

Q: Can we include more than 2 departments in our proposal?

A: No.

Q: Is this proposal limited to 2 of the 4 departments? Or a minimum 2 of the 4 departments?

A: The project can only fund two departments per institution. It may be possible for your institution to self-fund additional departments to join in participation in the project, if they wish more than two departments to participate.

Q: Can you repeat how the institution should select the two departments?

A: The slides from the Webinar describe how you might think about this issue. In particular, review slides 20-25.

Q: We have Chemistry and Physics in one department (not separate), if we include our department of biology as well, would we be qualified as two departments?

A: Yes. However, the four-year curricula of only two disciplines will be the focus of this project. If you add Biology to this project, you will need to decide whether to focus on the chemistry curriculum or the physics curriculum as the second discipline.

Q: Can a math department participate in connection with a science department?

A: Although we cannot directly support math departments in this project, we encourage on-campus engagement between the departments selected for inclusion in the project and other departments that may be interested in learning more about the curricular transformation process.

Q: Are computer science departments eligible to receive funding?

A: Unfortunately, our project can support only departments based in the disciplines of biology, chemistry, physics, and psychology. However, as stated in the question above, we encourage on-campus engagement between the departments selected for inclusion in the project and other departments that may be interested in learning more about the curricular transformation process.

Q: Does the proposal have to involve all the undergraduate majors? We have 2,300+ majors in our department and it does not seem feasible to involve all of them in research.

A: We are hopeful that departments/institutions selected for the project will identify curricular mechanisms to touch all the majors in the selected departments, but we realize that there may be situations where some students are impacted to a greater extent than others. This is an issue that you would work on extensively with your consultants. The project focuses on developing a four-year research-infused curriculum in a given discipline with research elements vertically scaffolded throughout the four years, achieving outcomes developmentally. As such, this model does not necessarily require a traditional capstone faculty-student collaborative undergraduate research project

for all majors.

Q: Our campus has two departments that are related to Biology: Biological Sciences and Wildlife. Would both be eligible?

A: Yes, assuming both offer a degree program at the baccalaureate level.

Q: Is the curriculum focus on the major program curriculum only, or are we also looking at service or general education curricula?

A: Our belief is that research-rich curricula should expose all students to this approach so general education courses should be part of any plan that is developed, even if courses in the major are more heavily targeted. However, a focus on general education curricula only, particularly one that does not have a four-year program, would not be eligible for this project.

Q: Does each department participating in the program need to offer its own BS programs, or could they be service departments only?

A: It is not possible for service-only departments to participate. Our participation criteria state that departments need to “offer accredited degree programs at the baccalaureate level”.

Q: Since our institution has 2 residential campuses, we would like to apply jointly with our two physics programs. Would this be appropriate?

A: We need more information as to whether these departments offer independent degree programs or not. We would interpret the two physics programs as constituting two departments if each department offers individual courses leading to a four-year degree. Alternatively, if the two departments offer a joint curriculum and the two campuses are relatively close together, we would view the two campuses as acting as one department. We would ask that you describe the department curriculum and decision-making structures in your narrative.

Q: Our Biology Department supports a major in biology but we also collaborate with a number of other departments to support majors in biochemistry (with our Chemistry Department), neuroscience (with our Psychology Department) and environmental science (with Chemistry, Earth Sciences, Economics and Political Science Departments). How do those other collaborations affect our eligibility?

A: We would count the Biology department as one of the two departments from your institution. The collaborations should allow you to enhance your curriculum in interesting ways and this can be managed with your consultants.

Q: Can departments within the 4 listed develop interdisciplinary course with departments not listed (ie. computer science or math)?

A: Absolutely. We would encourage this.

Q: Are new research-embedded courses required in each year (year 1, year 2, etc.)? Also, can existing courses be reimaged to include research?

A: We are not requiring any approach or outcome. However, you need to think about how you would scaffold the courses into a coherent, 4-year plan for your students. Existing courses will certainly be part of most plans. Each of your departments will work closely with their consultants to develop the type(s) of curricular transformation plans that make the most sense given your own institutional and departmental contexts.

Q: Is it preferred that the 2 selected departments be at the same stage of curricular development (in regards to where UR fits) or can they vary?

A: They can vary, and we assume that they might or will be at different stages of development.

Q: Does the scaffolded research-based curriculum in one department have to be related to the research-based curriculum in the other department or can each department design their own?

A: They can design their own. As noted above, each of your departments will work closely with their consultants to develop the type(s) of curricular transformation plans that make the most sense given your own institutional and departmental contexts.

Q: Do the two departments in each institution have to have a common plan in some sense of how they are going to work together? For example, that they would have an interdisciplinary CURE? Or just choose 2 departments that are most ready? I presume the second, but wanted to double-check, especially for situations where the two departments are more different (natural science vs. psychology)

A: Choose the two that are most ready; there is no presumption that the two departments will have a common plan for curricular reform. One of our research questions probes the influence of discipline on the strategies adopted for curricular transformation.

Q: Would you consider a structure where there are two lead departments, with participation from two additional departments? That is, all 4 disciplines represented in the application?

A: The institution needs to select two departments. In your question, the two lead departments need to be identified as those are the ones we will support. We encourage on-campus engagement between the departments selected for inclusion in the project and other departments that may be interested in learning more about the curricular transformation process.

Questions about Institutional and Departmental Leadership Teams

Q: Do you want full selection of departmental and institutional teams at the pre-proposal stage?

A: At the pre-proposal stage, institutions should definitely have the two departments selected, and, at the very least, the key members of the institutional leadership team and each departmental leadership team should be identified. If the teams are not yet finalized, pre-proposals could list the members (or positions) that are under consideration. The complete lists of team members will be required at the full-proposal stage.

Q: The size of the teams being described makes it sound like you are assuming the departments will be quite large. Are smaller institutions/smaller departments welcome? Are we expected to have the same size teams as larger institutions?

A: We anticipate that team members will not all have to be from a given department. In fact, we encourage each departmental team to include faculty members and/or staff members from others areas that would bring value to the department's work on the project (e.g., but could be people from schools of education, dean's offices, assessment folks, etc.). Moreover, we anticipate that each departmental team would include 4 to 6 members.

Q: We have relatively small departments on our campus (4-6 tenured/tenure track faculty). Is it alright to have smaller leadership teams than the suggested 4-6 leaders?

A: As stated above, we anticipate that team members will not all have to be from a given department. In fact, we encourage each departmental team to include faculty members and/or staff members from others areas that would bring value to the department's work on the project (e.g., but could be people from schools of education, dean's offices, assessment folks, etc.). We do expect that each departmental team would include at least 4 members, as there needs to be critical mass of individuals on the team; we want the full team to develop shared ownership of leading the project (i.e, a nested leadership model).

Q: You described wanting to ideally have "nested leadership" and multiple teams working simultaneously. For schools that are small, with small but committed departments, how many people do you anticipate needing on each "team?" To be specific, if we have 6 faculty members in one department, do you expect all six faculty members to officially be part of that department's team? Or might it be enough for 2 or 3 people in each department to take the lead?

A: As noted above, we are looking to have institutions of different sizes as part of the project, but we expect the leadership and department teams to be of comparable size. Department teams may include faculty within the department, assessment directors, educational research experts, etc. It is most important to ensure that a cadre of people are committed to the project and will stay in place over the life of the project. We do expect that each departmental team would include at least 4 members, as there needs to be critical mass of individuals on the team; we want the full team to develop shared ownership of leading the project (i.e, a nested leadership model).

Questions about Assessment and the Research Design

Q: I assume there will be an ethical review by an Institutional Review Board (IRB) of the project prior to beginning? Who will be the primary IRB?

A: Indiana University is the primary IRB holder, and the IRB review was required prior to submission of the project proposal to the National Science Foundation.

Q: Can one take part in scholarly efforts or pursue one's own education research in the context of this program?

A: Institutions are required to participate in the scholarly and assessment efforts of the project but are welcome and encouraged to develop their own educational research focus to conduct in parallel.

Q: Who will own the data collected?

A: CUR will co-own the data from each participating institution.

Q: Will participating faculty have the opportunity to co-author publications and move their own careers forward?

A: Yes. This is the model we have used in previous projects. When publishing their own results, it is our expectation that participating faculty members, departments, and institutions acknowledge the CUR Transformations project and its funding sources in all publications, presentations, products, etc.

Q: Will assessment tool(s) be provided, or are institutions expected to develop these?

A: To address the research questions of the project, there will be common assessment measures that all institutions will be required to use. The project's leadership and your consultants will work with you to develop additional assessment measures that support your programs and your research interests.

Q: Concerning assessment: If we have an evaluator from the School of Education, should he/she be on the leadership team or both of the department teams?

A: Either level of participation would be appropriate and depends on your institution's preferences and specific needs.

Q: The assessment piece that accompanies the project – are the assessments existing measures that are administered to faculty and students or do the assessments need to be created by the departments? If the latter, do the consultants help with the development of the assessments?

A: To address the overarching research questions of the CUR Transformations project, there will be common assessment measures that all institutions will be required to use. The project leadership team will provide these assessment measures. Disciplinary consultants will certainly help to construct additional assessment measures to address particular issues of interest to the participants.

Q: Could you clarify research question #1 again? It appeared different from the request for proposals.

A: Our overarching first research question is: "What effect do student characteristics (e.g., preexisting academic preparation) have on scaffolded integration of undergraduate research into the curriculum and student learning outcomes?" To address that question we have outlined possible explorations that examine how student characteristics influence both the receptivity of students to this approach and the benefits accrued by students as a consequence of this curricular transformation. We are also interested in knowing how the student experience varies with the depth of integration of research elements throughout the curriculum. These explorations are formally stated in the request for proposals in the following way:

- To what extent are students receptive to a research-based curriculum emphasizing discovery, inquiry, and analysis?
- Does receptivity vary with student characteristics? Do all students value this approach?
- How do student-learning experiences and outcomes in the scaffolded undergraduate research curriculum vary by student characteristics? Do all students benefit equally from this approach?
- What is the relationship between students' experiences in an inquiry-driven curriculum and the extent to which departments have integrated the components and outcomes of high-quality undergraduate research?

Q: Will the participating institutions have access to the proposal IRB?

A: Yes.

Questions about Dissemination of Project Results

Q: How will the data collected about each institution be disseminated at the end of the grant? How involved will the team members at the institution be in this process?

A: We will disseminate data at conferences, in publications, and in a monograph detailing the project. All participants will have opportunities to contribute. Some conference presentations and publications will be co-authored, but departments/institutions will be able to publish their own results. Our previous monograph is one example of a dissemination piece involving both institution-authored and project PI-authored chapters. When publishing their own results, it is our expectation that participating faculty members, departments, and institutions acknowledge the CUR Transformations project and its funding sources in all publications, presentations, products, etc.

Questions about Budget and Resources

Q: Does this grant allow for indirect costs to be taken on the travel and department funds? If you are invited for the full proposal will you need to include a budget for the travel and department funds?

A: No. All participant travel costs will be reimbursed directly from the project. The \$2,000 annual curriculum innovation funding per department is not subject to indirect costs, due to the small size of the amounts to be expended.

Q: Can you provide details on specific resource reallocations that will be required by the institution?

A: There are no specific resource allocations that are required from the institution. We believe that the greatest contribution will be for faculty time to do this work. Institutions will be encouraged to support the faculty and departments as appropriate. Moreover, as departmental work continues internal funding may be requested for specific initiatives (e.g., additional professional conference travel, hosting an extra speaker, holding a retreat, etc.).

Q: As faculty, how much time commitment for academic year and summer is normally required? Do you have recommendations or expectations involving the workload for faculty taking leadership positions in the project, e.g., would you expect key faculty leaders to have course releases and, if so, how much? What has been common practice in the past in grants like this that you have facilitated?

A: It is difficult to say how much is sufficient as it depends on teaching loads and other responsibilities that currently exist. Summer salaries is another way to support the faculty.

Q: Concerning funding: Are there restrictions on how to use the \$2,000 per year per department? For example, could one of the departments use \$4,000 every other year for a course release?

A: We will support creative ways to use the funds and your example is a good start.

Questions about Consultants

Q: What is the expertise of the consultants as applicable to these transformations, and how are they selected and matched with participating institutions/departments?

A: Consultants will be experts in their discipline, experienced in undergraduate research on both a personal and institutional level, will have experience in leading change initiatives (particularly curricular reform), and will be selected for their leadership skills.

Q: You are asking for a large commitment with not much support, other than consulting advice. What makes your project's consultants worth this commitment, compared to disciplinary consultants we consult through normal channels. It sounds like you are looking for research collaborator/participants, but not offering them much in return for their large commitment.

A: Our focus is on helping institutions and departments live their dreams and to support work on student learning and student outcomes. We have tremendous amounts of experience in assisting departments and we will bring on board consultants with the same mind set and experience. What separates this project from getting disciplinary consultants as you describe is the sustained engagement of the consultants with the departments/institutions and the long-term commitment to change that we are focused on ensuring. Moreover, participating institutions and departments are not simply buying consultant time and/or a product. Rather, the selected institutions and departments will be partnering with us and the consultants who are passionate about this work and its outcomes. These critical components of the project are discussed in the Request for Institutional Proposals, and we strongly encourage departmental faculty members and administrative leaders to carefully read this and to fully understand what they are signing on for when applying.

Questions about the Institutional Proposal

Q: What is the desired timeframe for the departmental and institutional demographic information that is requested in the pre-proposal? Last "x" number of years?

A: You would report the information for the most recent year for which you have complete demographic information.

Q: In the pre-proposal am I correct in my understanding that we only need to address the 6 prompts. We do not need to explain our ideas for curricular design, integration of undergraduate research, etc. specific to this project. That will be detailed in the full proposal?

A: Correct. Moreover, in the full proposal you will not be asked for your plans to completely redesign your curriculum, faculty workload system, and departmental culture. You may have ideas for this, or have already started some of these efforts, but this is the work that you will be doing over the four years of the CUR Transformations project, guided by your consultants and the project leadership.

Q: We have a few specific questions about the data requested. For data on students, are you asking for data on undergraduate students only or should we include our master's students? Do you want an FTE or can we provide a headcount instead? Regarding the request for data on faculty teaching contributions, are you asking about their teaching contributions to the major curriculum only?

A: We are asking for both full-time equivalent students (FTES), and head count, for both undergraduate and graduate student enrollments. You are welcome to provide data on faculty teaching contributions to non-major as well as major curriculum courses, but our primary interest is the teaching contribution to the major curriculum.