Grand Challenge: Building Critical Mass for Data Science RFP

Frequently Asked Questions
Updated on 12/5/2022

Table of Contents

Eligibility and Application Requirements

Do institutional partners have to be confirmed for a Pathways Development grant? (Added 11/14/2022)

Yes. Specifically, by the time you submit an Initial Proposal, your Pathways Development proposal must include at least two institutions from California's public higher education segments. These host and partner institutions are expected to be committed to the full duration of the project. Keep in mind that an institutional letter(s) signed by partners is required as part of the Initial Proposal.

Over the project duration, other institutions may be included in the project. That is, you may propose to recruit additional institutions to participate in the project. For example, a Pathways Development project that includes a faculty development component may plan to expand its reach beyond the main host and partner institutions; the budget may include line items that reflect recruitment and/or participation of faculty participants from other institutions in future years, even if individual faculty members or institutions were not identified at the time of the proposal submission.

For the Faculty Development Grant, how do you define data-science adjacent faculty? (Added 11/14/2022)

Data-science adjacent faculty are faculty who might not explicitly work within the field of data science but in a field or discipline where data science can be integrated. Examples include faculty in math, statistics, computer science, or in <u>applied fields</u>.

> **What do you mean by "applied fields"?** (Added 11/14/2022)
> An applied field is any field or discipline where data science can be applied and integrated into the curriculum. This definition is broad to allow projects flexibility in developing innovative approaches to data science integration and development.

Do I need to be an administrator to be PI? What if I am the PI but am not able to commit to the full life of the grant? (Added 11/14/2022)

PIs for the *Grand Challenge: Data Science* RFP may be administrators and/or faculty. (Projects can have more than one PI.) While we hope that PIs may be able to lead the project throughout the entirety of the grant, Learning Lab understands that institutional roles and positions can change. Projects may request changes to PIs, Co-PIs, or other project personnel throughout the grant duration.

Is there is a preference for Undergraduate vs. Graduate data science programs development? (Added 11/14/2022)

Graduate data science programs are **not** eligible for Learning Lab funding. All programs and services provided by Learning Lab are designed specifically to improve outcomes and close equity gaps for undergraduate students attending public institutions of higher education in California. Any proposal focused on graduate data science programs would **not** meet the eligibility requirement for this RFP.

Can a single institution submit multiple proposals? (Added 11/14/2022. Updated 12/5/2022)

Yes, an institution may submit multiple proposals. Please consider whether the proposals would be competing with one another and/or whether collaboration among project teams would be a reasonable expectation, regardless of grant category (i.e., Pathways Development, Faculty Development, and Interdisciplinary Collaboration). Proposals will be evaluated according to the respective rubric; meanwhile, Selection Committee members may consider other factors such as geographic representation in making final award recommendations.

Does Learning Lab have suggestions for CCCs dealing with the math requirements in existing data science programs at CSUs and UCs that some perceive to contribute to equity gaps and limited student diversity? (Added 11/14/2022)

Learning Lab does not have explicit guidance on this issue. By providing funding to CCCs, CSUs, and UCs, Learning Lab seeks to support faculty to develop projects with goals to identify and solve systemic barriers that may impede equity in data science higher education such as existing math requirements.

Who is eligible to serve as a PI or co-PI?

Any individual with a permanent faculty appointment and who can demonstrate institutional support for the project through commitments from their department chair AND the appropriate academic administrator (such as a dean, vice chancellor/vice president of research or provost or equivalent), may apply as a PI/co-PI. Learning Lab does not limit the definition of "permanent faculty appointment" to tenured or tenure-track faculty. The Learning Lab does require that principal investigators hold an appointment that provides assurance that they will be able to oversee the proposed project for the duration of the grant. Non-tenure-track faculty who hold also administrative or departmental positions or long-term contracts that provide an equivalence to permanent appointment for the duration of the grant may be eligible, provided that they can also demonstrate institutional support from their department chair and appropriate academic

administrator. Where intersegmental collaboration is included, faculty from partner institutions can serve as co-PIs. (Pathways Development and Faculty Development Grants require intersegmental collaboration.)

If I am already on a Learning Lab funded project, may I apply or be part of a project team that applies for this challenge?
Yes. In addition to meeting all the RFP requirements, existing grantees must demonstrate that they have time to participate in or lead a new project without compromising the existing grant project.

Would two departments of the same campus be considered "intersegmental"?
No. For Learning Lab, intersegmental refers to at least two of the three segments of public institutions of higher education, that is, UC, CSU, and CCC segments. (Pathways Development and Faculty Development Grants require intersegmental collaboration.)

What is the collaboration requirement for Interdisciplinary Collaboration Grants?
For these grants, a minimum of two departments within the same institution must be involved and committed to the goals and outcomes of the proposed project.

What does Learning Lab mean by a project's "host institution," pertaining to projects that include intersegmental collaboration?
The project's host institution is the college or university that will act as grantee and fiscal intermediary for purposes of grant administration. The host institution will enter into a grant agreement with the Foundation for California Community Colleges (the Governor's Office of Planning and Research's designated administrator for Learning Lab) for receipt and management of grant funds, including distribution of funds to the partner institutions based on sub-award agreements. The designation of an institution as "host" is for grant administration purposes only. Learning Lab expects awarded projects to have meaningful, well-balanced collaboration among partner institutions. (Pathways Development and Faculty Development Grants require intersegmental collaboration.)

May applicants submit a statement of intent without confirmation of additional co-PIs?
Yes, as long as these key contacts are identified prior to submitting the self-assessment/initial proposal.

What if my information changes after submitting the Statement of Intent?
Learning Lab acknowledges that information may change after submitting the Statement of Intent. As such, there will be an opportunity to update your team information during each stage of the application process.

How will the self-assessment be evaluated?
The self-assessment will help Selection Committee members understand the local context for the initial and full proposals. They will not be separately evaluated.

What if a faculty team is unable to obtain letters or signatures from all the partner institutions?
Applicant teams must have all required signatures for all partner institutions at the initial proposal stage.

What will the Cohort Coordinator do?
The Cohort Coordinator's role is to coordinate and facilitate the sharing of ideas, approaches, findings, data, and outcomes among awarded projects teams over the grant period. (See the [Full RFP](#) for additional information.)

For the Self-Assessment and Initial Proposal, would you like references and, if so, do they count toward the page limit?
We do not require references in the self-assessment and initial proposal. If you wish to include references at this stage, they may included with the application and will *not* count toward the maximum page limit. For applicants invited to submit a full proposal, there will be a no page limit section for Endnotes/References. References will be expected at the full proposal stage.

Is there any chance the grant awards could be extended? Curricular changes including new courses and articulation and systemic change in general take a long time.
We request that applicants write their proposals and budgets to the specified timeframe. Proposed projects should also be designed to adhere to a feasible, realistic timeframe.

Learning Lab understands that, as with all funded projects, unanticipated challenges may lead to delays. Applicants may include any caveats to their proposed project timeline if there are anticipated steps that may significantly impact the timeline.

Is it permitted to include visuals in the proposal?
You may add visuals to the proposal if you think they will enhance articulation of the

proposed project. These will be included in the maximum page limits with the exception of a logic model, which may follow the application.

Can Learning Lab provide a previously submitted grant proposal for prospective applicants to view?

Every RFP is unique and providing a sample grant proposal may not necessarily provide the best guidance. We advise being responsive to the prompts in the proposal requirements, reviewing all supplemental RFP resources, paying close attention to the scoring rubric, and contacting Learning Lab at info@calearninglab.org to receive technical assistance.

Is there a limit on the number of proposals that may come from one institution?

No, there is no limit. However, it is reasonable for proposal reviewers to consider whether there are duplicative efforts or potential collaboration across submissions.

Project Outcomes and Impact

Is the expectation to have a fully developed program that would support students throughout the pathway or is it about progress in creating a pathway? (Added 11/14/2022)

Given the level of funding and intent of the Pathways Development Grants, it is expected that the project will result in degree or certificate pathways as defined in the RFP (see pg. 5). Keep in mind that the scale and reach of a project and potential to close proven STEM equity gaps will contribute to the competitiveness of your proposal. Meanwhile, project outcomes and impact will vary depending on the nature of the particular project and respective starting point. For example, a project intending to plan and develop new pathways at given institutions will likely vary significantly from a project seeking to revamp or expand an existing STEM pathway to include data science. That is, depending on the established groundwork of any project, the expected outcomes will vary.

Is it okay for a Pathways Development project to also include elements of faculty development and/or interdisciplinary work? (Added 11/14/2022)

Yes. A Pathways Development proposal may include elements of faculty development and/or interdisciplinary work; however, developing the 2-to-4-year data science pathway must be the primary focus. Applicants must consider the specific design and goals of their project to determine which grant to apply for.

How does Learning Lab define outcomes and what types of outcomes should be included in the proposal?
Outcomes should demonstrate the changes that will result from the project; they should be measurable and timebound. Outcomes should collectively reflect how well strategies were implemented and the effectiveness of the interventions to the extent possible, not simply whether activities took place.

While Learning Lab acknowledges that each project will be unique with different outcomes, we also hope that outcomes across all awarded projects will lead to the buildout of a **data science educational infrastructure** that will further educate and engage faculty, mobilize intersegmental collaboration, and create both clarity and plenty in the options students can pursue for their interest and future careers.

Examples of common metric parameters for your team to consider as you develop project outcomes include:
- Improvement in student enrollment and learning outcomes for data science and related fields, especially for students from historically underrepresented groups;
- Expansion of options for students to enroll in data science courses and pursue data science certificate, major and minor degrees and/or on-ramp to other STEM degrees;
- Evidence of improved student learning and success such as increased retention and decreased DFW rates;
- Improvements in the affective domain for students such as motivation, attitude, perceptions, sense of belonging and STEM identity;
- Successful implementation of project strategy or strategies that effectively fostered inclusivity, collaboration, and communication among faculty and/or with institutional leadership and administrative offices and/or external partners;
- Changes in faculty knowledge, attitudes, practices, and/or willingness to collaborate in efforts designed to improve learning and close equity gaps for data science and related fields;
- Changes in department or institution-level policies and practices that support new or improved data science certificate or degree programs, and/or pedagogical or curricular innovation to close equity gaps for data science and STEM fields; and/or
- Efforts to share research-based knowledge and project data with other Grand Challenge projects, and STEM and non-STEM departments and institutions that are engaged in cross-department, interdisciplinary, institutional, and/or intersegmental collaboration.

Are projects expected to show direct impact on students and faculty within the maximum timeframe?

It is conceivable that within the grant term, the project may result in data that evidences positive impact on student learning, attitudes and identity, and/or faculty mindset and practices. The potential for impact on teaching and learning for students and faculty will vary depending upon the particular grant award.

What is expected regarding the size and scope of the project assessment?

Learning Lab expects projects to include an assessment plan with data collected throughout the project. Data should demonstrate progress and/or efficacy toward achieving project outcomes. The evaluation can be internal; there is no expectation of an external evaluation. A final project evaluation will be required at the conclusion of the project using the [required Learning Lab template](#).

Are projects required to be either regional or statewide?

No. There is no requirement that projects be regional or statewide. The project must be intersegmental (with the exception of those applying for Interdisciplinary Collaboration Grants) and include at least two public institutions of higher learning from at least two of the three higher education segments (i.e., CCC, CSU, UC). Include a rationale for the partnership (i.e., why these particular institutions have come together) and demonstrate that the project is well-balanced among the host and partner institutions, as appropriate.

Budget

Are there expectations about how the budget is allocated? (Added 11/14/2022)

Generally, applicants have flexibility to determine how to develop their budgets to best achieve project outcomes, in alignment with RFP guidelines. Proposed budgets will be assessed for reasonable and appropriate usage of funds in support of the overall project design. In the Initial Proposal stage, applicants are required to provide a Budget Narrative. Applicants selected to submit a Final Proposal will be required to submit a detailed project budget in Excel format as part of the Final Proposal, in addition to the Budget Narrative. You may contact Learning Lab if you have additional questions about allowable expenses.

If the institution applies for a $100,000 grant over two-years, does the budget have to be $50,000 each year? Is indirect allowed?

No, the budget does not have to be divided in half each year. Budgets can be allocated, as needed, for the project. Indirect is allowed up to 8 percent. (See Indirect Cost question [below](#).)

What is the difference between the two expense categories, Personnel and Consultant(s)?
Unlike Personnel who provide a percentage of effort and contribute to the project as a whole and are employees of the institution, Consultants are individuals or organizations who provide expert advisory or other services for brief or limited periods and are most often not employees of the institution. Individuals listed under Personnel list their percent of effort as represented against their total available time. Consultants' efforts measured against their total available time is not represented; instead, hours of effort and daily or hourly rates are typically represented.

What is the difference between paying faculty as personnel and paying faculty stipends?
Faculty serving a role that contributes to the overall effort or project implementation would likely be compensated as project personnel and included in the respective budget line item. Faculty who engage in a discrete or one-time activity, such as attending a workshop, may be paid a stipend. See additional reference to [faculty stipends](#).

Can grant funding be used to pay faculty stipends at other institutions?
Yes. From our current grantees, Learning Lab has learned about some of the challenges institutions have faced with paying stipends to faculty so it is advised that you check with your institution (and/or partners) about the required process for paying stipends.

Can funds be used to pay students?
Learning Lab funds may be used to pay students (stipends or hourly rates) and related student fees; however, Learning Lab funds may NOT be used to cover student tuition (undergraduate or graduate), housing, or summer bridge attendance.

Stipends or remuneration for students can only be made to students who are actually working on the project in some capacity (not participating as a student). The exception to this is de minimus type incentives (e.g., small bookstore vouchers) to participate in out-of-class surveys, or things that could not be made part of a classroom requirement.

Can a portion of the grant go toward offering students equipment?
This is not prohibited, though applicants should consider when developing budgets a reasonable balance in how grant funds are allocated. Typically, a majority of funding is used for personnel. Our [budget template](#) includes a materials and supplies line, and sometimes equipment is included in Other Direct Costs. An example is funding for bookstore vouchers as incentives for students to complete surveys, which is allowable.

However, a disproportionate amount of funding toward providing equipment that is not central to the proposal, would lead to a negotiated process with Learning Lab, if the proposal was awarded. In sum, the budgets developed as part of your proposal should match the project, but the budgets are not locked in. If awarded a grant, Learning Lab would negotiate the final budget as part of the grant agreement process.

Can funding be used for things like calculators and software licenses?
As for software licenses, yes, we have approved such expenses as part of grant projects. We would ask for the cost per license and how many licenses are needed. Calculators falls under de minimus expenses under materials and supplies. For all expenses, Learning Lab requests a justification included in the budget template.

What can award funds be spent on?
Award funds may be spent on expenses that are necessary for project implementation including assessment, with parameters provided below. The proposal requires applicants to populate a budget template, with detailed budget information and a budget justification.

Additional parameters:
- Personnel. Personnel may include faculty, staff, graduate student, and student or research assistant time toward planning and implementation of the project. If a project incorporates other student-centered approaches, such as coordination with ancillary student supports, a nominal portion of personnel is allowed for related activities.
- Faculty Stipends. Faculty stipends can go in the Other Direct Cost category (ODC). Please provide the number of faculty, the rate you are paying, and describe their participation.
- Materials, supplies, and equipment. Expenditures on materials, supplies, and equipment will be capped at 10 percent of the grant award and must be necessary to achieve the project goals. If your proposed budget requires a larger percentage of expenditure in these categories, please explain how your project would be widely scalable and replicable at other institutions without the same costs.
- Travel. Learning Lab requests that applicants reserve $2,000 per year in the project budget for travel to attend Learning Lab-hosted intersegmental grantee convenings over the grant duration. The $2,000 annual amount is based upon two team member attendance, with an estimated individual travel cost of $1,000 per person.

Learning Lab will only fund reasonable travel that is directly related to furthering the purposes of or disseminating the practices and results of the project. All travel must have

prior approval from Learning Lab with justification and reasonable rates prior.

- Convenings. Any sponsored convenings must be approved by Learning Lab and accord with state rules and rates for food-related and other costs.
- Learning Lab funds are intended to be used in California. If the project necessitates the use of Learning Lab funds outside of California, a brief justification and estimate of the funding will need to be provided in the full proposal. The amount of funds that can be spent outside the state will be subject to the final award agreement. Funds may not be used for travel to [states with discriminatory laws](#).

Why are the Indirect Costs capped at 8 percent and how is this calculated?

Learning Lab allows for up to 8 percent in indirect costs (IDC) on grant awards. Learning Lab's IDC rate is lower than that contained in the California Model Agreement used by CSU and UC. Learning Lab views the lower rate as appropriate for its grants, because these awards support pedagogical research and demonstration projects involving courses that are normally and regularly offered as part of established departmental curricula. In addition, projects supported by Learning Lab awards generally do not involve substantial facilities or equipment use beyond that associated with normal instruction. As a result, Learning Lab expects funded projects to pose a lower burden on facilities and administration than the research projects anticipated by the Model Agreement.

Learning Lab calculates the 8 percent IDC rate based on project direct costs. Combined direct and indirect costs cannot exceed the award amount. Consequently, for a project awarded a $100,000 grant, the total IDC cannot exceed $7,407 (i.e., 8 percent of total direct costs of $92,593. with indirect and direct costs totaling $100,000).

How will money flow for awarded projects?

Project teams should anticipate submitting invoices, according to the specific terms of the grant agreement and the agreed-upon budget plan. For all grants, the awarded institution will enter into a grant agreement with the Foundation for California Community Colleges (the Governor's Office of Planning and Research's designated entity to administer Learning Lab). For intersegmental awards, the "host institution" will act as the fiscal intermediary for purposes of grant administration and for receipt of grant funds and will distribute grant funds to the partner institutions on the basis of sub-awards.

If a UC campus is the host institution and a CSU campus, for example, is a partner institution, will funds to the latter show up as a subaward of a single grant?

Yes. The host institution is the awardee, and the partner institutions are the subawardees. The grant agreement will consist of a single contract between the Foundation and the host

institution, which acts as the fiscal agent or intermediary for the partner institutions. The subawards to the partner institutions will be reflected in the grant agreement, but there are no separate contracts between the Foundation and the subawardees.

Regarding the budget in the initial proposal stage, is there a specific format or level of detail required?

No, there is no specific format or level of detail for the budget required at the initial proposal stage. You may write to the level of detail desired, within the page length considerations. For applicants invited to the full proposal stage, we will require detailed budget information and justification by host and partner institutions, according to the [budget template](#) provided on our website.

My institution charges General, Automobile, and Employment Liability (GAEL) and other fees separately. Can I put them in as ODC?

No. These must be absorbed in your Indirect Cost (IDC) rate.

Will my submitted budget be approved if my project gets awarded?

No. The project's final budget will be negotiated as part of the grant agreement, and may be revised during the grant period, with Learning Lab's approval.

Other

Will Learning Lab be offering future data science funding opportunities? (Added 11/14/2022)

Currently, we have no set plans for releasing a future data science RFP, but it is possible given the projected expansion and demand for data science skills and education. Keep in mind that Learning Lab releases funding opportunities on an annual basis, and that there may be funding opportunities that are not limited to a single academic discipline. For example, we may release an opportunity for STEM faculty development that may apply to various disciplines. To stay up to date on future Learning Lab grant opportunities, [join our newsletter](#).

Can Learning Lab help facilitate partnerships from different segments? For example, if a CCC applicant is looking for a partner, can Learning Lab match the CCC with a partner at CSUs or UCs? (Added 11/14/2022)

At this time, Learning Lab does not have a means for matching prospective applicants with one another. In response to this inquiry, we created a publicly-accessible [Google document](#) so that prospective applicants who want to share their contact information with others looking for partners may "OPT IN" and initiate contact independently. Sign up [here](#).

What OER and intellectual property arrangements will appear in the grant agreements?

Statute requires the Governor's Office of Planning and Research (or its designated agent, the Foundation for California Community Colleges) to establish terms and conditions that require Learning Lab courses and course series, and technology and technology platforms developed or redesigned with Learning Lab funds, to be available as open educational resources. Learning Lab considers "open educational resources" to be any educational resources released under one of the Creative Commons licenses (or its equivalent) other than CC-BY. Open educational resources include, but are not limited to, full courses, course materials, modules, textbooks, faculty-created content, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

As part of the terms of grant agreements, awardees will agree to release all resources developed with Learning Lab grant funds under one of the Creative Commons licenses (or its equivalent) other than CCBY. The Learning Lab excludes the CC-BY license out of concern that this license would potentially allow outside entities to build upon products developed with Learning Lab funds for commercial purposes, but then place larger restrictions on access to the resulting product than the permissions of the original product. Learning Lab goal is to avoid the possibility that modified or subsequent versions of resources developed with Learning Lab funds might be "walled off" by an entity using them for commercial purposes. Learning Lab does not require that resources necessarily be free to users in order to be considered "open educational resources," but instead encourages projects to make resources developed with Learning Lab funds available to additional users either at no cost or at minimal, necessary, reasonable cost depending on the expense necessary to support its use.

Will there be consideration for renewal funding in the future?

It is not a guarantee that there will be renewal funding in the future, but there may be an opportunity. For example, after awarding grants for the Calculus Grand Challenge we realized that there was greater need to support efforts to close equity gaps in Calculus and, as a result, developed the Seeding Strategies to Close the Calculus Equity Gap RFP. In addition, we released a competitive grant opportunity, referred to as our Scaling Success RFP, that provided funding to existing grantees with the goal of expanding the impact of successful projects.