

UNEION Beyond: DEI Training for the Earth System Science Community

Executive Summary

UCAR's Office of Diversity, Equity & Inclusion has received multiple requests about running the UNEION training program for other organizations (herein provisionally entitled "UNEION Beyond"). In considering these requests, we have found that the amount of work that would be required to scope out this project is considerable. In short, we need to consider how such training could be ported from UCAR/NCAR to other organizations while preserving the elements that have made it successful here - particularly the concept of peer learning, and in-house facilitators with deep institutional knowledge and context. We are also highly aware that we need a model that can be replicated without taking too much of the UNEION team's time, or detracting from any of our work at UCAR/NCAR. We summarize these needs as creating a model that is "effective, ethical, and sustainable."

This proposal requests funding for salary time for UNEION's Lead Learners (excluding ODEI staff) to work on scoping out this project. At the end of the period of performance, we will have a complete project plan, including the charter, scope, project framework, a protocol to assess readiness of potential partners/clients, a full cost estimate to implement, an evaluation plan, program branding, a template contract between UCAR and future clients, marketing materials, and a plan for scalability. In short, we will have everything we need in order to make a decision on the feasibility of taking UNEION beyond UCAR/NCAR, and if the decision is to go ahead, we will have everything in place ready to implement. In order to ensure that we are grounding our project in a real-case scenario, we have secured partnership with the National Solar Observatory to work on this as a case study. If UNEION Beyond is deemed feasible, we will partner with them as our first external client.

Purpose and Overview

The UCAR/NCAR Equity & Inclusion (UNEION) program is an award-winning, staff-led four-part training series offered twice a year, made up of cohorts of colleagues from across the organization interested in exploring how our identities affect our experiences in society and at work, sharing those experiences, and working together to support diversity and inclusion across UCAR. Designed, implemented, and expanded from the ground up internally at UCAR, UNEION has developed into the pioneering comprehensive diversity and inclusion training program in the field of Earth system science (ESS).

In 2018, we published an article in the Harvard Business Review about the program and its success in creating measurable change in participants' attitudes, awareness, and behaviors. This led to an influx of requests for training from universities, private industry, and government agencies. We provided some information about UNEION to those who asked, and began to work with a select handful to provide a shortened version of the course. In January 2019, the UNEION team led a 1-day Short Course at the AMS meeting, and will offer this training again. Further afield, the UNEION program has been adopted and adapted by the National Radio Astronomy Observatory (NRAO) for training a number of their employees, and the UNEION team ran a 1-day training for the Workforce and Diversity Committee of the Association of Universities for Research in Astronomy (AURA) that was exceptionally well received. An AURA participant described UNEION in a recent letter of recommendation for the UCAR Diversity Award: "*UCAR has a stellar program that is marketable, coveted by many, and extremely impactful!*"

UNEION is now in the process of accepting trainee Lead Learners (facilitators) from other organizations who plan to run a similar course at their home institutions. So far, we have trained individuals from the National Solar Observatory (NSO) and the United States Geological Survey (USGS).

The external interest in UNEION has continued, and we currently receive around one request per month from institutions (e.g. University of Oklahoma, SIMMS, NSO, University of Colorado Boulder, and the Royal Conservatoire of Scotland) and government entities (e.g. Department of Defense, USGS, and NOAA OAR) interested in working with us to deliver training to their employees. As our capacity has increased and we have trained new Lead Learners to run UNEION 101 internally, we have found ourselves with more bandwidth to consider these external requests and what it might take to expand UNEION into other organizations in a way that is effective, ethical, and sustainable. This requires more than simply flying our Lead Learners out and running UNEION at other institutions – it requires working with other institutions to build their own capacity so that they are able to run their own training internally in the context of their culture, and do not require sustained in-person support from our staff.

In addition to these direct requests, a study done in 2019 in support of CPAESS’ strategic planning analyzed strategic plans from UCAR’s partners and found that a diverse and inclusive workforce was the second-most mentioned concern of those entities, behind only scientific integrity. A lack of diversity amongst staff was cited as the third greatest challenge to entities achieving their mission, behind insufficient funding and insufficient facilities/infrastructure. The need is undoubtedly out there, and according to our conversations with entities interested in our services, is not being met by existing diversity, equity, and inclusivity (DEI) training programs that are commercially available.

We therefore propose to create a comprehensive plan for developing a version of UNEION that can be exported to other science institutions in a way that is effective, ethical, and sustainable. We’re internally and provisionally calling this “UNEION Beyond,” but branding and communications will be part of the project plan. UNEION Beyond will require careful planning with clear requirements of client institutions and clear boundaries around what we can and cannot support. If funded, this project will develop the framework, scope, branding, template contracts, draft marketing and communication plans, cost estimates, evaluation plans, and future directions for training and supporting individuals at other institutions to develop a version of UNEION at their organizations, and ensuring that the UNEION brand continues to be associated with world-class training and development.

Objectives

In reviewing requests for training, we have realized that we need to put a framework and project management plan in place to develop a version of UNEION (i.e. UNEION Beyond) that can fulfill these needs in a way that is effective, ethical, and sustainable. This proposal to the President’s Strategic Initiative Fund asks for funding to enable our team, with the assistance of UCAR Contracts, UCAR Finance, UCAR Communications, and the National Solar Observatory, to develop the plan for pursuing these opportunities. Ultimately, we will develop a training program that can be effectively run in other institutions by individuals at those institutions who understand the context in which they are working. We expect that those external Lead Learners will continue to be linked with each other and us through a Community of Practice, enabling a peer support community, ongoing development, and quality control checks for the UNEION brand. Additionally, UNEION Beyond will be scalable beyond our own capacity by allowing us to recruit the best Lead Learners from those other institutions to help train and support new clients (a scalable train the trainer model). The program is a potential source of revenue for UCAR, while simultaneously boosting our reputation as leaders in DEI and as the employer of choice for those looking for a diverse and inclusive workplace environment.

At the end of the period of performance we will have developed a full framework for running UNEION Beyond, including:

- A charter defining the scope of the program.
- A structure for UNEION Beyond that enables it to be adapted to any institution. This includes identifying partner organizations, assessing their readiness to implement the program, and “train the trainer” elements for Lead Learners at the host institution.

- A full cost estimate for our time and travel expenses, plus a financial plan for offering the program to different types of external institutions. Likely this will operate on a sliding scale depending on the type of institution, requiring some market research into the feasibility of pricing.
- A template contract between UCAR and host institutions that can be adapted to future partnerships.
- Branding for the program, plus draft communication plans and materials.
- An evaluation plan for assessing the effectiveness of UNEION Beyond at other institutions.
- A provisional plan for scoping up the UNEION Beyond program if it is successful; including an estimate of our internal capacity to support external clients in any given year.
- A feasibility review that will lead to a go/no go decision about whether to pursue this opportunity.

Vision - how will this activity/project improve the organization?

One of the major goals of UCAR is to position ourselves as leaders in ESS. As far as we know, UNEION is unique in **all** sciences, in that it provides research-driven DEI training for scientists that causes shifts in attitudes and awareness, and leads to behavioral changes in participants. In UNEION Beyond, we have the opportunity to share this ground-breaking program and position UCAR/NCAR as national and world leaders in DEI trainings for scientists. In doing so we will lead the field in creating more diverse and inclusive environments throughout the ESS community, and position UCAR as an employer of choice for the future workforce. This vision for our project directly aligns with the following aspects of UCAR's vision, mission, guiding values, and goals as outlined in the new UCAR Strategic Plan 2019-2028:

- UCAR Vision: Earth System Science for a Better World
- UCAR Mission: Leading world-class Earth system science through partnership, innovation, and service
- UCAR Guiding Values: community, inclusivity, integrity
- UCAR Strategic Plan Goals:
 - Goal 1: Provide exemplary management of NCAR and UCP.
 - Goal 2: Be an advocate, convener, and enabler of the community to advance scientific breakthroughs that solve complex ESS (Earth System Science) problems.
 - Goal 4: Be an employer of choice in ESS by promoting a welcoming, innovative, and inclusive culture that maximizes the talent, skills, and diversity within the broad ESS community.

Stakeholders

Stakeholders for this effort are wide ranging throughout UCAR and into the ESS community. UNEION was initially created in response to internal needs within UCAR; however, these needs are emblematic of wider challenges within the sciences. Therefore, stakeholders must be used in two distinct contexts for this proposal. First, there are the stakeholders for the work to be funded through this request as a pilot effort. Second, there are the broader stakeholders that would be interested and affected by the availability of these services once developed.

Stakeholders that would be affected by the funding of this pilot project include the Office of Diversity Equity and Inclusion, Lead Learners for the current UNEION effort (from UCAR PO, CISL, Unidata, COSMIC, GLOBE, HESS, and CGD), Contracts, Finance, the Communications Office, and the National Solar Observatory (NSO). NSO has committed to working with us on this project, as they are interested in being a potential future client. We strongly believe that their involvement will be invaluable in order to develop this framework in the context of a real case study while providing them with a successful program, at no cost to UCAR.

Stakeholders for a program that would implement UNEION Beyond include: the NSF, which has funded much of the initial efforts that resulted in UNEION; the UCAR Board of Trustees, who have encouraged UCAR to work towards inclusion; the university community, which is struggling with similar challenges; and the broader ESS research and services community. Specific organizations that have requested information include NSO, USGS, NOAA OAR, the University of Oklahoma, SIMMS, the U.S. Department of Defense, the University of Colorado Boulder, and the Royal Conservatoire of Scotland.

Expected Outcomes - what are the impacts and how will they be measured? What will it do if this is funded?

The UNEION program has undergone a rigorous external evaluation, published in the Harvard Business Review, showing that participants demonstrate a measurable change in attitude, awareness, and inclusive behaviors as a result of attending the training. If we are successful in developing a framework for UNEION Beyond during this period of performance, we have the opportunity to expand these changes beyond UCAR's walls into the broader community, ensuring that UCAR continues to be seen as a leader in DEI in Earth system science and beyond. Funding for dedicated development time will allow the Lead Learner team to create a program that meets the needs of our external partners. The development of a train the trainer element, in particular, will build capacity for DEI work in ESS, and also benefit our own UNEION Lead Learners as they develop facilitation and coaching skills that will lead to more effective training capacity here at UCAR.

Successful implementation of this project will be measured by the following deliverables:

- A completed charter and structure for UNEION Beyond
- A protocol for engagement with and assessment of the capacity of external organizations
- A completed cost analysis and proposed funding model
- A draft agreement with the National Solar Observatory that will act as a template for future contracts
- Final branding, draft communications plan and materials plan for advertising UNEION Beyond
- An evaluation plan for UNEION Beyond
- A provisional plan for scaling UNEION Beyond
- A report detailing lessons learned, outstanding questions, and feasibility concerns that will make recommendations on whether to go ahead with implementation.

High-level Requirements - staff resources (key staff, staff hours), budget, other resources?

- ODEI: Carolyn Brinkworth and Kristen Aponte are not requesting any salary and will work on this as a part of their regular job commitments.
- Lead Learners
 - 0.1 FTE: Joshua Young, Julie Malmberg, Jeremiah Sjoberg, Matthew Herring,
 - 0.05 FTE: AJ Lauer, Virginia Do
 - Total cost of all participants (salary, benefits, overhead) for 208 or 104 hours as noted above: **\$65,150.59**
- Non-funded collaborators:
 - UCAR: Contracts Office, Budget and Finance, Communications Office
 - Collaborator: Claire Raftery (NSO; no funding requested)
- Total budget requested: **\$65,150.59**

Timeframe Requirements - how much time will this take and what are the major milestones?

Once this project has started the Lead Learner team will meet every other week, through the end of the six-month performance period to complete work toward milestones outlined below.

Month 1: Kickoff meeting with NSO, the Lead Learner team, the UNEION evaluator, UCAR Communications, UCAR Contracts, and UCAR Budget & Finance. Define scope of UNEION Beyond and draft governance structure.

Month 2: Identify requirements, develop a plan for providing training and support structures needed (including a platform/structure for a Community of Practice). Develop a preliminary evaluation plan.

Month 3: Iterate with NSO on the proposed scope/training/support plan and identify potential NSO Lead Learners. Develop the protocol for institutional engagement and assessment of institutional readiness/capacity.

Month 4: Draw up template contract and perform cost analysis for the full package. Consider feasibility/legality of a sliding cost scale for institutional type. Continue to work on evaluation plan and develop draft materials.

Month 5: Review program, contract, and cost with NSO leadership to decide feasibility and interest. If NSO has continued interest in the program, will work on a schedule and plan for implementation. If NSO is not interested in pursuing program, will determine if their concerns can be mitigated, if another partner would be interested, or if the program is unfeasible. If still feasible, work with UCAR Communications on branding and communications plans.

Month 6: Finalize all program elements, write documentation, draft preliminary plan for scaling UNEION Beyond, and make the final go/no go decision for pursuing UNEION Beyond with additional partners.

Is this a one-time activity or a pilot project with potential follow-on to be resourced through other means? If applicable, what is the anticipated scope of the follow-on?

This proposal is for a pilot project with follow-on to be funded by outside organizations contracting with UCAR for implementation of UNEION Beyond. The scope of the pilot project covers the development of the program described above, including development of a contract between UCAR and NSO for implementing the program.

The follow-on would begin with the signing and subsequent execution of this contract. Depending on our capacity, we will engage with additional external partners, contracting for and applying a customized version of UNEION Beyond for each client. Each partner will have its own unique needs and relationship to UCAR, requiring us to modify the particulars of the training materials, and contracted obligations and costs.

Additional scalability will be part of the feasibility review during the pilot program, but we currently anticipate meeting those needs through an advanced train-the-trainer model, working with the best Lead Learners that we've trained at other institutions to help train new Lead Learners with new clients. Ideally this would be a regional model, with UNEION Beyond Lead Learners based all over the country and connected by an online Community of Practice, so that new clients have at least one support person in their geographical region. This would not only reduce impacts on our staff, but also travel costs for new clients. A similar Community of Practice model is run by UCAR/NCAR E&O for NSF REU PIs, and is funded explicitly by the NSF to support their PIs.