

Meaningful Collaborations

A WORKBOOK FOR
COMMUNITY LEADERS, EDUCATORS,
AND ADVOCATES WORKING WITH
SCIENCE INSTITUTIONS

About this Workbook

for Community-based Organizations and
Community Leaders

How can we navigate partnerships with science institutions to better implement informal science education projects in underserved communities?

We hope you'll take some time to go through this booklet and answer the questions honestly and thoroughly. The process will help your community-based organization navigate partnerships with science institutions better to benefit your community.



A few of the ICBOs during an in-person meeting in Philadelphia.
Photo by Marilú López Fretts.

Who are the ICBOs?

We are community leaders representing underserved communities throughout the U.S.A. We call ourselves the ICBOs (Independent Community-based Organizations). We initiated community-based participatory research, using Grounded Theory and Critical Race Theory approaches, and asked more than 30 community organizations to weigh in. We, as community researchers, participated in all phases of the research. The objective of our work is to improve equity, diversity, and inclusion in STEM (Science, Technology, Engineering, and Mathematics) through research.

Sometimes research approaches themselves can be part of the problem when trying to understand equity, diversity, and inclusion in STEM. For instance, even informed researchers may tend to use frameworks and literature that originate in the dominant culture to inform their research; ask questions that may not really get at the issues; and may leave underserved communities feeling as if they are being studied. These problems create an even greater sense of mistrust. Knowing this, we wanted to lead research that would, instead, represent our communities' perspectives.

Visit our NSF video:

<http://stemforall2018.videohall.com/presentations/1127>

MEANINGFUL COLLABORATIONS



Illustration by José González.

Table of Contents

Themes Explored.....	4
Power and Privilege	7
Institutional Racism	7
Trickle-Down Engagement	9
Walking on Eggshells	11
Reflecting our Community	12
Tightrope Approach	13
Robin Hood Approach	15
Third Best Man	16
Exclusion	18
Maintaining the Status Quo	22
Reflection	23
Trust and Transparency	24
Co-create Projects	26
Budget	28
Non-Negotiables	31
Inclusion	37
Communicate with Clarity and Transparency	39
History of Power and Privilege	41
Access	47
Know Your Worth	49
Realities and Relevance	52
Logistics	37
Inequitable Pay and Credit	60
Guinea Pigs	60
Savior Syndrome	62
Grant Funding	62

Commitment and Collaboration.....	64
Mission Statement	66
Alignment	70
Goals	74
Measures of Success	75
Bridge to Conflict	79
Evaluate with Honesty	80
Have My Back?	83
Work Through Challenges	84
Face Time	85
Gratitude and Acknowledgment	86
Authors.....	90

All quotes and stories in this booklet come directly from the participants of the research.



Illustration by José González.

Themes explored



Power and Privilege

“It takes money and time to be able to shift culture, acknowledge and name racism, and pivot the organization towards a more inclusive organizational culture.

It can’t be a back-burner issue. It has to remain front and center even in crisis.”



Trust and Transparency

“I don’t think you ever ‘achieve’ trust. Trust has to be maintained just like a certain temperature or speed when walking.

I see trust as a spectrum, so we never stop working towards increasing the level of trust and then maintaining that level.

You know you are at an optimal level when your partnership becomes resilient to tension, mistakes and push backs.”



Realities and Relevance

“The mistrust runs deep and there will always be seeds of anger and insecurity just like any other relationship, because it is a partnership. So, it takes deep inner awareness.”



Commitment and Collaboration

“The mission statement of my organization is something I can’t negotiate, as it is in the interest of the people whom I serve.

What is most important is what one values and how hard one is willing to work to implement those values.”

Illustrations by Carlos Figueroa.

What do these quotes say about how community-based organizations view or perceive their relationships with larger institutions?



“I think the key driver is understanding how you are going to leverage that power to close the equity gap. Otherwise, you will just perpetuate it.”

“They have to work for the people and not just for the elite.”

“I think for people of color it is boring if it’s not real and we know how to look between the lines and distinguish real from not real.

So, it’s hard for us to convince ourselves to work on a project when the partner is in the project for superficial reasons.”



Power and Privilege

Institutional Racism

Most community-based organizations don’t address issues of institutional racism present in collaborations with dominant culture science institutions, even when blatantly present. Our research also indicates that most science institutions are “clueless” about how institutional racism is manifested in their institution or choose to ignore it. Yet, when community organizations point out systemic inequities they experience in collaborations with science institutions and set clear boundaries, the resulting partnerships tend to be more productive and beneficial for the community. It is important to address “the elephant in the room”.

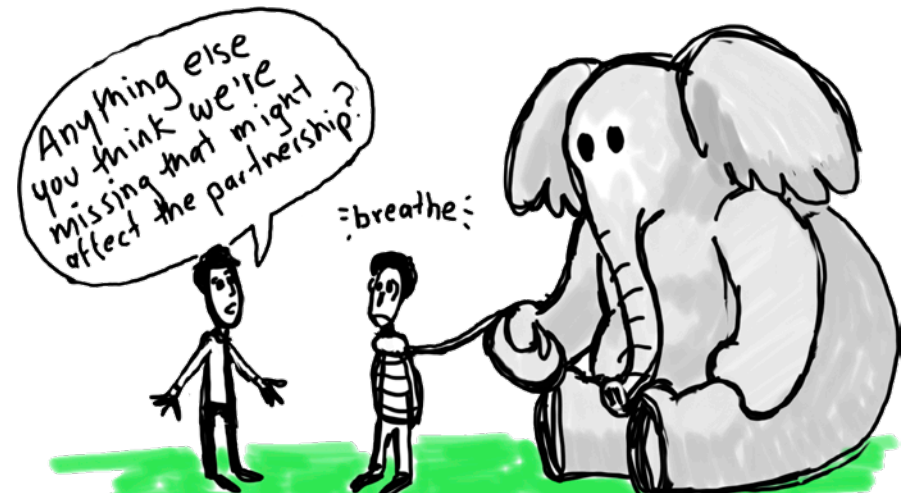


Illustration by José González.

- How does your organization define institutional racism?
- How does your community define it?
- How does the science institution you'd like to partner with define it. Have they thought about it?



Inner-city youth from *Nosotros Radio*, one of the organizations leading this research, create a bird garden as part of a citizen science project. Photo courtesy of *Nosotros Radio*.

Trickle-Down Engagement

We found that most community organizations believe that science institutions put the majority of their funding, staff, and power into programming for dominant culture audiences and expect that it will “trickle-down” to the community. Trickle-down engagement decreases trust in the community.

- Does your partner institution prioritize work in underserved communities?
- Does your partner have an institution-wide commitment to equity, diversity, and inclusion?



Illustration by José González.

- Is funding equitably distributed among programs for dominant culture vs. underrepresented cultures?
- Is the institution's leadership involved in programming specifically co-created with the community?



The WorldBeat Center's programming creates unity through music, art, dance, education, sustainability and technology in San Diego, California. Photo courtesy of WBC.

“Because my work is across the USA, I feel that it is detrimental to address racism among the audience that holds the purse strings.

I address it in an indirect way. It is my hope that eyes will be opened and minds will be changed so that we can find that middle ground and we can all come together.”

Walking on Eggshells

Our research shows that community-based organizations don't feel like they can be honest with partners when they see institutional racism. They feel like they are “walking on eggshells,” because addressing inequity might harm their organization or community.

“In multicultural situations, it's been helpful to acknowledge power differentials and not tiptoe around, but name those things and work to address them.”



Illustration by José González.

Reflecting our Community

It is important to look at our partner institution carefully to understand if they reflect the community they wish to serve. When answering the following question, think about all levels of the institution, including the Board of Directors, institutional leadership, researchers, outreach staff, custodial staff, and admins. In addition, consider if staff at your partner institution live in the community they want to serve.

Does your partner institution reflect the community you are serving?



Community families learn drumming during an event organized by WorldBeat Center at Balboa Park in San Diego. Photo courtesy of WBC.

“When it comes to equity, it’s necessary to have a discussion around power and privilege as well, being committed to talking about it, when it plays out, because it’s gonna play out. Just because you understand equity and are committed to equity doesn’t mean you’re immune to falling into the traps of dominant culture or inequity”

Tightrope Approach

Community leaders indicate that in their experience, science institutions hire one or two people of color to do “outreach” and do not give them any decision-making power. These individuals tend to be short-term hires and many are inexperienced in equity, diversity, and inclusion. In addition, there is no support for the work they are doing. The science institution sets the course for their work (the tightrope) and the outreach staff cannot significantly change the direction, scope, or depth of the work once they start if more funding or support is required.

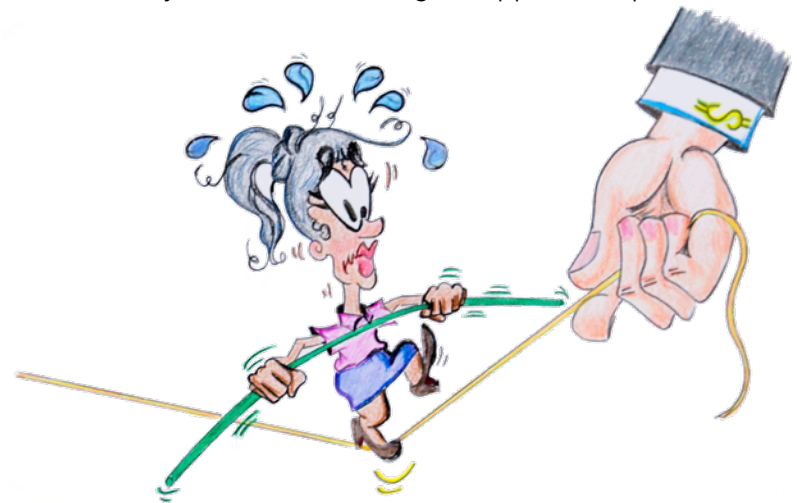


Illustration by Carlos Figueroa.

“It’s a long line of power that has not been fair to institutions of color from grants to employment.

If you find people of color in a powerful position, they’ve been hand picked to be docile.

Always use your mission as your guide and know that we are standing in the shoulders of giants and we are their seeds.”



Children participate in the WorldBeat Center’s Outdoor Classroom program where they learn about sowing seeds, and the pollination process. Photo courtesy of WBC.

Robin Hood Approach

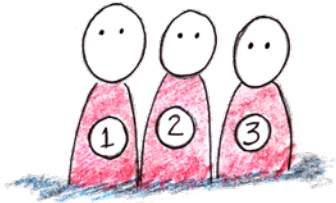
Community researchers found that many community organizations will put up with collaborations and partnerships that are untrustworthy, inequitable, frustrating, and lack transparency in order to obtain funds and opportunities that they feel can be channeled directly to their communities.

- Why do you think community-based organizations sometimes use the “Robin Hood Approach”?



Illustration by Carlos Figueroa.

“When you send your best representative and your counterpart sends someone who has no knowledge or decision power, it sends a message.”



Third Best Man

Our research also indicates that science institutions will often send someone who has no experience in the community, no authority within the institution, and no decision making-power, to represent their institution at key planning and negotiation meetings.

“When you look at the culture, does it support a white-dominant culture approach to doing things? For example, “There’s only one right way of doing things, and that’s the way we do it, and you have to do it that way also.” That’s a dominant-culture approach, and it’s not based in reality. The reality is that there a a number of right ways to get to the end goal. Do you provide opportunities for people of all different cultures to be able to do it their way?”

“Many times, informal science institutions request large funding and more than half goes to administrative or staff, and less than half goes to the program. And meanwhile, many community-based organizations will use their funds on programming and little to none on staff because they run on volunteers.

There must be a new way to calculate equitable distribution based on the needs of the organization and their time and effort on the proposed project.

It can’t be based on degrees because community-based organizations have employees that have a lot of experience with no degrees which many times is worth much more.”

Exclusion

Our research indicates that inclusion is a key factor of successful collaborations. Being included in “lead team” meetings is important throughout the partnership and can create or break trust. Inclusion should occur throughout the planning, implementation, dissemination, and evaluation phases and should be a long-term commitment— even when not funded.

Examples of exclusion include using technical language or lingo, wearing clothing that demonstrates dominance, choosing meeting venues that are difficult to access or feel exclusionary, not showing up or not inviting community-based organizations to key meetings, requiring advanced degrees or valuing them more than experience, not paying attention at meetings, choosing dissemination of results via channels that exclude non-academics (ie: peer review journals), and more.

- Does level of education exclude experienced individuals from meetings and decision-making?

“I will know that I have achieved trust when I am included in ‘important’ planning meetings and/or events where significant decisions have to be made and where I am included in the decision-making process.”

- How can you work directly with your partners to identify, acknowledge and change this?
- In what ways does your partner institution knowingly and unknowingly exclude community members?



*Community researchers work during their in-person meeting in Philadelphia.
Photo by Marilú López Fretts.*

If you do not feel included, address this openly with your partner, and be willing to walk away from the collaboration.

- Who is included in decision-making?
- Are your ideas valued and respected? If not, how do you ensure that your voice is heard?



Community researcher Bobby Wilson presents at a conference for urban farmers in Alabama. Photo courtesy of Metro Atlanta Urban Farm.

- Is the racial/cultural/gender makeup equitable in meetings?
- What are ways in which an institution can demonstrate to your community-based organization that they are working towards a more inclusive organizational culture?
- Are your staff committed to working with the institution? Is everyone on board?



Community researcher Marcelo Bonta during a group meeting in San Diego, California. Photo by Marilú López Fretts.

Maintaining the Status Quo

Partners tend to behave in ways in which they are accustomed to behaving and this reinforces the status quo. We found that community-based organizations sometimes behave in ways that are disadvantageous to themselves and their communities or may continue working in collaborations that are not equitable and may not ultimately benefit their organizations. Science institutions behave in ways that maintain their power and privilege.

- In what ways does your institution maintain the status quo?



Community researchers visited partner organization Camp Compass in Allentown, PA. Photo by Marilú López Fretts.

Reflection

- Is your partner institution responsible for trickle-down engagement?
- Are you “walking on eggshells” with your partner institution?
- Is your partner institution ‘checking-off the box’ by hiring one or two people of color to do outreach in your community? Is the commitment really there to make a significant impact in the community?
- Does your partner fund work in underserved communities consistently?
- Who represents your partner institution at community meetings?



Trust and Transparency

Our research shows that developing genuine trust is one of the most important aspects of a successful partnership between a STEM institution and a community-based organization. Because of a long history of inequities, developing trust needs to be a long term commitment. There has to be continuity, openness, and a real desire to make it happen.

Working through challenges successfully and spending time getting to know each other personally increases trust. Transparency is key to increasing trust. But transparency means different things to an informal science institution than it does to a community-based organization. We found that finding alignment on what transparency means is important. Clear and consistent communication also helps increase trust.

*“Authentic trust is built with time.
Working through misunderstandings
can also build trust.”*

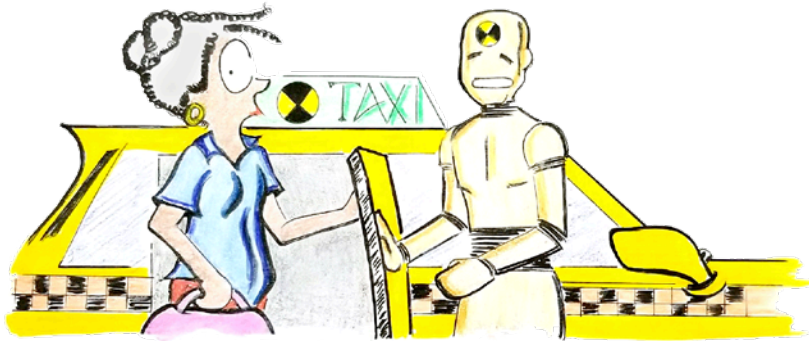


Illustration by Carlos Figueroa.

- How do you approach a potential new partner after being betrayed or exploited in a previous collaboration with a different partner? What changes do you make to avoid the same negative outcome?
- Has an institution ever withheld information from you in a collaboration? Have you ever kept a secret from an institution? Why, and what was the result?
- Have you ever felt used by a partner organization? Did you address the problem? Why or why not?

“I really don’t know if I can tell anybody anything because I don’t know what’s done with that information, how that’s used, or if it can come back and affect me negatively.”

Co-Create Projects

Before you partner with a science institution make sure you and your partner understand each other's missions, goals, and measures of success in order to find alignment. Don't rush the planning and budgeting stages and expect to co-create throughout the collaboration process, especially before co-writing the grant proposal.

- Did conversations about funding and grant writing goals begin before the proposal was written?
- Who is at the table to establish goals and co-create the budget?
- Is the leadership of both organizations present and visible?

- Who is the lead organization? Are you comfortable with how this was decided?
- What are your goals for this co-created project? What are your partner's goals? How do they align?
- How do you define success for this co-created project? How does your partner define success? How do they align?

- How do you measure success for this co-created project? How does your partner measure success? How do they align?



Community researchers meeting via Skype with additional members who could not attend research meeting. Photo by Marilú López Fretts.

“Funding is often distributed to science institutions, making it difficult for community-based organizations to get. Institutions in power need to be held more accountable.”

Organizations receiving the money must develop better reports to show real outcomes.”



Illustration by José González.

“People are tired of being used for studies and they are tired of promises. For many years organizations have come and talked to people in the community about projects that are done half way.”

Budget

Our research shows that transparency in the budgeting process is key to building trust. Co-creating the budget is essential to success.

- Does the science institution's budget reflect their commitment to work in your community?
- Has the science institution paid you, the community-based organization, for your expertise equitably? Look carefully at past budgets before answering.



Community researchers during their in-person meeting in San Diego. Photo by Marilú López Fretts.

Non-Negotiables

Our research shows that understanding and clearly communicating what you are willing to compromise and what you cannot negotiate is important for the success of a collaboration.

Think about your non-negotiables. Our research found that some things community organizations are not willing to compromise on include: commitment to equity, long-term continuity of the project, transparency, and co-creation.

- What are three key non-negotiables for your community organization in collaborations with more resourced STEM institutions?
- Is your partner institution willing to continue working in your community after the funds run out?

- In what ways has your partner institution demonstrated commitment to equity, diversity and inclusion?

- Is your partner institution interested in co-developing programming or do they generally use top-down approaches?



Community researchers walk the streets in Philadelphia during an in-person meeting. Photo by Marilú López Fretts.

“Larger powerful institutions need the smaller community organizations to fill in the holes because the bigger institutions need a soft side publicly and as long as there is mutual benefit, partnering can happen.”



Illustration by José González.

“Before you go into a partnership, you need to be clear on what your non-negotiables are. I think that’s important to have that discussion from the beginning because, sometimes, partnerships aren’t meant to be. For me, it is the commitment to equity. If you don’t even have an understanding of what “equity” means, or have a decent understanding of it, or aren’t open to learning, then it’s not gonna be worth our time and energy to partner.”

“Key drivers to partnering effectively with power: I think the first one is just naming it. Knowing it’s there. Oh yeah, well, power. Yeah. Naming power, and what it is, and what it looks like. And recognizing different forms of power.”



Illustration by José González.

“[I]nstitutions carry more power and this has weight with funders [...] and donors. Community-based organization may be underpowered, but you need to value their existence. They exist for a reason. They are the community’s power, and that is power the larger institution may not have.”

“... a larger institution has power and ... so it’s gonna receive a large community engagement grant because a funder may see they have the capacity or really the power to deliver on that.”



Bobby Wilson, one of the community researchers, discussing mission and vision of the group. Photo by Marilú López Fretts.

*“...people say success begets success...
I think feeding inequity begets
more inequity.”*

Inclusion

Our research indicates that inclusion is a key factor of successful collaborations. Inclusion can create trust and should occur throughout the planning, implementation, dissemination, and evaluation phases.

- How has cultural knowledge been respected and included in projects in the past?
- Are there procedures, rules, and institutional structures that exclude members of your community from projects, boards, or leadership?

At left, community researchers engage in conversations during a planning meeting. Photo by Marilú López Fretts.



“We invited a museum to be partners in a STEM based project because the reality was we didn’t have the resources to do it ourselves. For the last two years [of the partnership] it was going well. But this year, the third year, they learned the steps, they learned who the connections were and where the staff and money were, and the list of girls that we invited to participate, and they did it without us. I believe if they had spent time in our community and forming personal relationships with us, they would be able to actually appreciate the resources that we provide to them in order to create a meaningful partnership; how we understand the culture and the way the girls act, because we are a part of that community. They don’t have that. We shared everything with them, and it felt like a slap in the face.”

Communicate with Clarity and Transparency

Clarity, transparency, and honesty are essential in all communication for a partnership and project to succeed.

Our research found that honest, open communication works best when it is a long-term commitment. Clarity requires self introspection and a willingness to address difficult issues.

- Have you communicated your short and long term goals in the community to your partner?
- Have you shared your personal goals?

“...transparency is an action, is being able to do a transparency, not just show information.”

- Have you communicated with clarity and transparency with your community partners about the history of your partnership? And the history of STEM in your community?
- Does the budget reflect your community-based organization's needs?
- Have you communicated clearly how you would like the budget to be distributed?

“Communicating on a superior level in opaque and didactic terminology breaks trust.”

“It’s not just about the one who is hurting you, you really have to look deeply where the fear and attachment to power is coming from.”

History of Power and Privilege

It is important to address past inequities in the sciences openly and with clarity. Our research found that this is a key step in building trust with partner institutions. Can you address “the elephant in the room” openly, with honesty, and with a clear plan to overcome past challenges? If this cannot be done without negative consequences to your organization and community, you may want to reconsider the partnership.

- Does your partner institution have a history of working in your community? What has been their track record?
- Does your partner think that their past work in the community has been successful?

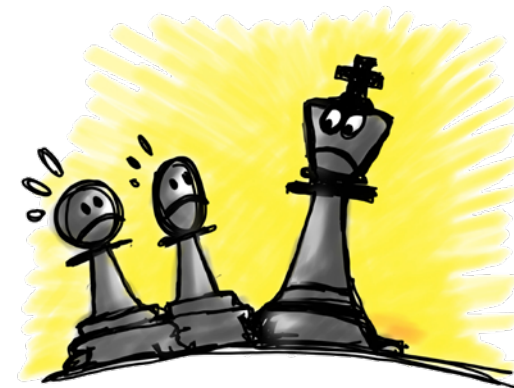


Illustration by José González.



Community-researchers meet in Ithaca. Photo by Marilú López Fretts.

“Equity is relational.

Partners need to first understand the interactions of power and privilege based on numerous organizational characteristics, such as size of organization (number of staff/board and budget), racial make-up, gender make-up, commitment to diversity, equity, and inclusion, access to funders/resources, reputation, well-resourced vs. under-resourced.”

- Do you believe that your partner’s past work in your community has been impactful?

- If you have worked with this institution before, was the partnership successful?

- Does your partner institution think the collaboration was successful? How do you know?

- Have you developed a long-term relationship with your partner institution? Why or why not?

- It is important to research and understand the relationship between your community and the STEM (science/technology/engineering/mathematics) field in the past. For instance, has there been a history of use or abuse in your community?

- Has this “history” been addressed openly and clearly with your partner institution? How? (Describe here).

“The legacy question also needs to be addressed: how much cultural and intellectual knowledge that is unique to a community is being taken for free or cheap...?”

“It happens in small ways, such as a glitch in the “translating” phase of establishing common norms and values, or in larger, cumulative ways, such as a history of uni-directional communication between the two groups, one that has grown accustomed to being listened to and followed, and other very easily ignored at no obvious loss.”

“In the end, let’s say you have programs for youth and all you see is white youth coming to these programs. That’s institutional racism ‘cause you didn’t do anything intentional to support and provide the benefits for youth of color. It’s not the intent; it’s the impact. It’s the outcome where institutional racism comes in.

You can have the intent, on the front end, of “I don’t wanna be racist,” but you provide more benefits to white people than people of color. That’s what institutional racism is. That’s how it plays out within our system.”



Research meeting at St. Vincent de Paul Young Adult Center in Philadelphia.
Photo courtesy of Community Perspectives.

“Raising awareness about the history of these disparities and inequities is not just the job of the community-based organization.”

Access

We found that when informal science institutions use their power and connections to provide their partner organizations more direct access to funding streams, networks, and resources, trust increases. Community-based organizations don't want pre-packaged, top-down programming. They don't want to be told how to help or save their own communities. They want to have the resources, networks, and access to channels that will allow them to create or co-create programming that their communities want and need.

- How can your institution use its power to provide access to funding, networks, and resources?

“A science institution can believe, “Oh, I have these services and programs that will benefit these communities, so I’m gonna bring them to you and this is how you will benefit from them.” That’s completely the wrong way of doing it!”



Camp Compass is a unified effort to introduce urban, middle & high school students to various outdoor activities. Photo courtesy of Camp Compass.

“Often these institutions want access to something that we have. It’s usually our proven success with patient retention and that we provide direct care. Often they need an avenue to reach our patients and we are the gatekeepers.”

Know Your Worth

When community-based organizations understand their power and communicate it clearly when partnering with more resourced STEM institutions, the community benefits. Our research found when community organizations understand the value of their expertise and leverage their worth, it generally works to their favor.



Illustration by José González.

“I got a call from a bank to be in an advertisement; they wanted to put my face on an ad. The idea behind this is that people will go and open accounts or move their businesses to that bank because I am known in my community and people trust me. I said no, because I don’t know this bank—they were just trying to use me.”

Community researchers found that an effective strategy for developing equitable collaborations with science serving institutions is to “know your worth.” When community organizations understand their power and worth and communicate it clearly, it benefits them and their communities.



Illustration by José González.



Bobby Wilson, one of the community researchers, teaches informal science education at the Metro Atlanta Urban Farm. Photo courtesy of MAUF.

“[Trust] is broken when a partner tries to hide anything - information or inaction - it is better to be up front about things.”

“When a stable, resourced institution such as a university or research institute or school district “pilots” a program working with CBOs in under-resourced communities [...], it can be ditched for any number of reasons that are not only completely arbitrary in terms of the relationship being built with the affected community [...] but also do long-term damage to that community expecting it to be similar when another institution comes along singing the same song. What’s to prevent THAT institution from pulling up stakes and cutting loose the community-based organization and its membership to hang in the wind.”

“I just had an appointment with the CEO of a foundation. They requested the meeting, so I obliged but in the middle of the meeting he said he needed to be at a food establishment in 15 minutes for another meeting. Total turn off—I could care less about him now.”



Realities and Relevance

Understand the value of your organization and your commitment in the partnership. Institutions need community-based organizations to reach and work with your community. You have the trust of the community, knowledge and understanding of the community culture, and much needed personal connections to networks. Your staff speaks the community language, understands its strengths, realities and barriers. Your organization has valuable expertise and is the gateway to underserved communities. Science institutions also benefit by obtaining funding for projects when they partner with you.

- What do you think may be different about working with more resourced science institutions than working with other community-based organizations?

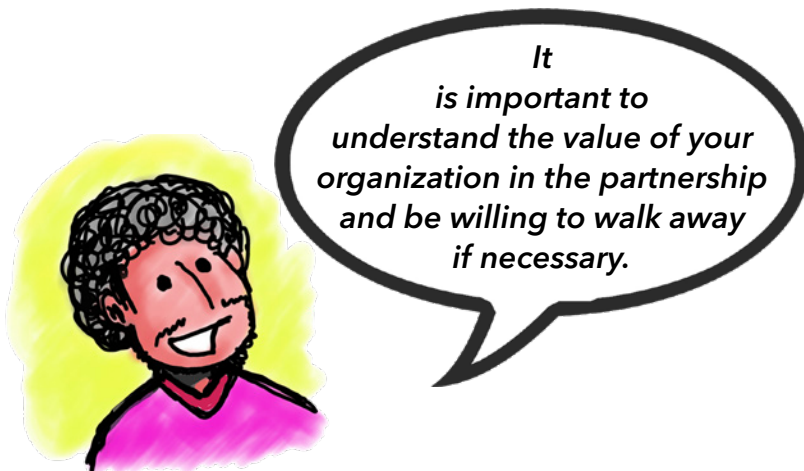


Illustration by José González.

- How does your community perceive the field of science? How do you know this?
- Does your community feel “included” in the sciences?
- Do parents encourage their children to pursue careers in the sciences? Why or why not?
- Does your community trust the sciences?



Community partners engage with students from Camp Compass Academy. Photo by Marilú López Fretts.

“Science institutions could strengthen local community-based organizations and their communities by going to the communities they want to engage with.

Going to communities brings a presence that is a statement saying- we’re here, we’re with you, we support you. It matters, understanding where folks are and where they come from when bringing people together.

When people come together they then have a shared experience which builds relationships, in turn building stronger communities.”



“We do surveys, hold message meetings, and stay informed about and support the analysis of other community-based organizations. We have come to trust researchers with a track record of (a) putting the long-term, basic needs of the community first, and (b) not ‘poverty-pimping’ [...] off the results.

We ask questions to see if our mission and founding goals are still as relevant as when we formed.”



José Miguel Hernández Hurtado, one of the community researchers, with youth at La Joven Guardia del Teatro y la Danza Latina. Photo courtesy of La Joven Guardia.

“You have something they need. You make it clear that you know what that is. You outline what you are willing to give. You outline what you need in return. You are ready to walk.”

“Having an honest conversation and making sure the science institution understands the needs of our community.

An effective way to do this is by developing a relationship with the leadership and people who will be involved in this partnership. I would invite them to all of the public events to strengthen the relationship and I would even give them space to showcase what they are and do (this is an invitation to get them to know and learn about our community) in its own environment”

Logistics

The details can make or break a collaboration and it is especially important when developing trust. Pay careful attention to the details and timing of communication, budgeting, and strategy. Communicate your constraints clearly.

- When is the best time for you to talk with your partner organization?
- Have you established the best mode of communication with your partner organization? Remember that your schedule (and that of your community) may differ from your partner’s organization. Be clear with your partner about this from the very beginning. Face-to-face meetings? Phone? Email?



Illustration by José González.

- Are you open to different perspectives? Different modes of communication?
- Does your organization provide training to new staff on navigating partnerships with science institutions?



The community researchers meeting at Metro Atlanta Urban Farms.
Photo by Marilú López Fretts.

“Again, the group with more constraints and fewer resources needs to have what it offers to the partnership valued highly enough, so that the relationship doesn’t just replicate existing inequities.

A related example is the [...] study grant I was awarded (but sadly never used) to study for a year in [a location]. That year of study would have cost much less than the exchanged year of study for a [...] student at a high-end university here, so the award itself was designed to rectify some of the structural inequalities. The two parties would need to analyze what a fair exchange would entail.

In my experience, community-based organizations are so desperate for resources that they give up way too much and reap little benefit in return.”

“I felt more like [we] were guinea pigs and there was no real support built in And again, I understand it’s for research’s sake, but these are real people and these are real relationships ... like, there are real kind of implications, I guess, and consequences...”

Inequitable Pay and Credit

Our research results tell us that underserved communities don’t feel that their expertise is valued, fairly compensated, or given equitable credit in their collaborations with science institutions.

Guinea Pigs

Our research found that community organizations feel that science institutions use ‘underserved communities to obtain grants, do research, and ‘check’ off diversity and inclusion requirements. They expressed anger at not seeing clear benefits for their communities, an absence of follow-through or sharing research results, and lack of long-term commitment.

- How does each institution/organization benefit from the collaboration? Who has benefited in the past?

- What are the benefits to your community?
- If research is being conducted in your community, who is being studied and why? Who will benefit?
- Are members of the community involved in asking research questions and interpreting results?
- Have community research collaborators been named as authors?
- Have you received equitable compensation for your community expertise?

“Because CBOs are often do-gooders, it is assumed that they will help with the project putting in extra hours-time, etc... for the privilege of working with a larger institution. Many of us don’t even know that it is acceptable to be funded for our expertise.”

Savior Syndrome or “I Know What You Need”

Community researchers indicate that science institutions want to “save” or ‘fix’ their communities, and don’t think the community has knowledge to make meaningful contributions. Science institutions are confident that their expertise and resources are best and want to implement pre-packaged, top-down programming, even when it is not relevant or effective.

“We like to work with organizations and partners that have the same goals; not just because the informal science institution needs to partner with a CBO for grant purposes.”

Grant Funding

Research participants stated that they were frustrated by their inability to access meaningful funding streams directly and felt that funding cycles did not allow time to develop trust and establish equitable collaborations. Some also felt that research questions in grants seldom, if ever, originate from their communities.

- Did your partner science institution contact you BEFORE co-writing the grant?
- Have you seen the entire budget? How are the funds distributed?



Illustrations by Pixabay

- Does the grant include community advisors? Are they being paid equitably compared to other advisors?
- Are there plans to obtain research approval from a Community Review Board as well as an Institutional Review Board?
- Who will ultimately benefit from the grant award? Is there a long-term plan?



The ICBOs did a panel presentation at the annual American Community Gardening Association conference in Atlanta, GA. They incorporated storytelling, singing, and other creative interpretations of the research.



Commitment and Collaboration

Authenticity and Motivation

Community-based organizations often question the authenticity and motivation behind partnerships with STEM Institutions. Gaining clarity about your organization’s mission and motivation is important. Why do you want to work with a science institution (university, museum, science center)? Will the collaboration serve your goals and mission, and benefit your community?

- Why do you want to bring science education to your community?
- Why do you want to work with the science institution?
- Why does the science institution want to work with your organization?



Even as the sciences become more diverse, we continue to see inequities in representation from culturally diverse communities.

Illustration by José González.

- Do you want your community to adapt to the world of science? Or do you want the science world to adapt to your community so that your community’s perspectives are better represented? Or do you want both?

“Presupposing that informal science institutions can strengthen their local community-based organizations and communities is a bit colonialist, when in fact, I believe it’s the community-based organizations and communities that could strengthen the informal science education institutions.”



Youth of La Joven Guardia del Teatro, one of the community organizations leading the research, gather before their theater performance. Photo by Marilú López Fretts.

Mission Statement

Our research shows that an authentic mission statement that prioritizes work in underserved communities can help lead and guide you in determining the impact of a partnership with a science institution. Will the collaboration ultimately help you accomplish your mission? Your clear mission statement will help inspire continuity and commitment to partnerships that really matter.

“A mission statement is really helpful when things go wrong...because it is easier to know that the person is here for the right reasons.”

“Being part of a mission driven organization where all members of the organization are encouraged to understand and practice the mission every day and in every interaction builds trust and cohesion.”



Camp Compass Academy, a partner organization leading this research, reaches inner city students and provides hands on experience and lessons designed to broaden their knowledge of the outdoors. Photo courtesy of Camp Compass.



Community researchers work on the group's mission and vision during their in-person meeting in Philadelphia. Photo by Marilú López Fretts.



Makeda Cheatom, one of the community leaders driving the research, at an ICBO meeting in Philadelphia. Photo by Marilú López Fretts

- What is your personal mission statement?
- What is your organization's mission statement?
- What is your project's mission statement?



Children from La Joven Guardia del Teatro youth troupe read a screenplay in Spanish. Photo by Marilú López Fretts.

- Does your mission guide you in decision making?
- Do you "live out" your mission statement?

"Most organizations have good mission statements, but many of them don't live them out."

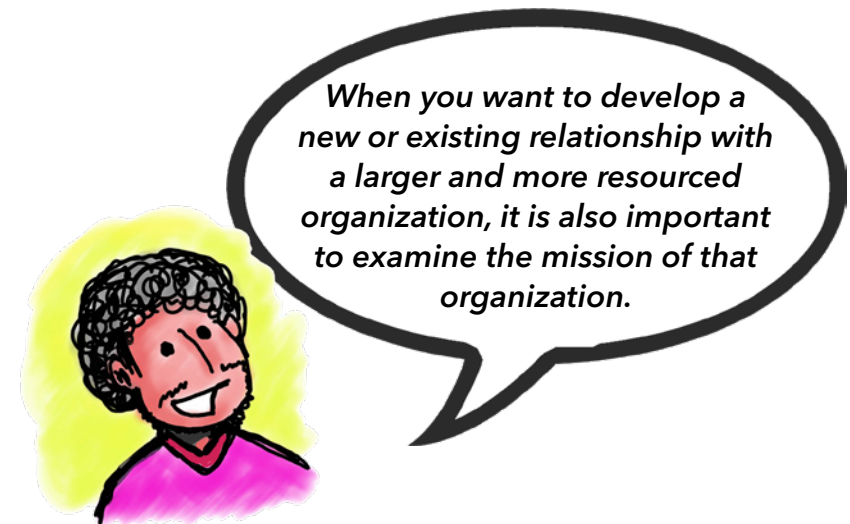


Illustration by José González.

Alignment

Our research shows that science institutions are gatekeepers to the sciences and community-based organizations are gatekeepers to their communities. Science-serving institutions need community-based organizations to reach communities historically underrepresented or excluded from the sciences. Community-based organizations are trusted in their communities, have knowledge and understanding of the community culture, and have much needed personal connections to networks. They speak the language, and understand the strengths, realities, and barriers.

Your community's perspectives are essential for the success of the project. Compare the goals, strengths, and barriers of your community with those of your partner institution.

- Do you understand your partner's goals? List them here:

- Do you understand your partner's strengths? How do you plan to leverage those strengths?

At right, historic Chicano Park in San Diego. The team visited the community park during their last meeting. Photo by Marilú López Fretts.



- Do you understand barriers you may encounter? List them here:

- What are your community's strengths? How do you plan to leverage those strengths?

- How do you plan to address barriers? Describe here:



Youth of La Joven Guardia del Teatro Latino gather before their theater performance. Photo by Marilú López Fretts.

- Name the advantages that your organization and your community have that can improve the field of science.

- How does involvement with your community (organization) benefit the science institution?

- What expertise can you, your organization, and your community offer to your partners?

- Do you feel you have anything to gain from partnering with the science institution?

“Seeing another organization value our partnership by valuing our clients is what increases trust for me and my co-workers. Sensing indifference is what brings it down.”



José González, one of the community researchers, talks about his community-based organization, Latino Outdoors. Photo by Marilú López Fretts.

Examine your goals and measures of success with those of your partner.

- Are your goals and measures of success aligned?

- Do your partners have advantages that would benefit your organization or community?

- How might your collaboration be perceived by the community?

- How is your partner institution perceived by the community?

- What institutional barriers are there in place that make it hard for your community members to have a voice in the science institution?

- Does the science institution see/understand the barriers and inequities that are present?
- Have you addressed barriers/inequities directly with your partner? If you do not feel comfortable addressing barriers with your partner, you may want to consider ending the relationship/ finding a new collaborator.
- What barriers/inequities are there in place that make it hard for community members to have a voice in science specifically? In other STEM?



Four of the ICBO community leaders who are driving this research: Berenice Rodriguez, José Miguel Hernández Hurtado, Karen Kitchen, and Marcelo Bonta. Photos by Marilú López Fretts.

Bridge to Conflict

Community researchers found that they can be more effective when they first build bridges or find commonalities to develop trust and only then begin to address inequities and conflict.



Illustration by Carlos Figueroa.

“So it’s not just a commitment to equity; it’s also demonstrating having a history of implementing it, of implementing internally, as an organization, or a history of partnerships across difference”

Evaluate with honesty

Our research indicates that community-based organizations believe that evaluation is key to developing trust, growth and long-term excellence. Evaluation should be co-created. The community perspective must be part of the evaluation, otherwise it will not be effective.

- Is the project serving your community?
- How will the project be evaluated? Who will do the evaluation?
- Is your community involved in the evaluation design?
- Does your partner appreciate honest feedback? Do you? Will your partner use feedback as a compass for growth?

- Is there continuity in the project? Is this a long-term relationship that will grow with evaluation and feedback?
- Is the collaboration process being evaluated?
- Do you feel comfortable sharing concerns about the collaboration process? Do you feel heard?
- Can you walk away from the partnership if the project evaluation indicates that it is not serving your goals, mission, and community and there is little willingness to improve?

“Do they really feel that what they’re contributing is actually changing anything? Or is it like, ‘Every time I say something, I never see anything that I’m saying being incorporated, included, or even rebutted.’”



Community-researcher Bobby Wilson shares his successes at Metro Atlanta Urban Farm with Marta del Campo. Photo by Marilú López Fretts.

“The biggest strategy is to know that it’s not only an outward struggle, but it’s also an inward struggle to conquer the inner fear of the strong opposition.

We have to retreat and then begin anew and know the seeds of opposition will always be there, in anything we face as an organization.”

Have My Back?

Our research found that trust is strengthened when STEM institutions use their power and privilege to uplift community organizations in the long-term or go out of their way to stand by their partners during difficult times.

- Has your institution gone out of its way to uplift or stand by partner community organizations? If so, what happened?

“In those moments when people may be looking down upon me or really oppressing me, it helps to know that I have a partner from the dominant culture, who has my back. When that partner identifies the oppression, accepts me and supports me in my organization, and uplifts us in a good way in the partnership.”



Community researchers during a meeting in Atlanta, GA. Photo by Marilú López Fretts.

Work Through Challenges

Community-based organizations believe that evaluation is key to developing trust, growth and long-term excellence. Always think about your mission when you evaluate.

Take time to get to know your partner institution before entering into a partnership. Who are the key leaders? What is its mission? What are their projects?

- What are your strategies for working through challenges?



Kids of all ages enjoy nature at the WorldBeat Center. Photo courtesy of WBC.

Face Time

We learned that when staff and leadership from the science-serving institution spend time in the community (above and beyond programming) it contributes to greater understanding of the community and commitment to the work. Spending time in the community seems especially important in establishing motivation, understanding 'who benefits' from the collaboration, and creating authentic relationships.

- Is your partner institution willing to become involved in your community beyond just the project?
- Is your partner institution willing to go out of their comfort zone to get to know people in your community?
- Has the leadership of the institution spent time in your community?

Gratitude and Acknowledgment

Our research indicates that a genuine and heartfelt thank you means a lot. Express gratitude and expect to be genuinely recognized and acknowledged for your community's contributions.

- Have your contributions been acknowledged? Have your communities contributions been appreciated publicly?
- If a publication will emerge from your collaboration, who will be named as authors?
- If there are deliverables created from the joint collaboration, who will be acknowledged?



Illustration by José González.



Bobby Wilson, one of our community researchers, from Metro Atlanta Urban Farm, shares his thoughts at a research meeting in Atlanta. Photo by Marilú López Fretts.

*The ICBOs would like to dedicate
this workbook to
our friend and partner,
Pepe Marcos-Iga.*

*We are forever grateful for your invaluable dedication, insight,
and contribution to our collective work. You leave an important
legacy in the field of environmental education, conservation,
equity and inclusion. We'll miss your sense of humor, your
brilliance, and your passion for building a more just and
equitable society. Thank you, Pepe.*



Photos by Marilú López Fretts.



And one day
As I'm sitting here nostalgic of things to come|
Remembering fondly what's still to be
The laughs will stop
The smiles will be no more
I will be distant from the warmth of hope
And I may be only left with memories
If I fail to see
The moments I have between you and me
Are these
Right now
Aquí

I've come to see
That to me
You'll still be there
Like a star from afar
Even if distant and gone
Your light will reach me
From the past
Its luminosity will last
As I hope to be
A star for others
Like you've been for me

Written by José González after hearing the news about Pepe.

Authors

John Annoni
Miguel Balbuena
Rick Bonney
Marcelo Bonta
Jena Camp
Makeda Cheatom
Catherine Crum
Yao (ChaCha) Foli
Marilú López Fretts
José González
Mary Ellen Graham
José Miguel Hernández Hurtado
Sister Sharon Horace, D.C.
Karen Kitchen

Yarisel Lozano
Brigid Lucey
Pepe Marcos-Iga
Anna Muhammad
Gabriela Naveda
Karen Purcell
Berenice Rodriguez
Michelle Roxana Santillán
Tracy Smith
Fanny Villarreal
Kheli Willetts
Bobby Wilson
and Tanya Zwald

We'd like to acknowledge all the community-based organizations that have been a part of this work. We do not include all individuals as authors to preserve their confidentiality, but each and every one of the community-based organizations and community leaders who participated in the research have been key to the success of the work. Thank you!

This is a guide to working in underserved communities created through the research of community-based organizations across the U.S. Please, do not share or reproduce without permission.

At right, youth from the community-based theater group La Joven Guardia del Teatro Latino, directed by José Miguel Hernández, perform "Bebe and Mr. Don Pomposo" by José Martí. The group is the only one performing in Spanish in Central New York. Photo by Marilú López Fretts.



We would appreciate your feedback!

Please let us know what you think of this workbook.

What part of the workbook did you find most useful or least useful?

Was it approachable? Why or why not? Who do you think is the intended audience? Is there anything you would like to see that was not included? Do you think people would use it?

Please email your feedback to Marilú López Fretts at
marilu@cornell.edu

Thank you!



This project is funded by the National Science Foundation (DRL # 1422022 and #1421788). We gratefully acknowledge all ECF (Examining Contextual Factors to Improve Cultural Diversity in Informal Stem Programs) project participants, team members, and Committee of Visitors. In addition, we would like to thank Debra Nero, Lisa Schreiner, and Diane Tessaglia-Hymes for their invaluable help.

