TACTICS For trust

A Practitioner's Playbook for Building Public Trust in Science and Other Domains

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A report by



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EDITORS' NOTE

The most recent Pew Research Center survey data shows that only 57% of Americans say that science has had a "mostly positive effect on society," down from 65% in 2021 and 73% before the pandemic.¹ Other trends point in the same direction: overall trust in science has fallen from 87% in the early stages of the pandemic to 73% in 2023, and the share of the population identifying as having a great deal of confidence in scientists has dropped from 39% to 23%. In tandem, public skepticism is captured in the 15% rise in distrust in science over the same period.² And, while the conversation around trust in science is often geared towards the most extreme conspiracy cases, one doesn't have to be anti-science to lose trust in science and, perhaps more importantly, the scientists behind the work.

Blind, unquestioning trust in science should not be the goal—the scientific endeavor and society as a whole benefit from demands for transparency, accessibility, and accountability. At the same time, the scientific method and the knowledge it produces have a valuable role in informing our public decision-making.

In communities across the country and worldwide, organizers, activists, and frontline providers—all cognizant of the positive impact that science can have in saving lives and improving livelihoods—are working tirelessly to make this sentiment tangible on the ground.

What has worked for this group of trustbuilders, and what hasn't? What are the appropriate forms of content, format, and language? What approaches make sense when engaging with certain communities, but not with others? It is also worth noting that the issues facing science are far from unique. Institutions across the board, from journalism to government bodies, are finding themselves under similar scrutiny.

Recognizing the often underutilized expertise of these community organizers, activists, and frontline providers, we set out to create a <u>practitioner's playbook</u>. Toward this end, in Spring 2024, the Aspen Institute Science & Society Program convened a diverse group of **multi-sector trustbuilders to foster a candid, open conversation around the tactics that make up an <u>effective trustbuilder's toolkit</u> in science and more broadly.**

This text, freely available to aspiring trustbuilders, members of the scientific community, and the public whose trust we seek to earn, represents an actionable summary of their discussion. This work is also the third installment in Science & Society's publication series on public trust in science, with the first two chapters captured in the more theoretical December 2023 report, <u>Building Bridges, Earning Trust: The WHY and the</u> <u>HOW of Public Trust in Science</u>.

2. Ibid.

^{1. &}lt;u>Kennedy, B. & Tyson, A.</u> (November 14, 2023). American's Trust in Scientists, Positive Views of Science Continue to Decline. Pew Research Center.

Our aim was to synthesize and share perspectives from the discussion as a whole rather than to attribute any quotations or viewpoints to specific individuals. Participants are listed below (alphabetically by last name):

- Mónica Feliú-Mójer, Ph.D. Director, Public Engagement with Science, Ciencia Puerto Rico; Director, Inclusive Science Communication & Engagement, Science Communication Lab
- **Stuart Firestein, Ph.D.** Professor and Chair, Department of Biological Sciences at Columbia University; author of Ignorance: How it Drives Science and Failure: Why Science Is So Successful
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- Lina Yassin, M.S. Researcher, Climate change, International Institute for Environment and Development; former Operations Manager and MENA (Middle East and North Africa) Programme Manager, Climate Tracker
- Anonymous cybersecurity analyst
- Anonymous professor of military studies and sociology

The imagery contained within this playbook reflects a theme of construction, the idea that the pursuit of trust is a work in progress and requires scaffolding in the form of resources—intellectual, material, and temporal—along with a network of connections.

Featured artists

Headings: Pop & Zebra	Page 15: Tolu Olubode
Page 9: Anne Nygård	Page 17: Oleksii Drozdov
Page 10: Dean Bennett	Page 18: Pop & Zebra
Page 12: Matthew Hamilton	Page 19: Jesse Orrico
Page 14: Ant Rozetsky	Page 22: James Sullivan

Our goal is to be one tool in your trust-building toolbox.

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TACTICS

Involve Local Leaders

By working closely with local leaders, aspiring trustbuilders enter a larger communication chain, allowing their needs to reach decision-makers more quickly, and potentially to unlock access to additional resources. For example, one trustbuilder at the roundtable spoke to the success of partnering with their county commission to create a vaccination site and bring supplies into their small, rural town, which otherwise may have been overlooked in the allocation of resources.

Addressing the challenge of scalability, another organizer found that when hosting campaigns and events in different states, it was most efficient and effective to begin by identifying intervention points via local faith leaders—people whom community members were already listening to, believing in, and idealizing. "They're the wisest and the eldest, but also the most close-to-God kind of figure," the organizer explained. "Trying to convince village members one by one was impossible, but actually convincing that one [leader] meant that you essentially got all the village on your side."

Participants stressed the importance of building human relationships rather than transactional connections when approaching local leaders. Moreover, relying on the top of the pyramid is not sustainable. Rather, aspiring trustbuilders should be intentional about "building the pyramid as they go." For instance, during the COVID-19 pandemic, one participant's organization channeled its efforts into preparing toolkits—multimedia campaigns, educational materials, and tactics for dealing with difficult conversations and skeptics—that could then be distributed to nonprofits and community leaders, in turn equipping a new wave of on-the-ground trustbuilders. In utilizing this train-thetrainer model, one trustbuilder emphasized the importance of providing channels for continual engagement. For example, one local leader who had been taught to use the organization's educational materials and to deal with misinformation was then connected to the organization via a mobile chat, allowing the trustbuilder to be on demand to answer scientific questions.

Equip People on the Frontlines

Similarly, training a range of professionals throughout the healthcare ecosystem—from medical doctors to vaccination center employees—was identified as a significant opportunity for intervention. One trustbuilder's organization ran a national survey in partnership with their country's pediatric society, yielding over 1,000 responses on the types of problems physicians encountered with hesitant parents, the most common questions they encountered, and their self-reported capacity to respond. Notably, pediatricians tended to feel underprepared, not due to a lack of medical knowledge, but because they lacked the psychological or social work training that was key to mediating concerns, particularly among parents who had previously trusted vaccines but now found themselves hesitant about the COVID-19 vaccine specifically.

In direct response to these needs, the trustbuilder's organization ran roleplay-based workshops and trainings for pediatricians. To supplement the knowledge shared with professionals, their organiza-

tion collaborated with a nationally beloved cartoonist to produce a <u>children's comic book</u> about vaccine disinformation and hesitancy. The book was then distributed to all pediatrician's offices in the country. Other materials included vaccine safety information and background knowledge about disinformation so that members of the public could identify red flags on their own.

> **Questions for Partners:** Trustbuilders might consider the following questions when forming partnerships with local leaders and people on the frontlines:

- What is their history?
- Who is in their community?
- What are the challenges they face?
- What are their perceived assets?

Practice Reflexivity and Pick Your Battles

In addition to asking questions of their partners, aspiring trustbuilders must also look inward to lay the groundwork for resilient relationships, particularly in an ever-changing scientific landscape where mistakes are bound to be made on the long path to earning trust.

As education expert Michael Hammond at the University of Warwick has written, "Reflexivity generally refers to the examination of one's own beliefs, judgments and practices during the research process and how these may have influenced the research. If positionality refers to what we know and believe then reflexivity is about what we do with this knowledge."³ The same principles from education and research can be applied to building partnerships. A critical examination of where one is coming from may include candid questions about one's privileges, biases, and assumptions.

The outcome of this process may be the conclusion that one is not the ideal messenger for a given context. This verdict leads back to the notion of working with local leaders and finding someone people will instinctively listen to and resonate with. This can be particularly relevant across gender, socioeconomic, and racial lines. "In situations where I felt like I may not be the best communicator, I was very happy to step back and actually allow someone else from the organization to take over," one trustbuilder shared during the roundtable. This trustbuilder found that specific marginalized facets of their identity made it difficult to connect with certain populations and noted that they had to choose their battles. In their case, this meant prioritizing climate education over gender-based activism—a difficult decision they continue to question and grapple with.

Roundtable participants also pointed to the need for scientists to reflect on their role in the current state of trust. While it is unlikely and perhaps undesirable for every scientist to take on the additional task of becoming a full-fledged boots-on-the-ground communicator, there was a shared feeling that all scientists are, at a minimum, responsible for thinking about how the knowledge or outputs they produce will be communicated. Although the media is often thought of as the 'bridge' in this

^{3. &}lt;u>Hammond, M.</u> (April 15, 2022). reflexivity. Education Studies, University of Warwick.

situation, one trustbuilder cautioned that "media can only communicate as much as they understand, and most of the time they don't have enough resources to actually understand the details and be able to distill the most important facts," creating a need for scientists to take a more significant share of the responsibility.

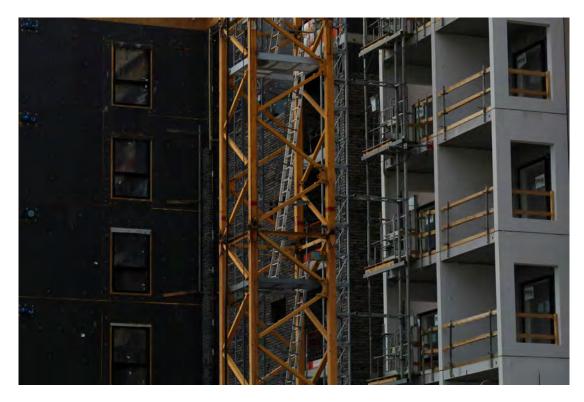
This gap was described not as a lack of skill, but as a lack of caring, since many of the existing science engagement organizations rely on the self-initiative of scientists who are already concerned about communication rather than actively reaching out to scientists who are most in need of this training.

Know Your Community

Make Translation Readily Available

English is largely considered the de facto language of science, with 98% of scientific publications being written in English.⁴ However, "by ignoring other languages, traditional mass media (e.g., newspapers, magazines), social media, and scientific journals ignore the cultures and perspectives of non-English speaking communities."⁵ This practice excludes communities and can hinder trust if scientists and communicators fail to make deliberate efforts to ensure inclusion. Since language is a critical element of how people access, comprehend, and make judgments about information—from

^{5. &}lt;u>Márquez, M.C. & Porras, A.M.</u> (2020). Science Communication in Multiple Languages Is Critical to Its Effectiveness. Frontiers in Communication 5:31.

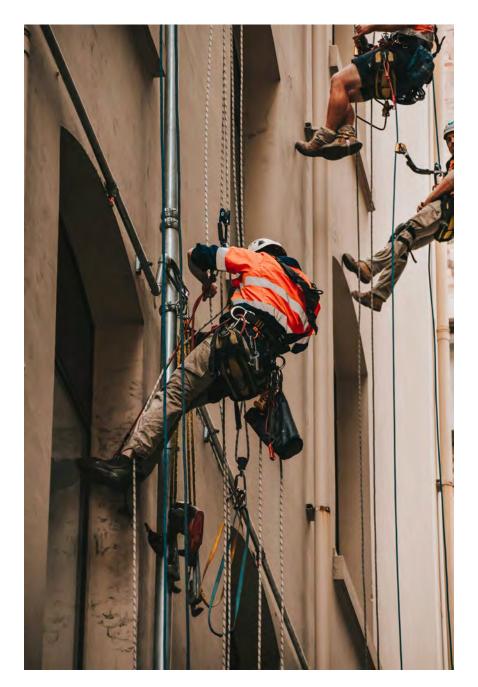


^{4. &}lt;u>Gordin, M.D.</u> (2015). Scientific Babel: How Science Was Done Before and After Global English. University of Chicago Press.

peer-reviewed findings to mis- and disinformation, translated materials should be readily available in languages that reflect the community or culture of interest.

The importance of translation was underscored at the roundtable, with one science communicator explaining that "people that don't speak English are more vulnerable... for many different reasons, not just language, but other systemic barriers and '-isms.'" The same is true for translation across modalities, such as sign language. Language translation democratizes knowledge and enables people from different cultural backgrounds and abilities to participate in scientific discourse.

However, translation in this context not only reflects a linguistic task, but also a need to engage in the brokering of cultural and technical scientific concepts. "People trust people who can speak their same language because they feel heard. It's not just that they understand. It's that they know that they've been understood," observed one trustbuilder.



While translating and summarizing facts are important pieces of the 'access puzzle,' these steps stop short of making sure that good information makes it into the hands of the public.

As one trustbuilder at the roundtable found, when working within their community, trying to follow the former approach was difficult to pitch to newspapers. By linking their message to religion, the trustbuilder captured the attention of both editors and readers. Rather than trying to urge action through fear, the trustbuilder recalled that they found resonance by aligning their call to action with what God wanted people to do. "I was also able to actually attract attention and start arguments because some people felt challenged. Some people felt offended because they had a different interpretation. While I did receive criticism, at least it incited discussions and incited people thinking about how climate change is linked to religion," the trustbuilder reflected. "This was one of the fastest ways to communicate messages to them. It just made my message easier to receive, but also easier to interpret and relate immediately back to life, and also made the call to action clear, because then, at least, people will be able to relate it to something they highly regard, which is religion."

Religion and Climate Change in Action

Kickstarted with support from Greenpeace, <u>Ummah for Earth</u> is a faith-based alliance linking organizations and individuals in Muslim communities who are passionate about climate justice and the transition away from fossil fuels. The alliance "shed[s] light on the intersection between Islamic faith and climate action, and encourag[es] and help[s] Muslims and others to raise their voices for the well-being of our common home." The project also supports Muslims in practicing an eco-friendly Hajj pilgrimage through a green pledge that links back to scripture and "Muslim values of stewardship, balance, and wisdom."⁶

Another trustbuilder pointed to youth appeals to parents—one of the successful strategies used in the smoking-cessation world—as a form of personally relevant message that might be tailored to climate change communication.

Keep Resources and Access in Mind

The provision of resources should be an internal and external concern for trustbuilders. As one trustbuilder who teaches about social inequality commented during the roundtable, many of the tactics described in this playbook can be resource-intensive for organizations, requiring assets such as time and staffing. At the same time, the resourcing problem extends to the public, where nearly one-third of Americans are "medically disenfranchised,"⁷ and a general lack of bandwidth to dedicate time and energy researching evidence-based answers permeates the most vulnerable communi-

^{6. &}lt;u>About Ummah for Earth</u>. Ummah for Earth.

^{7. &}lt;u>National Association of Community Health Centers</u>. (February 2023). Closing the Primary Care Gap: How Community Health Centers Can Address the Nation's Primary Care Crisis.

ties. Left without easy access to a primary care provider with whom they can share their questions and concerns, one trustbuilder explained that many people are left to consult less-than-reputable resources, where there is plenty of money involved in the business of disinformation.

Connecting back to the specific case of vaccination, one trustbuilder emphasized that one of the most promising approaches to increasing outcomes like vaccine uptake is to support people who already trust the science behind it but encounter other barriers, such as long commutes to vaccination centers or product shortages in their community.

Therefore, some challenges that may outwardly appear to be issues of trust in science can also be resolved through more straightforward means. To this end, another trustbuilder shared that in the realm of climate and energy, practical challenges, including the expense of electricity, concerns about privacy invasions and extreme-weather functionality⁸ of electric vehicles, and solar panel scams⁹ can all present additional roadblocks among people who otherwise support and believe in a green transition.

^{9.} Office of Attorney General Ashley Moody. (2024). Scams at a Glance: The Dark Side of Solar.



^{8. &}lt;u>Glick, M.</u> (February 15, 2024). Electric Vehicles Aren't Ready for Extreme Heat and Cold. Here's How to Fix Them. Scientific American.

The Value of a Belief

Before trying to challenge mis- and disinformation, asking why said beliefs are so dear to the people holding them can be valuable. The spread of disinformation is often targeted based on identities, so it is worth considering how to communicate the facts without creating a perceived attack on belief holders themselves or on a movement's leaders, which can be interpreted as a personal attack by proxy.

Establish a Personal Relationship

Fostering personal relationships with community members is as equally necessary as when developing connections with local leaders and frontline providers.

As one trustbuilder underscored in the context of their work with climate change, where outcomes tend to play out over the long term, "We're talking about people's lives and livelihood. Most of the time, the call to action does include people having to change some aspects of their lives, or people having to relocate, or it includes a major drastic change. So that, coming from a stranger will never be taken lightly, or would never be welcomed." To communicate successfully, the trustbuilder found that people "needed to know us on a personal level, and they needed to know that we do mean well."

Ideally, these relationships form naturally through active community engagement and participation. One trustbuilder shared that their work with the local community center, daycare, and business sector meant they were entering the pandemic with a high degree of previously established trust. That is, people who already knew the trustbuilder knew that they wouldn't do anything that did not align with the community members' interests. For those who didn't know the trustbuilder, it was easy to hear about them by word of mouth from people who did trust them and then adopt a similar level of trust.

It also helps to have a stake in the matter. For one trustbuilder, using their money to purchase supplies such as masks and hand sanitizer for the community demonstrated a genuine and deeper dedication to the cause. Particularly when discussing serious topics, the same is true of providing personal examples of how the trustbuilder themself or the trustbuilder's close circle has been impacted by the issue at hand. "You gotta show concern to get concern," summarized one trustbuilder at the roundtable.

Listen First and Use the Right Tone

The delivery of a message matters just as much as its content when it comes to building trust. Aspiring trustbuilders should actively listen and express genuine curiosity, empathy, and humility in their engagements with the community. Channeling this approach allows trustbuilders to articulate their message in a way that doesn't offend a belief holder's ability to make judgments and decisions. Moreover, it keeps trustbuilders accountable to the principle that one must listen to another person's fears before they can allay them. Stated differently, trustbuilders should approach conversations from the mindset of understanding where others are coming from rather than trying to change their mind. Listening sessions also help trustbuilders to figure out a community's common questions and concerns, along with their preferred ways of receiving information, both of which are valuable assets for meaningful science communication.

To effectively persuade someone, connecting with their perspective and demonstrating understanding are essential. "If you want to argue with someone and convince them, you need to use their argument rather than create new arguments," explained one trustbuilder.

Trustbuilders should also note that although a topic of conversation, such as COVID-19, may be serious, utilizing nonverbal and verbal communication measures such as exchanging smiles, laughing, and genuine friendly banter should be valued. These techniques serve as key tools for initiating conversations, establishing a connection, and building rapport, in addition to making the interaction more pleasant for all parties involved.

Follow Through

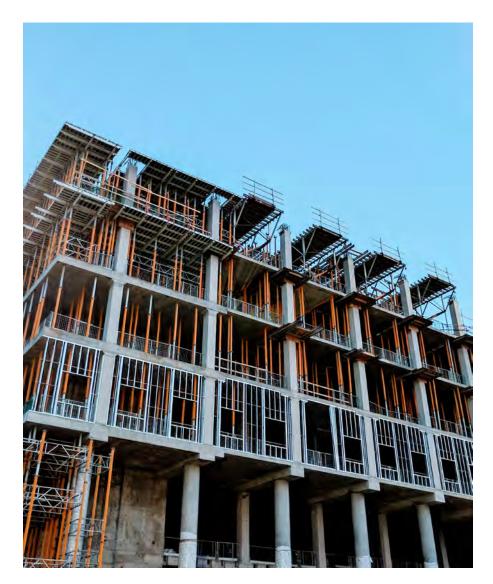
While inundating people with facts and figures is poor practice, it is important to engage them when they say something false. More effective engagement can look like proactively passing along information to people and letting them read it for themselves, then providing a safe space for them to ask questions or discuss their thoughts afterward.



Trustbuilders reported that the nature of their work is a long journey. For instance, one participant found that people who pushed back against vaccination during an initial interaction would often come back several weeks after getting their dose of the vaccine. In the interim, calling and following up can help keep the information at the forefront of people's minds. "I do what I have to do to get the job done. 'Cause when I'm in on something, I'm a hundred percent in," said one trustbuilder about the phone calls they made. This strategy of repeated check-ins is also crucial for pushing local leadership to provide additional resources.

Position Yourself and Science in the Service of People

As one trustbuilder noted, "Science is part of all of our lives, and science can be useful for everyone." It is important to ask who has historically been shut out from institutions of science and the privilege of thinking of themselves as scientists. To emphasize the importance of connecting scientific work to everyday experiences, another trustbuilder highlighted a core principle guiding their efforts: "There is a throughline in everything we do, and for us [that] is making science relevant... to the lives, to the realities of people." Thus, it should be emphasized that although people in a given public might have shared cultural experiences, there are hundreds and thousands of individual realities



within the larger community. This idea underscores that no community is a monolith and that scientific communication needs to be tailored and relevant to diverse perspectives and experiences.

To complement efforts to bring racial and ethnic minority communities into the sciences, trustbuilders should also engage people who are already engaged in science in the informal sense, such as youth in 4-H programs, tinkerers, and hobbyists—all of whom have historically had a hand in various scientific breakthroughs but often do not view themselves as scientists.

Another step to heighten the sense of relevancy between science and the public is to provide scientists with space to speak about their work, inspiration, and identities. One trustbuilder noted their weekly participation in a radio segment, allowing them to build relationships with both outlets and audiences in the media sphere. Other platforms like <u>The Story Collider</u>, which was founded by physicists Ben Lillie and Brian Wecht, host in-person and podcast shows featuring deeply personal storytelling by "researchers, doctors, and engineers, of course, but also patients, poets, comedians, and more."¹⁰

Participatory Decision-Making in Practice: GMO Beans in Brazil

For decades, Brazil has hosted National Public Policy Conferences¹¹ and mini-publics,¹² which are variations on well-organized citizen assemblies. In 2008, a forum focused on the issue of genetically modified beans was organized by the national agriculture company (Empraba) with the participation of the Agriculture School of the University of São Paulo (ESALQ-USP), the Federal University of Viçosa (UFV), and the Federal University of Santa Catarina (UFSC).¹³ The Swiss Agency for Development and Collaboration (SDC) funded the project. Because beans, or *feijões*, are a staple of the Brazilian diet, a range of stakeholders were called to contribute their perspectives. These groups included the market association, farmers association, housewives association, and agro-ecology association, which has historically opposed any kind of genetically modified organisms (GMOs). Participants met over one weekend, reaching a consensus to release the beans. By providing a safe and in-person environment in which various competing voices were given a chance to come together around the table, the decision was reached with civility rather than devolving into the hate speech typical of social media engagement.

^{10. &}lt;u>Home</u>. The Story Collider.

^{11. &}lt;u>Pogrebinschi, T. & Samuels, D.</u> (2014). The Impact of Participatory Democracy: Evidence from Brazil's National Public Policy Conferences. *Comparative Politics*, 46(3), 313–332.

^{12. &}lt;u>Smith, G. & Setälä, M.</u> (October 9, 2018). Mini-Publics and Deliberative Democracy. *The Oxford Handbook of Deliberative Democracy* 18: 300–14.

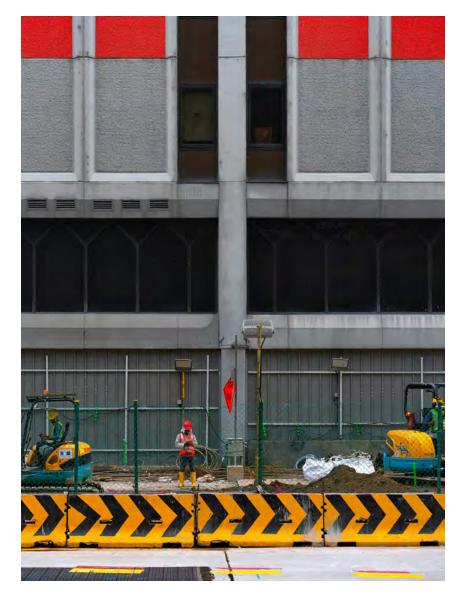
^{13. &}lt;u>Guivant, J.S. et al.</u> (2009) Uma Experiência de Consulta a Setores de Interesse no Caso do Feijão Transgênico. Embrapa Hortaliças.

In the Physical Sense

The concept of 'meeting people where they are' is more than just a figure of speech. Finding where people gather physically can be crucial for fostering meaningful connections and bringing evidence-based information directly to communities.

Successful trustbuilders situate themselves in shared spaces such as convenience stores, places of worship, and community centers, providing information in locations that are already part of people's daily routines and where they already feel comfortable. Importantly, figures of trust are available to lend an ear whenever people need to talk, not just during scientific crises.

During the COVID-19 pandemic, one trustbuilder highlighted the work of their county commissioner, who would go door-to-door trying to get her community vaccinated. When faced with questions or hesitancy from neighbors, the commissioner would pull up articles on their phone to show people information from credible sources, an example of how to bring information to the community directly and in the moment.



In the Virtual Sense

As a trustbuilder attending the roundtable with a background in communications affirmed, a journalist's goal is—or should be—to write the kind of reliable, accessible articles that people like the above-mentioned county commissioner can pull up on their phone while on the ground.

Search engine optimization (SEO) is a trustbuilder's friend in this digital age, the same participant noted. In other words, to help an evidence-based article get to the top of search engine results, trustbuilders should put themselves in the public's shoes by considering the questions people are likely asking in their social circles and typing into their search engines. One participant referenced a popular CNN article published during the initial outbreak of COVID-19 on the psychology of emergency toilet paper buying,¹⁴ a topic that was relevant to the cultural conversation.

Improve the Information Ecosystem

The current information ecosystem has room for improvement on both the supply and demand sides. As one trustbuilder at the roundtable said, "combating the anti-science rhetoric in the disinformation is almost as important as making life-saving vaccines if we're committed to saving lives." The same sentiment holds for other areas of science rhetoric.



14. Prior, R. (June 12, 2020). Why are we hoarding toilet paper? It might be your personality type. CNN.

To begin, reporters have choices in how they pitch an article—either as a straight news line or as a piece that highlights surrounding conspiracy theories—noting that there is value to both angles depending on the context. Journalists should also be aware of using false equivalence,¹⁵ the trap of presenting two sides of the story with equal weight despite clear scientific consensus, such as in the case of climate change.

In any case, more investment is needed in science-backed journalism, particularly given that the virality of falsehoods is roughly six times that of the truth¹⁶ and in light of local news deserts.¹⁷ Similarly, the forwarding function on mobile messaging platforms amplifies the challenge of communities with low education, where information is usually spread by word-of-mouth. Trustbuilders at the roundtable flagged <u>Bellingcat</u> as a site hosting good examples of investigative journalism in the climate space, while others praised the work of reporters at *The New York Times* dedicated to the disinformation beat, like Steven Lee and Tiffany Hsu.¹⁸ Even outside the investigative space, reporters would benefit from <u>specific training on covering climate disasters</u>, which demand the ability to cover a rapidly-unfolding event, show the impact on affected communities, and explain events using science.

16. Vosoughi, S., Roy, D., & Aral, S. (March 9, 2018). The spread of true and false news online.

17. <u>Medill School of Journalism, Media, Integrated Marketing Communications</u>. More than half of U.S. counties have no access or very limited access to local news. Northwestern University.

^{18. &}lt;u>DiTrolio, M.</u> (October 18, 2022). The Misinformation Beat, Translated. New York Times.



^{15.} Eshelman, R.S. The danger of fair and balanced. Columbia Journalism Review.

"The lies are free, the truth is paywalled," posited one trustbuilder. In contrast to the under-supply of accessible, quality journalism noted during the roundtable, social media platforms are incentivized to make money, get reactions, and lead users down rabbit holes. Engagement farming, typically consisting of clickbait coupled with advertisements and artificial intelligence (AI)-generated images, plays into the same motivations. This structure is reflected in the Meta (formerly Facebook) algorithm, which has been shown to manipulate the information ecosystem by sending posts that receive hate reactions to the top of other people's feeds.¹⁹

Trustbuilders at the roundtable pushed back on the idea that content moderation is censorship, instead likening it to the peer review process, which has been a core form of gatekeeping in the scientific community. In the age of AI, trustbuilders also expressed a need for places to direct the public that are not search engines, such as the Merck Manuals and fact-checked videos of doctors explaining a subject.

While pre-bunking—the approach of warning people about falsehoods before they encounter them can seem overwhelming at face value, the premise can be atomized into its elements. Instead of delegating pre-bunking to individual scientists, there ought to be a greater collective effort to spread messages that provide a kind of pre-bunking. In addition to supporting media literacy efforts, one trustbuilder spoke of working with their local secretary of state to build information resilience, push out the truth, and work with athletes—who tend to be trusted across partisan lines—in advance of anticipated increases in election-related mis- and disinformation.

While trustbuilders at the roundtable agreed on the need to regulate the information "free-for-all" of social media, they diverged in their recommended approaches. While some pushed for the outright elimination of anonymous users and bots, others feared that doing so would harm marginalized groups who have legitimate grounds for not associating their posts with their identities. Requiring minimum forms of verification was proposed by the trustbuilders as a middle ground.

Steer Clear of the Partisan Paradigm

Polling shows that trust in science is down across the political spectrum, yet the drop has been more precipitous among Republicans.²⁰ Despite this trend, trustbuilders strongly cautioned against framing the challenge as a 'Republican trust in science problem.' In the words of one trustbuilder, "the left-right paradigm [is something] we need to stay as far away from as we possibly can. Absolutely don't touch it with a 10-foot pole. Let's go at this with issues that people are dealing with."

As trustbuilders explained, feelings and platforms shift over time, making an exclusive focus on one political group a time-limited strategy. For instance, strong anti-vaccine sentiments were traditionally associated with liberal enclaves before transforming into a civil liberties issue for the right.²¹ One trustbuilder pointed to the influence of identity politics by drawing on the case of Marin County,

^{19. &}lt;u>Merrill, J.B. & Oremus, W.</u> (October 26, 2021). Five points for anger, one for a 'like': How Facebook's formula fostered rage and misinformation. *Washington Post*.

^{20. &}lt;u>Kennedy, B. & Tyson, A.</u> (November 14, 2023). Americans' Trust in Scientists, Positive Views of Science Continue to Decline. Pew Research Center.

^{21. &}lt;u>Allen, A.</u> (May 29, 2019). How the anti-vaccine movement crept into the GOP mainstream. Politico.

California, a liberal stronghold known for its low vaccination rates but which outpaced the nation in terms of COVID-19 vaccine uptake—an outcome that has partially been attributed to a fear of being associated with the now-conservative 'anti-vax' label.²²

Understand how trust is being measured

Measures of trust—particularly within a broad area such as science—are sensitive to the subject matter at hand. Over time, the type of science at the forefront of the public conversation has shifted, from the Space Race and the dawn of GMOs to the prevalence of mRNA technology and climate analysis. For this reason, trustbuilders and public opinion researchers benefit from breaking down the question in two ways:

- Asking people to identify what comes to mind when they are asked to think about science, and
- Asking people how much they trust specific disciplines such as vaccine science, engineering science, and so forth.

Whereas aligning the conversation around Democratic-Republican party politics has the potential to alienate half of the U.S. population, further entrenching the loss of trust, trustbuilders offered that populism might be a more useful classification because anti-science attitudes map closely onto anti-democratic outlooks. In this way, recent polling results can be understood through the lens of rising populism within the Republican party²³ rather than an inherent characteristic of the conservative electorate.

Trustbuilders also indicated that niche areas of distrust in science, such as flat earth beliefs, do not matter in themselves. Rather, individual conspiracy theories become problematic when they merge with others, creating a broader coalition²⁴ with enough leverage to influence the information environment.

Protect Scientists from Political Attacks

As one trustbuilder summarized, the ingredients to facilitate public trust in science can be described as three intersecting circles of a Venn diagram: 1) communication and public engagement, 2) countering the orchestrated campaign of disinformation, and 3) the rarely mentioned need to protect scientists. While initiatives such as the recently established <u>Coalition for Trust in Health and Science</u>

^{22. &}lt;u>Karlamangla, S.</u> (October 2, 2022). Once Known for Vaccine Skeptics, Marin Now Tells Them 'You're Not Welcome.' *New York Times*.

^{23. &}lt;u>Lange, J. & Oliphant, J.</u> (March 21, 2024). Republicans have taken sharp populist turn in the Trump era: Reuters/Ipsos. Reuters.

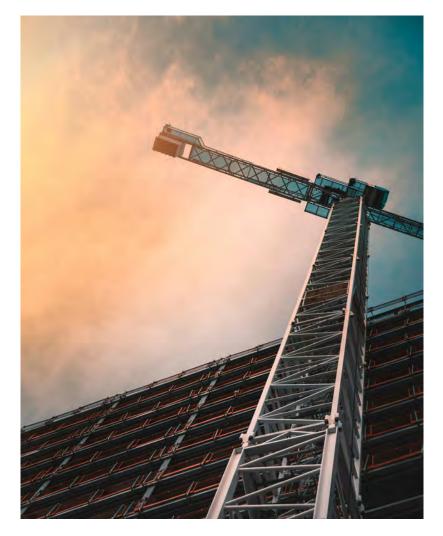
^{24. &}lt;u>Weinberg, D.B. & Dawson, J.</u> (October 2021). From anti-vaxxer moms to militia men: Influence operations, narrative weaponization, and the fracturing of American identity. Brookings Institution.

address these first two objectives, few safeguards exist for the people whose scientific careers hang in the balance.

In moving away from a partisan paradigm, trustbuilders inevitably will—and should—engage with politics. One trustbuilder framed this assertion by referencing Joseph Rotblat's Nobel Peace Prize lecture, in which he stated, "Precepts such as 'science is neutral' or 'science has nothing to do with politics,' still prevail. They are remnants of the ivory tower mentality, although the ivory tower was finally demolished by the Hiroshima bomb."²⁵

"In a way, you're going to be accused of political bias either way, so hiding from it isn't going to help," noted one trustbuilder, adding that the system typically stops at the point of rewarding the production of knowledge, leaving the politicization of science to politicians. In contrast, and from the trustbuilder's own experience in international climate negotiations, in cases where the path forward is clear—for instance, the need to phase out fossil fuels by the end of the century—"it is the job of a scientist to come and just emphasize that." The trustbuilder viewed taking a stand as caring enough to be the face of science, stating, "Yes, there's a line to draw [in terms of being political], but I don't think a lot of scientists try enough, at least, to find that line."

25. <u>Rotblat, J.</u> (1995). Remember Your Humanity. The Nobel Prize.



Trustbuilders also expressed alarm at the defamation of scientists,²⁶ rallying around the idea that a movement from within the science community is necessary to protect scientists' credentials from the power of the anti-science lobby. In particular, trustbuilders called out a lack of support from national institutions (e.g., Office of Science and Technology Policy, President's Council of Advisors on Science and Technology, professional science organizations) and university administrations (particularly within their communications offices), demanding that they take less risk-averse positions when defending scientists and faculty.

One trustbuilder quoted Dr. Martin Luther King, Jr. in saying that "In the end, we will remember not the words of our enemies, but the silence of our friends." The participant stressed the particular consequences for mid-career science professionals, commenting "[At] the end of the day, as long as I know I have the backing of the professional societies and the leadership of science in America, I'm good.... I'm a full professor, and I've been able to make enough noise in a way to get people behind me. What do you do if you're a mid-career associate professor...? I mean, those people are really isolated. And so those people in the trenches are really getting beat up as well, and don't have and can't organize the resources that I can."

Standing Up for Science and Scientists

The <u>Climate Science Legal Defense Fund</u> (CSLDF) was praised by trustbuilders as a potential model for expansion across other scientific disciplines. The CSLDF protects the scientific endeavor across four pillars:

- "Offering free legal aid to scientists,
- "Educating researchers about their rights and responsibilities,
- "Sharing strategies and information about cases with attorneys, [and]
- "Publicizing attacks on science."27

What Doesn't Work?

- A one-size-fits-all approach,
- Assigning excessive value to digital influencers during the pandemic over local leaders, and
- Leaving local news out of the conversation.

^{26. &}lt;u>Naishadham, S.</u> (February 8, 2024). Jury awards climate scientist Michael Mann \$1 million in defamation lawsuit. Associated Press.

^{27.} Our Mission. Climate Science Legal Defense Fund.

CONCLUDING MESSAGE

Ultimately, the path ahead for aspiring trustbuilders encompasses a two-fold approach: cultivating trust and establishing its foundation, trustworthiness, which is achieved through both actions and words.

Regardless of which tactics in this playbook resonate most with you, the first and most essential step in building trust is to step out of your silos to engage and connect with others.

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