

Part I. Impact and Assessment

One of the major areas of activity supported by the Wikimedia grant has been our digital storytelling initiatives. Led by our fantastic team at #VanguardSTEM, these efforts have focused on two key areas. First, the team has revamped and expanded our features programming that highlights established and emerging Black, Indigenous, women of color and non-binary people of color in STEM. These features are a part of our remarkable repository of changemakers across a variety of fields whose profiles help to normalize culturally relevant STEM stories. Incorporating open access publications by our featured community members as part of our updated profiles, we encourage our readers to engage in the radical praxis of citation that honors the culturally relevant knowledge production BIPOC scientists contribute to the field.

- Example Updated Feature:
<https://conversations.vanguardstem.com/wcwinstem-arianna-long-m-s-she-her-eb5ad0cdc755>

The team worked to develop all-new graphics and formatting for these features and collaborated with these individuals to facilitate sharing narratives about their professional trajectories, the challenges they encountered, and the work that they were most proud of. We also provided a forum for them to share and amplify their recent research and work to our large audience of social media followers. This refreshed design will carry forward as part of our ongoing effort to tell stories that are impactful, affirming, and that help to create and claim new spaces in STEM. By updating the visual language of VanguardSTEM's community features, our team has created a more streamlined, effective medium for highlighting technical expertise alongside lived experiences.

Using engagement (link clicks, profile visits, comments, etc.), impressions (the number of individuals who view our content as a function of follows, reposts, and other sharing methods), and content views we are able to obtain preliminary measures of impact. According to Sprout Social, the third-party social media analytics software VanguardSTEM deploys, announcement of our refreshed community feature series garnered approximately 28.2K unique Impressions across our social media accounts. Typically, corporate and other non-personal social media accounts anticipate a 1-2% engagement rate from followers. VanguardSTEM's community feature campaign is within this range at exactly 1.5%, meaning that the new features garnered approximately 415 individual readers. Medium's in-article metrics report that 60-80% of VanguardSTEM's article traffic comes from external social media posts, newsletters, and other forms of sharing rather than internal article promotion across Medium's site.

A second area of growth supported by the grant is in our multimedia storytelling efforts. As part of making more visible and accessible our unique content and archive of materials, the #VS team has piloted a podcast program set for a Spring 2023 release. Drawing upon our extensive catalogue of interviews and conversations with women of color and non-binary people of color in STEM, the podcasts will provide us with a new format to share our stories. The team is particularly excited to have this opportunity to reach new, broader audiences and spark new engagement with our work.

Another key area of activity has been #VanguardSTEM's continued leadership in developing and sharing interventions and theories of change for STEM spaces. Growing from the vision of an Intersectional Scientific Method (ISM) laid out in our 2020 open-access article, the #VS team has worked to articulate a reimagined theory of mentorship in STEM spaces that speaks to the deeper levels of

systemic and ideological change that are needed in these fields. The resulting “Decolonized Mentorship” framework reflects a new set of practices and priorities for what the future of STEM mentorship can and should look like. This effort builds on our existing and ongoing “Guerilla Mentorship” platform that provides on-the-ground, community-based mentorship for emerging STEM practitioners. Within our online community, this was VanguardSTEM’s most impactful campaign of 2022. According to Sprout Social this campaign reached a total of 112K individual users with an engagement rate of 1.6%. Alongside the publication of the Decolonized Mentorship framework, VanguardSTEM hosted an online mentoring workshop to (1) deploy the Decolonized Mentoring framework with BIPOC mentors and (2) allow mentees to engage mentors for academic and professional advices. This event recruited 28 women and non-binary BIPOC mentors from academic, government, non-profit and industry backgrounds. In total, 32 mentees from marginalized communities were able to participate in at least two mentoring sessions with a mentor of their choice.

The team is poised to share and disseminate the Decolonized Mentorship framework at the upcoming Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) annual conference in 2022. This opportunity to reach the more than 8,000 members of that organization is an important step in spreading our broader theory of change. By sharing and facilitating the implementation of this mentorship framework, #VanguardSTEM is preparing to build a long-term cohort program and training modules that we anticipate will play a key role in shaping mentorship practices within STEM fields in the years to come.

- Decolonized Mentorship framework and event announcement: <https://conversations.vanguardstem.com/decolonize-mentorship-with-vanguardstem-17c3a56f0404>

One final area of activity in the past year has continued our collaborative storytelling work by hosting a virtual symposium in Summer 2022 for a diverse group of researchers. These individuals had previously received microgrants through #VanguardSTEM in Summer 2021 to support culturally relevant scientific experiments. The team re-engaged these individuals and collaborated with them and with the nonprofit organization The Story Collider to provide training, coaching, and a platform to tell their stories and amplify their scientific research. The goal of this campaign was to create an accessible alternative to the standard science symposium format. Rather than sharing research impact with data and figures, we asked our grantees to share stories about how their work impacts them personally as well as their communities of support. While this campaign garnered fewer Impressions than our previous work this year at 28.5K, this was our most engaged campaign at 2%. While we had outstanding engagement from our audience, the long-form production of the stream has limited continued viewership, likely due to the length. As with previous Story Collider productions, we plan to redistribute these science stories as individual podcast episodes to increase audience and impact.

- Intro to Hot Science Summer: <https://experiment.com/grants/hotsciencesummer>
- Hot Science Set Summaries: <https://conversations.vanguardstem.com/hot-science-summer-revolutionizing-research-resources-93affe1d979b>
- Hot Science Stories: <https://www.youtube.com/watch?v=Bw3CzYQNBBE&t=8s>

Looking ahead to the coming year, we believe that we are well positioned to make an even bigger impact through the strategic deployment of this funding. We are currently in negotiations with a web designer to facilitate the transfer, updating, and expansion of our archived web content. We are also prepared to launch our campaign to push across the 10,000 Twitter follower threshold and leverage that event as a unique opportunity to engage our broader community, center highlights from our past and current features, and build interest and momentum for our next wave of storytelling and interventions.