

Reflecting On Our Roots – "Broader Impacts" Is Still Relevant - by Shirley Malcom

Reflecting On Our Roots is a series of essays outlining some of the historical context of the field of broadening participation. The essays were originally published in the NSF INCLUDES Open Forum group on Trellis, and are now located in the new Open Forum on Broadening Participation microsite . Shirley Malcom is the Senior Advisor and Director of SEA Change at the American Association for the Advancement of Science and co-PI on NSF grant 1748345 which supports the NSF Open Forum on Broadening Participation in STEM.

When this Reflecting on Our Roots was first written I urged a return to the originating documents to understand the history and intent of the NSF "broader impacts" criterion since questions have continued to emerge almost a quarter of a century later about what constitutes BI and why the criterion is important.

The recent enhanced attention to diversity, equity and inclusion (DEI) in science has magnified these discussions, even when considering some of the most forward-facing science agendas. Every ten years, under the auspices of the National Academies of Science, Engineering and Medicine, the astronomy community issues its decadal survey, the result of years of discussions leading to agenda-setting for ground and space-based astronomy going forward. What work will take priority; what telescopes are being recommended for support? What "observatories" should be established? But the discussions are not all about physical infrastructure; also discussed are the human infrastructure needs of the field. In the past the lack of diversity within the field and the situation for underrepresented groups were acknowledged, and then folks just kind of moved on.

But in this 2020 decadal study, the community was called out on its failures to move beyond the poor numbers and inattention noted in the last study.



Once again, the issue of the NSF requirement to respond to "broader impacts" has been brought into sharp focus. For astronomy, at least, does the bright light of broadening participation (BP) need to be lifted up? Is more attention by university departments needed? What will that entail? How will movement to BP be measured? What impact will BP have in deciding who receives funding? What specific expectations will be articulated?

Relevant to all these questions, other parts of the physics and astronomy community, driven by work of the professional societies, are offering a tool to support more accountability and reflection within universities.... SEA Change departmental assessment for physics and astronomy. A pilot of the assessment tools and SEA Change Bronze Department Award process is currently underway. Perhaps this new improvement infrastructure is an opportunity beyond "acknowledging the problem."