

Resources for Planning your Broader Impacts Activities and Writing your Broader Impacts Statement

Office of Research Development Broader Impacts website <https://www.umass.edu/research/proposals/develop-proposal/broader-impacts>

NSF guidance, tools, examples, on- and off-campus resources

Resources for BI Planning and Evaluation – NSF funded (*Note: It is good to cite NSF products and research*)

Broader Impacts Guiding Principles and Questions for National Science Foundation Proposals

https://broaderimpacts.net/wp-content/uploads/2016/05/nabi_guiding_principles.pdf from National Alliance for Broader Impacts (NABI)

<https://broaderimpacts.net/> A network of individuals and organizations working together to build institutional capacity, advance BI, and demonstrate the societal benefits of research. Membership is free.

COSEE NOW Broader Impact Wizard <http://www.coseenow.net/wizard/>

The Broader Impact Wizard to help you develop a broader impact statement that will satisfy NSF Criterion II and fulfill your interest in communicating your science. The five-step process will produce an outline of important points to include in your BI statement, will help frame discussions with your BI partners, and suggest literature related to dealing with specific audiences and activities.

(OERL) Online Evaluation Resource Library <https://oerl.sri.com/home.html> resources include instruments, plans, and reports from evaluations for NSF projects that have proven to be sound and representative of current evaluation practices.

National Academies Press <https://www.nap.edu/>, which publishes free downloadable reports on many science and educational topics useful for literature reviews for broader impacts statements. Has good browsing tools for finding what you need. E.g.:

[Undergraduate Research Experiences for STEM Students Successes, Challenges, and Opportunities \(2017\)](#)

[Integrating Research and Education: Biocomplexity Investigators Explore the Possibilities: Summary of a Workshop \(2003\)](#)

[Effective Chemistry Communication in Informal Environments \(2016\)](#)

NOAA, A Scientist's Guide to Achieving Broader Impacts through K–12 STEM Collaboration <https://swfsc.noaa.gov/publications/CR/2015/2015Komoroske.pdf>

Other Resources for BI Planning and Evaluation

The Connector, University of Missouri <http://theconnector.missouri.edu/> provides resources for broader impacts, evaluation, NSF Early CAREER awards, and engaged scholarship. Some are specific to University of Missouri, but most are useful to all.

Penn State Eberly College of Science, Broader Impacts Resource Center <https://broaderimpacts.psu.edu/>

Clear and up-to-date guidance on how to plan, write, execute, and evaluate Broader Impacts Activities.

Includes a section on “Broader Impacts in NSF Graduate Research Fellowship Program (GRFP) Applications”

Iowa State University, Broader Impacts Text Analysis presentation – for help with writing an BI statement for your proposal
https://www.spisu.iastate.edu/sites/default/files/events/485/BIT_Analysis_presentation.pdf

Assessment of Informal and Afterschool Science Learning, National Academies of Science, Engineering, and Medicine, Commissioned Papers
https://sites.nationalacademies.org/DBASSE/BOSE/DBASSE_080110 A good source of citations for assessment.

Program Development and Evaluation, University of Wisconsin-Extension <https://fyi.uwex.edu/programdevelopment/evaluating-programs/>
Evaluating Programs: Provides brief “Quick Tips” guides on Evaluation Planning, Methods, and Analysis and Use. Each guide includes citations.

Connected Science Learning: Linking in-school and out-of-school STEM learning. A new journal published by National Science Teachers Association and Association of Science-Technology Centers
http://csl.nsta.org/?utm_source=realmagnet&utm_medium=email&utm_term=CSL%20Issue%205%2C%20Part%203%3A%20STEM%20Learning%20in%20Environmental%20Settings&utm_campaign=CSL2018%5F03%2D14%20Issue%205%2C%20Part%203

Assessment Tools

Altmetrics – For gathering data on interactions with your social media projects. <https://www.altmetric.com/audience/researchers/>

Google Analytics – For gathering data on visits to your website, basic version is free.
<https://analytics.google.com/analytics/web/provision/?authuser=0#provision/SignUp/>

A collection of assessments for NSF Research Experience for Undergraduates (REU):
https://serc.carleton.edu/NAGTWorkshops/undergraduate_research/reu_assessments.html

The CURE assessment tool may be used as a pretest-posttest or posttest-only survey to measure student experiences in "research-like" or other science courses: <https://www.grinnell.edu/academics/areas/psychology/assessments/cure-survey>).

UMass Amherst Campus Resources for Evaluation

Office of Academic Planning & Assessment (OAPA)

The OAPA offers help with assessing student experiences, and can help faculty craft, articulate and measure learning outcomes. They work with educational programs that vary in scale from small courses to university-wide efforts.

Contact Martha Stassen (mstassen@acad.umass.edu), Associate Provost, Assessment and Educational Effectiveness.

Website: <https://www.umass.edu/oapa/tools-services-and-support>

Teaching Excellence & Faculty Development (TEFD)

TEFD supports faculty in developing as teachers, especially with student-centered pedagogy. Services include course planning consultations and the Midterm Assessment Process.

Contact the TEFD office at tefd@umass.edu or 413-545-1225.

Website: <https://www.umass.edu/tefd>

Institute of Diversity Sciences (IDS)

The IDS is a new institute that helps faculty assess broader impact projects related to diversity and inclusion, by designing and/or conducting evaluations that measure appropriate indicators. The IDS can also identify and connect faculty with resources and local organizations, on and off campus, as well as disseminate scientific deliverables to communities of interest.

Contact Buju Dasgupta (dasgupta@psych.umass.edu), Director, or Leyla Keough (ljkeough@umass.edu), Program Coordinator.