BITSS Catalyst Program Pilot 2015–2018

Background

The Berkeley Initiative for Transparency in the Social Sciences (BITSS) was established in 2012 to strengthen the quality of social science research and evidence used for policy-making. The initiative aims to enhance the practices of economists, psychologists, political scientists, and other social scientists by promoting research transparency, reproducibility, and openness.

This concept note lays out the pilot for the BITSS Catalyst Program, which will formalize a network of professionals to advance the teaching, practice, funding, and publishing of transparent social science research. Currently, most people promoting transparency in research practices are acting in relative isolation and with few resources. The overarching goal of this program is to connect and empower individuals to make changes in their own classrooms, in their universities, and across their network, thereby achieving far-reaching change.

Who are BITSS Catalysts?

BITSS Catalysts are current graduate students, academic faculty, and other researchers in the social sciences who are committed to changing norms by educating the current and next generation of social science researchers on transparency tools and practices.

Several of BITSS' partners have already established networks in the research transparency ecosystem, such as the <u>Center for Open Science</u> Ambassador Program and Stanford's <u>METRICS</u> Affiliate Program. While these programs facilitate identification and dialogue across individuals who are already committed to research transparency, neither of these programs requires action by affiliates or ambassadors to change behavior of peers, students, or other colleagues. The BITSS Catalyst Program requires active engagement by Catalysts to deliver education on research transparency on their campuses. Involvement with COS or METRICS does not preclude involvement as a BITSS Catalyst. We expect that some BITSS Catalysts will also be connected to COS, METRICS, and other programs given their strengths, networks, and comparative advantages.

Why become a BITSS Catalyst?

There are several benefits to joining the BITSS Catalyst program:

Access to financial resources. Catalysts will be eligible to apply for catalytic grants of \$1,000-\$5,000 (expected average of \$2,500) to cover the financial costs of developing new course materials or carrying/attending events that advance the organization's mission. BITSS expects the pilot period to provide learning opportunities for how best to manage and execute these financial resources (through sub-awards, managing travel requests, or other). In addition, a formal affiliation with BITSS may help catalysts secure additional funding opportunities, as it indicates their strong commitment to research transparency.

Access to educational materials and staff. BITSS will provide Catalysts with staff support to customize training materials that are already developed (such as our workshop training materials and semester-long UC Berkeley course developed by Ted Miguel). They will be eligible to receive specific guidance on how to integrate new content into existing social science education, either through participation in BITSS institutes, or by campus visits from BITSS leadership and/or partners. BITSS staff will also be able to identify natural partners for Catalysts looking to collaborate on new projects and provide learning and networking opportunities by exposing Catalysts to an active community of likeminded individuals. In particular, BITSS will actively engage with Project TIER on

further refinement of their protocol for 'research hygiene' that provides instructions for assembling a set of electronic files that document all the steps of data management and analysis you conduct for an empirical research project.

High profile mechanism to highlight Catalysts' work. BITSS, already recognized as a key player within the research transparency movement, will establish a monthly "Catalyst Spotlight" on our blog. With close to 400 subscribers and counting, this will highlight not only the Catalyst's work on transparency, but also other relevant research topics and interests.

Formalize commitment to scientific values of openness, integrity, and transparency. There is growing recognition within the social sciences that we must change our practices to align better with the scientific values of openness, integrity, and transparency. BITSS Catalysts will be able to demonstrate their commitment to these values through this formal commitment and engagement in the network.

What will Catalysts do?

Catalysts will be asked to complete a form for their online profile. BITSS Catalysts' profiles, along with their stated goals, will be posted on the BITSS website and linked to complementary programs (such as COS, METRICS, Project TIER). Catalysts will meet with BITSS staff either in person or by conference call to identify how BITSS can best support their efforts and brainstorm possibilities for collaboration.

Educate. BITSS Catalysts will be required to deliver at least one training per academic year (undergraduate and/or graduate) on research transparency. The Catalysts can identify the appropriate delivery mechanisms for integrating training on research transparency tools and practices (e.g. seminars, workshops, boot-camps, existing courses, panel sessions on transparency at professional convening, Summer Institutes on methodology and empirical research, and related festivals such as the Mozilla or Open Knowledge Festivals). Once a Catalyst identifies such an event, Catalysts will be able to apply for funding to cover event or travel costs as needed.

Advocate. Catalysts will also be encouraged to lead advocacy efforts that will affect policy change at the department or academic senate levels (e.g. among university governing bodies). This may include writing blogs, OpEd pieces, meeting with administrators and other decision makers to discuss and develop additions and or revisions to curriculum. Catalysts will be asked to advocate for BITSS' specific activities as well, such as promoting the Social Science Meta-Analysis and Research Transparency (SSMART) Call for Papers, nominations for Leamer-Rosenthal Prizes, and registration at key BITSS events.

In addition to core activities above, BITSS Catalysts may also:

Review and provide input on existing BITSS Resources. BITSS has developed a foundation of coursework materials for Catalysts to draw from. Feedback will be sought from Catalysts, either informally or through direct asks. The materials include:

- Manual of Best Practices in Transparent Social Science Research, freely available online through Github.
- Library of powerpoint presentations on key topics in research transparency, currently available on the <u>Open Science Framework</u> (OSF). These slide decks were culled from BITSS annual summer institutes. They are available for use by others in workshops and seminars. Feedback is sought on the quality of existing materials, as well as gaps in the library.
- Syllabus and recorded lectures from a semester-long course offered at UC Berkeley, available on <u>YouTube</u>. Additional course materials include a complete set of slide decks and assignments.
- Research transparency MOOC, currently in development and to be offered on the EdX platform in 2016. This course will source slide decks, videos, and assignments from a range of faculty members across the U.S. and Europe.

Develop and share new coursework materials. The BITSS resources described above are intended to support BITSS Catalysts as they develop and deliver their own courses. However, Catalysts will be encouraged to share existing resources, or new materials, that complement and extend the BITSS library. These materials will be shared through OSF, GitHub, or other sharing mechanisms for the benefit of other Catalysts and the broader research community.

Provide expertise on grant and incentive initiatives. BITSS has several grant and incentive initiatives, such as the Social Science Meta-Analysis and Research Transparency (SSMART) grants and Leamer-Rosenthal Prizes for Open Social Science. Catalysts will be invited to participate on review panels for these initiatives, providing an opportunity to lend their expertise to funding new research in transparency and meta-analysis, as well as recognizing the next generation of social science researchers.

Provide feedback. As BITSS pilots new efforts to scale its impact, Catalysts will play the crucial role of identifying opportunities for BITSS to better serve its missions, and target and tailor its services to deliver maximized impact. Catalysts will be asked to provide feedback to BITSS staff when applying to the program, whenever they carry out a BITSS supported activity and in bi-annual surveys. Catalysts who execute BITSS supported activities may also be expected to request participants of their courses or events to fill out online surveys. Finally, BITSS will encourage Catalysts to consider how BITSS may integrate follow-up with students (1 year, post graduation, etc) into the curriculum given BITSS'

commitment to study and understand the extent to which transparency practices are being implemented as a result of this training and education.

Recognizing the diverse and innovative strategies the BITSS community has used to advance transparent research principles, BITSS is willing to support activities beyond the scope of those listed above as long as such efforts are in line with BITSS' objectives.

How are Catalysts identified?

Identifying and formalizing the BITSS Catalysts network will take place over two phases:

Phase I: October 2015-June 2016. During Phase I, BITSS will target graduate students and academic faculty who have already expressed interest in furthering the BITSS mission and confirm their commitment to introduce research transparency training onto their campuses. The goal is to formalize Catalysts from 20-25 institutions during this time, drawing from the BITSS Executive Committee, Advisory Board, Institute participants, Social Science Meta-Analysis and Research Transparency (SSMART) grant applicants, and Leamer-Rosenthal Prizes for Open Social Science nominees. Criteria will include:

- Institutions where BITSS senior leadership are based;
- Institutions where past Institute and Annual Meeting participants who have expressed interest in furthering the BITSS mission/participating in this pilot are based;
- Institutions where faculty who have proposed new Institutes or Workshops in collaboration with BITSS are based; and
- Institutions where Leamer-Rosenthal Prize recipients are based.

We have \$50,000 available for this pilot period.

Phase II: June 2016-January 2018. During Phase II, BITSS will use feedback collected to further hone the details of the program and continue reaching out to a core pool of graduate students and academic faculty as detailed above. At this point, BITSS will also accept referrals from existing BITSS Catalysts for new Catalysts to add to the pilot.

What's the goal?

BITSS aims to have at least one Catalyst based in a total of 100 institutions in the network by January 2018: 30 in 2016, 60 in 2017, and 100 in 2018. Assuming each Catalyst can reach 50 undergraduates and 20 graduates per year, the program aims to reach a total of 9500 undergraduate and 3800 graduate students by June 2018.

How do we measure success?

BITSS will establish a bi-annual reporting system for Catalysts to report on the number of courses and students reached. In addition, BITSS is exploring how we may best measure success of the Catalyst Program. This requires brainstorming and discussion with the Catalysts – how can we best measure whether or not the strengthened curriculum is changing norms and practices of the next generation of researchers? How can we incorporate data collection on students into the program? These are issues we look forward to discussing during Phase I.

Summary of Phase I Institutions

Institution	Criteria
Columbia University	BITSS Leadership
Harvard University	BITSS Leadership
MIT	BITSS Leadership
New York University	BITSS Leadership
Stanford University	BITSS Leadership
UC Berkeley	BITSS Leadership
UC Los Angeles	BITSS Leadership
UC Riverside	BITSS Leadership
University of Michigan Ann Harbor	BITSS Leadership
University of Virginia	BITSS Leadership
APHRC	Institute/Workshop
Cambridge University	Institute/Workshop
Georgetown University	Institute/Workshop
London School of Economics	Institute/Workshop
Norwegian School of Economics	Institute/Workshop
UC San Diego	Institute/Workshop
United Nations University	Institute/Workshop
Universidade Federal de Pernambuco	Institute/Workshop
University of Alabama Birmingham	Institute/Workshop
University of Pennsylvania	Institute/Workshop
University of Rwanda	Institute/Workshop
Indiana University	Prize Recipient
University of Western Ontario	Prize Recipient
Yale University	Prize Recipient