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# STATE OF THE LAB

Stories and Updates from the DIL Network

## Failure: Inspiring Innovation



**BLUMCENTER**  
FOR DEVELOPING ECONOMIES



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By CARSON CHRISTIANO (CEGA)  
DIL ENRICHMENT COORDINATOR

failure

The Development Impact Lab (DIL) is prepared for failure.

Most would agree that risk-taking is essential to innovation, whether we're talking about creating a simple hand-washing station or a state-of-the-art suspension bridge. At the same time, researchers from all disciplines – engineering and economics among them – are prone to highlighting successes while downplaying ambiguous research results, misguided technologies, and projects that fail to achieve their desired impact. We fear humiliation and the curtailment of donor interest. Yet open discussion about what doesn't work, in addition to what works, is critical to our eventual success as innovators. We at DIL, like so many others working towards social change, believe strongly that there should be “no silent failures” in development.

In Silicon Valley, failure is regulated by the market. Venture capitalists don't invest in technologies that consumers won't buy. In the social impact space, particularly in developing countries where consumer demand is difficult to quantify, donors and governments rely on loose, assumption-laden predictions of return on investment. As millions of people in poor countries around the world stand to benefit (and potentially lose) from large-scale social and economic development programs, it follows that DIL and our partners maintain a steadfast commitment to discussing failure – and to maintaining research transparency more broadly – as a moral imperative.

Of course, it is infinitely easier to commit to the concept of research transparency than to actually engage in it. Making a new technology or a program open source requires extra complexity and bandwidth; writing a pre-analysis plan takes precious time and resources; study registration holds us accountable for the results of our research, which may not turn out as we expect. How, then, can we change behavior around research transparency, and encourage researchers to accept (and openly admit) failure as a necessary part of the innovation process?

Perhaps it's not failure itself, but public failure, that we fear. We weren't pre-conditioned to be this way. In a 2010 TED Talk, Tom Wujec revealed the results of a "Marshmallow Challenge" which he ran over 70 times with individuals of varying age and occupation. In the challenge, teams of four were given 18 minutes to build the tallest freestanding structure they could out of 20 sticks of spaghetti, one yard of tape, and one marshmallow. Lo and behold, kindergartners built structures over twice as tall as recent business school graduates. The little kids, with their lack of self-consciousness, engaged in a highly productive process of trying, failing, and trying again, while the business school graduates spent most of their 18 minutes coming up with a "perfect plan," with no time to adjust when their plan fell short of its mark (which it often did).

Nevertheless, failure and research transparency are increasingly becoming part of the public dialogue. "FAILfares" create a safe space for technologists and entrepreneurs to showcase widgets and programs that have failed to meet their targets (with the hopes that they avert future failure). The NGO FailForward helps organizations learn from their mistakes by publishing "failure reports" and developing metrics and evaluation criteria for failure. IDEO.org's HCD Connect platform allows human-centered designers around the world to share their stories through the web, and learn from one another's mistakes. The Global Partnership on Output-based Aid (GPOBA) challenges the way donors and international organizations approach grant-making, by making support contingent on documentation of successful service and infrastructure delivery.

Failure is slowly but surely making its way into the academic world as well. Ashok Gadgil's analysis of a failed lighting efficiency program in India, "Stalled on the Road to Market," is an early example of a project failure that was published in a top journal, Energy Policy. By the end of 2011, the results of Gadgil's analysis were saving 100 million poor customers in 42 developing countries over \$5 billion per year in lighting costs. A recent study on the efficacy of micro-nutrient powders (MNP) in reducing anemia in Bangladesh, Nepal, and Kenya documents evidence of partial effectiveness while highlighting low adoption rates among target populations, and offering some possible explanations for this failure. The Berkeley Initiative for Transparency in the Social Sciences (BITSS) makes tools and resources for promoting research transparency accessible to faculty and students in a range of disciplines.

DIL puts failure and transparency at the forefront of its iterative design approach. The DIL which generates quick, crowd-sourced ideas to help institutions and organizations make informed decisions about technologies and programs, is a great example of this. By fostering close inter-disciplinary collaboration and promoting data-sharing and research transparency at all stages of the innovation pipeline, DIL aims to shorten feedback loops and help normalize open discussion about failure.

This post was originally published on the CEGA Blog as "The Role of Failure in Promoting Transparency," the last in a ten-part series on research transparency organized by the Berkeley Initiative for Transparency in the Social Sciences (BITSS).