



Gendered Design in STEAM

Team

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Technology University, Australia

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Associate Professor, Sociology, Undergraduate
Program Coordinator, Carleton University

From April 2019 to October 2022, the GDS Program has been investigating and advancing gendered design through 20 grant-awarded projects with scholars at institutions across the global souths. The Program aimed to contribute to more inclusive technological designs in science, technology, engineering, the arts and math by building capacity in gendered design and innovations to address challenges and biased perceptions predominantly faced by women in low- and middle-income countries (LMICs). The gendered design approach brings diverse and critical perspectives to the design process to reshape how we identify design challenges, the process to address them, the solutions to these challenges, as well as the reach of their benefits.

What is STEAM?

To support STEM researchers to be more socially focused, we adjusted our terminology from STEM to STEAM. To fully affirm the relevance of this approach for the desired socio-technical transformation, we included the arts and social sciences as full partners in the program.



\$1.6 Million Grants

13 Countries

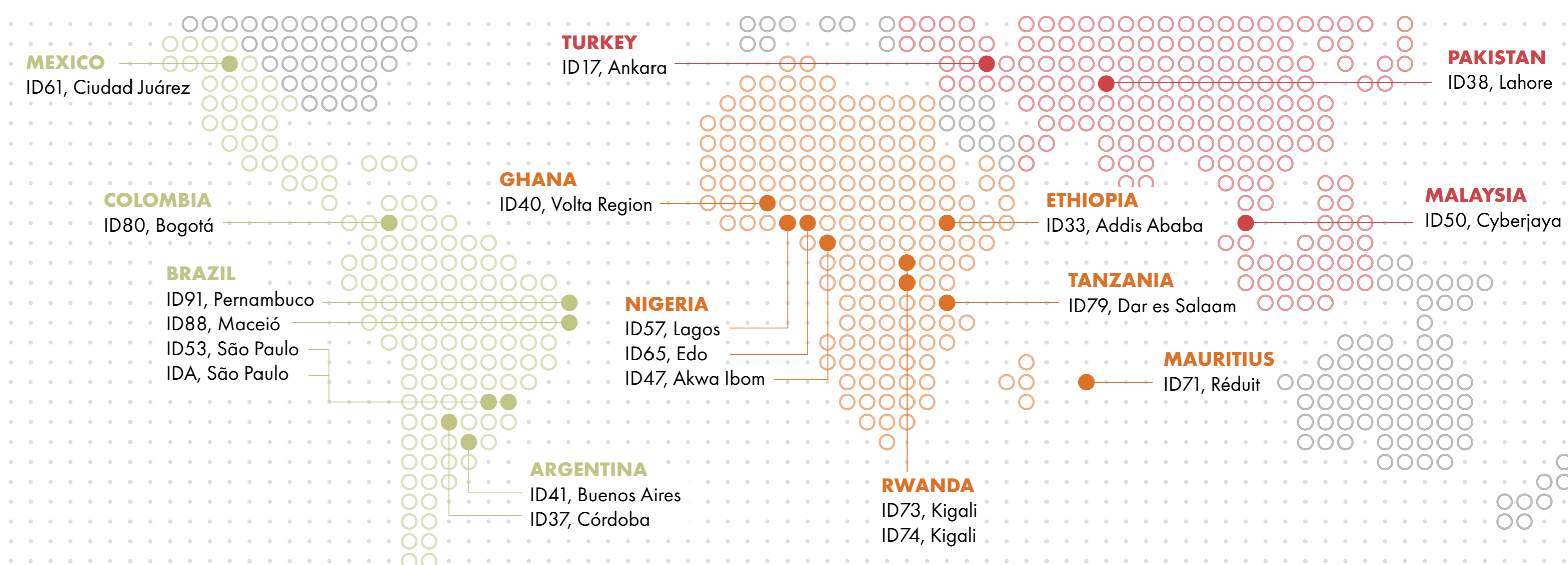
20 Academic Research Teams

11 Prototype Intensive Research Projects

9 Research Case Studies

16 Carleton Research Assistants

Projects



Sector Experts



Adam Weiss
Transportation Engineering

Adrian Chan
Systems & Computer Engineering, READi

Burak Gunay
Civil & Environmental Engineering

Chiara Del Gaudio
Industrial Design

Fred Afagh
Mechanical & Aerospace Engineering

Jill Wigle
Geography & Environmental Studies

Katie Bonier
Architecture & Urbanism

Mika Westerlund
SPROTT School of Business

Tracey Laurialt
Journalism & Communication

Vivian Nguyen
Environmental &
Interdisciplinary Science

"The enthusiasm shown by our colleagues in Africa, Latin America and Asia is clearly indicative of how important community-oriented STEAM work with a focus on Gender is."

— Bjarki and Dominique

Methods and Tools

- Transdisciplinary designed-based approach to the research: – iterative, abductive, strategic, and open processes
- 'Research-through-design' approach from a Participatory Design perspective: where knowledge is built from practical experimentation with design processes
- Activities and workshops that encouraged networking and collaborative knowledge building on gendered design
- Ad-hoc designed knowledge mobilization tools e.g., GDS Bulletin publication

Outcomes

- Developed definitions of gendered design built upon local context and knowledge
- Mobilized a strong collaboration between academics and communities in the Northern and Southern hemispheres
- Supported and enhanced Southern and Indigenous academic voices, approaches, and cultures
- Increased the visibility of local communities studied by these scholars
- Promoted the dissemination of Southern research results
- Created opportunities for researchers across the Carleton campus to work together with a common goal and do interdisciplinary work
- Design Research Society paper acceptance and presentation

Timeline



Learn more



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A partnership between

