

CR&DALL Seminar Series 2020-21 Project Launch



Gendered Journeys: The trajectories of STEM students and graduates through higher education and into employment in India and Rwanda

A UKRI-funded project running for 3 years from February 2020

Friday 27th November 2020, 10:00 – 11:30 GMT

Online via Zoom

Abstract

This project will investigate how far, and in what ways, gender may have an influence in the progress of students through higher education, graduation and progression into skilled employment in the STEM sector in India and Rwanda. This is important because science has a critical role in supporting global sustainable development that will not be realised unless it makes better use of the potential skills of women and girls.

At present, girls and women are markedly under-represented in STEM areas both as students and in the workforce in most countries across the globe. At Higher Education level, only 35% of students enrolled in STEM studies internationally are women (UNESCO, 2017).



Addressing this problem is vital in ensuring equitable access to quality education and meaningful work, and is crucial for countries seeking to prioritise equitable economic development, speaking directly to UN SDGs 4, 5, and 6.

Both our countries of focus, India and Rwanda, currently have a severe under-representation of women STEM students in HE, and in relation to the skilled workforce (WEF, 2018), and there is a limited amount of research in these countries, as in many global south contexts, on gender and STEM issues post-secondary school (for an overview see e.g. UNESCO, 2017). What is particularly under-researched is the gendered journeys of students once they have accessed university, and beyond into skilled employment (UNESCO, 2017, EGHE, 2018). Moreover, most lower and middle-income countries do not collect detailed disaggregated data to document access, retention, transfer/dropout, and successful graduation at HE level, especially by institution and discipline (see Chanana, 2007). Neither is there information on the onward journeys of students after they leave education Our research thus seeks to address these gaps.

The project has been organised into 5 distinct work packages (WPs). WP1 involves secondary statistical data analysis of gendered patterns of HE participation and achievement, utilising available data in India and Rwanda, with UK data utilised for comparative purposes. WP2 involves largescale primary survey data with STEM students in both countries. WP3 comprises a range of in-depth qualitative methods, including in-depth interviews with three sets of participants in India and Rwanda: first-year STEM students and final year STEM students at a university in each country and employees in a key STEM employer in each country. All participants will be interviewed again a year later, to explore their experience over time, and for the second group, potential experiences of transition into employment. The team wished to acknowledge similar issues of under-representation according to gender in STEM in the UK, and also to contribute more equitably to the knowledge exchange between countries, hence WP4 involves secondary data analysis of a number of different, relevant qualitative/mixed method datasets in UK Data Service archives.

Responsibility for impact activities will be shared equally between partner HEIs. Academic outputs will include at least 10 journal articles to be submitted to high impact journals in appropriate fields. Non-academic outputs will include the development of gender-sensitive virtual support 'toolkits', developed in conjunction with student participants; and gender-sensitive CPD materials developed in conjunction with STEM academic and industry staff, tailored to appropriate national/regional contexts.



Project Team

Principal Investigator	Dr Barbara Read	University of Glasgow
Co-Investigator	Prof Bonnie Slade	University of Glasgow
Co-Investigator	Dr Srabani Maitra	University of Glasgow
Co-Investigator	Prof Catherine Lido	University of Glasgow
Co-Investigator	Dr Saikat Maitra	IIM*, Calcutta
Co-Investigator	Ms Jane Umutoni	University of Rwanda
Co-Investigator	Prof Manish Kumar Thakur	IIM*, Calcutta
Co-Investigator	Dr Marie Cyulinyana	University of Rwanda
Research Associate	Dr Emma Seddon	University of Glasgow
Research Associate	Ms Sumita Chatterjee	University of Glasgow

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References

Chanuna, Karuna (2007) Globalization, Higher Education and Gender: Changing Subject Choices of Women Students, *Economic & Political Weekly*, February 17, 2007.

EGHE (Examining Gender in Higher Education) (2018) *Policy Briefing 2: Participating and Succeeding in STEM subjects: a focus on gender dynamics. Initial findings of the EGHE Network for Uganda, Kenya, Rwanda, The Gambia and the UK.* Project Report, EGHE Network. Accessible: http://www.eghe.org/resources/

UNESCO (2017). Cracking the code: Girls' and women's education in science, technology, engineering and mathematics (STEM). United Nations Educational, Scientific and Cultural Organization. France. Accessible:

http://unesdoc.unesco.org/images/0025/002534/253479e.pdf

World Economic Forum [WEF] (2018) *The Global Gender Gap Report 2018*. (Cologny/Geneva, Switzerland: World Economic Forum). Accessible: <u>https://www.weforum.org/reports/the-global-gender-gap-report-2018</u>

All are welcome – Register HERE



Gendered Journeys Project Launch Agenda

Item	Time
	10:00 – 10:05 UK
1. Launch Introduction	12:00 – 11:05 RW
	15:30 – 15:35 IN
	10:05 – 10:15 UK
2. Team Member Introduction	12:05 – 12:15 RW
	15:35 – 15:45 IN
	10:15 – 10:20 UK
3. Rwanda Team Presentation	12:15 – 12:20 RW
	15:45 – 15:50 IN
4. India Team Presentation	10:20 – 10:25 UK
	12:20 – 12:25 RW
	15:50 – 15:55 IN
	10:25 – 10:30 UK
5. Michele Schweisfurth	12:25 – 12:30 RW
	15:55 – 16:00 IN
	10:30 – 10:35 UK
6. Michael Osborne	12:30 – 12:35 RW
	16:00 – 16:05 IN
	10:35 - 10:40 UK
7. Gregory Meredith	12:35 – 12:40 RW
	16:05 – 16:10 IN
	10:40 - 10:45 UK
8. UNESCO Presentation 1	12:40 – 12:45 RW
	16:10 – 16:15 IN
	10:45 - 10:50 UK
9. UNESCO Presentation 2	12:45 – 12:50 RW
	16:15 – 16:20 IN
	10:50 - 11:00 UK
10. UNESCO Presentation 3	12:50 – 13:00 RW
	16:20 – 16:30 IN
	11:00 - 11:30 UK
11. Concluding Remarks / Open Discussion	13:00 – 13:30 RW
	16:30 – 17:00 IN