

Engineering and Innovation Research Studentship

2022/2023

Project title:	Governing in the Anthropocene: Co-designing learning systems for managing water catchments
Discipline:	Systems Thinking; Environmental Management
Key words:	Water governance; catchment managing; communities; systems thinking; social learning; collaborative actions; sustainability
Supervisory team:	Kevin Collins; Natalie Foster
URL for lead supervisor's OU profile:	https://www.open.ac.uk/people/kbc36

Project Highlights:

- Rethinking framings of water governance
- Enabling collaborative inquiries
- Engaging with multiple perspectives
- Co-designing learning systems for sustainability

Overview:

In a climate changing world, effective water governance is vital for integrating and delivering economic development, social equity and environmental sustainability. But water governance is beset with competing claims as a concept and as a practice. Lack of coordination and integration within and between policies, actors, agencies and communities responsible for managing water-related sectors has led to systemic governance failures in many countries and contexts, with significant impacts on communities and their environments. The studentship will focus on a critical review of how water governance is conceptualised, framed and enacted in context, as well as how it can be improved through co-design of learning systems for more sustainable water governance.



Okavango Delta, Botswana

Methodology:

The frameworks and methodologies relevant to this research will depend on context and researcher's own interests and capabilities. Applicants are encouraged to propose their own ideas. In all cases, the research design must go beyond consultative processes. The focus should enable and facilitate engaging with multiple perspectives and interdependencies in context in order to co-design learning systems.

The research frameworks could include (but not be limited to): systemic co-inquiry and participatory action research.

The methodologies could include (but not be limited to): literature review, semi-structured interviews, workshops and other participatory approaches. Applicants are encouraged to consider how systems diagramming and similar techniques could enhance methodological approaches and lead to new insights about developing systemic water governance concepts and practices.

The scope and location of any fieldwork is partly dependent on the interests of the researcher and should be specified in the application. Subject to resourcing, the fieldwork can be either within a single country context, or a multi-national study, or a trans-boundary basin.

References & further reading:

1. Borowski-Maaser, I.; Graversgaard, M.; Foster, N.; Prutzer, M.; Roest, A.H.; Boogaard, F. WaterCoG: Evidence on How the Use of Tools, Knowledge, and Process Design Can Improve Water Co-Governance. *Water* 2021, 13, 1206. <https://doi.org/10.3390/w13091206>

2. Foster, N. Water Co-Governance for Sustainable Ecosystems: Reflections and Recommendations from Pilot Processes in the UK. *Water* 2021, 13, 1737. <https://doi.org/10.3390/w13131737>
3. Ison, R. L.; Collins, K. B. and Iaquineto, B. L. (2021). Designing an inquiry-based learning system: innovating in research praxis to transform science-policy-practice relations for sustainable development. *Systems Research and Behavioral Science*, 38(5) pp. 610–624. <https://doi.org/10.1002/sres.2811>

- IELTS test scores where English is an additional language

Applications should be sent to STEM-EI-PhD@open.ac.uk by 04.03.22

Further details:

Essential:

- You should hold a UK Bachelor's degree, or equivalent qualification and/or relevant work experience.
- Understanding of environmental governance issues and sustainability
- Excellent organisational skills
- Excellent communication skills
- Evidence of leadership and teamwork
- Ability to work on own initiative and adapt to changing situations

Desirable:

- Previous experience of research in a related field or discipline
- Previous experience of qualitative and quantitative data collection and analysis
- Use of systems concepts and approaches
- Previous practical experience of complex water governance situations.
- Designing and facilitating collaborative processes with stakeholders

You will join academics working in [Sustainability](#), and Applied Systems Thinking in Practice ([ASTiP](#)) research groups in the School of Engineering and Innovation, STEM Faculty.

Further information can be obtained from:

kevin.collins@open.ac.uk

Applications should include:

- A 1000 word cover letter outlining why the project is of interest to you and how your skills match those required
- an academic CV containing contact details of three academic references
- an Open University application form, downloadable from: <http://www.open.ac.uk/postgraduate/research-degrees/how-to-apply/mphil-and-phd-application-process>