



مرفق ٢:

Interdisciplinary Research Excellence: 21st Century Competencies for Achieving Complex Sustainable Development Goals 2020 Pilot Programme Overview

Introduction

The future of academic scholarship is interdisciplinary. In 2015, Nature’s special issue on interdisciplinary research began with an editorial saying, “The best interdisciplinary science comes from the realization that there are pressing questions or problems that cannot be adequately addressed by people from just one discipline.” Knowledge E and the Egyptian Knowledge Bank (EKB) are pleased to offer a comprehensive capacity-building training programme to strengthen **interdisciplinary research** in Egyptian universities and to advance research **integration and implementation** in society to address complex real-world problems in Egypt, including achievement of Sustainable Development Goals.



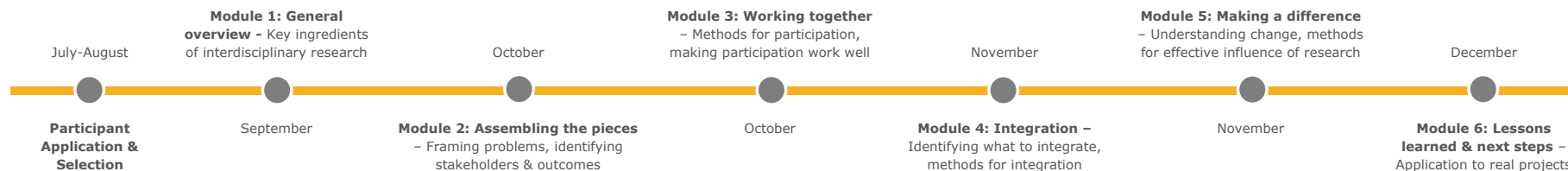
Pedagogical Overview

Teaching and learning methods are competency-based and driven by principles of adult learning: leveraging participant experience and current projects to build new competencies, co-create knowledge, and produce tangible, collaborative work products that will offer immediate practical impact on sustainable development goals in the Egyptian context.

Interactive live sessions online will combine expert content delivery with hands-on practical exercises and discussion. Individual and group work between live sessions will use written assignments and peer review to build towards individual presentations demonstrating application of a selected concept or method to advancing the practical work and priorities of participants. Assessment will include measures of cognitive and practical competency outcomes in assignments and participation requirement.

Programme Timeline

This pilot programme will deliver a series of online learning modules, with individual and group activities, focused on developing core competencies for interdisciplinary research (as outlined below) based on economic growth goals, governmental mandates, key Egyptian stakeholder feedback, and international expert consultation. The programme will conclude with individual presentations highlighting practical application of a concept or method to real-world projects.





Course Leaders & Expert Programme Supervision

To ensure the best possible content and session delivery, Knowledge E will engage top experts from around the world to deliver the outlined workshops. We have engaged a top international professional, Professor Gabriele Bammer, to provide comprehensive strategic input for the successful execution of the programme. The expert's key roles shall include review and recommendation of individual workshop leaders, review and recommendation of course content, and design of participant assessments. Caryn Anderson, Knowledge E's Training & Strategy Expert, has collaborated with Prof. Bammer since 2003 on a variety of projects related to interdisciplinary excellence. She will coordinate the programme and lead selected modules.



Gabriele Bammer, PhD

Professor, National Centre for Epidemiology and Population Health, Research School of Population Health, ANU College of Health and Medicine, Australian National University

Professor Gabriele Bammer is developing the new discipline of [Integration and Implementation Sciences \(i2S\)](#) to improve research strengths for tackling complex real-world problems through synthesis of disciplinary and stakeholder knowledge, understanding and managing diverse unknowns, and providing integrated research support for policy and practice change. Her work is described in [Disciplining Interdisciplinarity: Integration and Implementation Sciences for Researching Complex Real-World Problems](#) (ANU E Press, 2013). She runs the [Integration and Implementation Insights \(i2Insights\) blog](#) and convenes the [Global Network for Research Integration and Implementation](#). She is a Fellow at the Institute for Advanced Sustainability Studies in Potsdam, Germany (2019-20), an ANU Public Policy Fellow, an inaugural Fulbright New Century Scholar alumna. She's has held visiting appointments at Harvard University's John F. Kennedy School of Government (2001-14) and the National Socio-Environmental Synthesis Center at the University of Maryland (2015-18).



Caryn Anderson

Training & Strategy Expert, Knowledge E;
Associate Editor, *Library and Information Science Research*

Caryn Anderson has worked globally since 2009, especially in the Middle East & South Asia, to strengthen civil society capacity through improving research & education excellence. She has been engaged with the Integration & Implementation Sciences (i2S) team and the i2S global network since 2003, while completing her Master of library & information science at Simmons University, where she served as Doctoral Studies Programs Manager and teaching faculty. From 2008-2009 she was Integration Research Manager for the ARC Centre of Excellence in Policing and Security's Integration and Implementation research programme.

Participant Attributes & Commitment

Applicants will demonstrate:

1. Passionate display of growth mindset
2. Proof of capacity to spread knowledge gained
3. English fluency (spoken & academic writing)
4. Commitment to complete all requirements
5. Experience in team-based research, preferably of an interdisciplinary nature
6. A specific complex societal or environmental problem to work on through the programme

Certificate requirements:

1. Attendance of 85% or higher
2. Active participation in all exercises, engagement with course leaders, and interaction with peers
3. Satisfactory completion of all course reading, exercises, small group discussions and assignments

Technology & Schedule:

Due to COVID-19, the entire programme will be delivered virtually over 12 weeks. "Live sessions" will begin at 0930 on Wednesdays (3-hour sessions every other week, 1-hour small group discussions on alternate weeks). Additional activities will take place in an online learning management system (Moodle). Participants must confirm adequate internet capacity at the scheduled times.



Participant Application & Selection Process

Capacity and Composition

Egyptian researchers conducting and leading research on all kinds of complex societal and environmental problems are encouraged to apply to the Interdisciplinary Research Excellence programme to improve their skills and become role models and mentors for their institutions. **No more than 30 participants will be accepted for this pilot program.**

While there is no specific restriction on the career level of researcher, each applicant must demonstrate that they have previous experience with team-based research, preferably of an interdisciplinary nature, in order to ensure a common foundation of experience within the cohort of participants.

Individual participants will complete exercises to apply new concepts and methods to one of their own projects (focused on a complex societal or environmental problem). Participants must be clear in their application about what project they intend to use during the programme.

Programme participants will work closely together on all aspects of the programme through large group discussion, small group discussion, and peer review of individual work. Researchers will be expected to be engaged, collaborative, respectful, and supportive of their peers. Applicants must demonstrate their collaborative orientation and their ability to share the knowledge gained within their institution.

Application Process

1. Individuals submit an application via the [ONLINE FORM](#) that requires information including:
 - o Application Form
 - o Current CV
 - o Personal statement (500 words) explaining
 - why they want to participate in the program,
 - their team-based research experience,
 - the specific complex societal or environmental problem that they propose to work on,
 - how they anticipate applying and disseminating the knowledge gained,
 - skills, qualities or experience they can contribute to group learning during the programme, and
 - o their agreement to complete all activities
 - o **Deadline: Sunday, 23 August 2020, 1200 noon**
2. Applications reviewed by selection committee including representatives from the Ministry of Higher Education and Scientific Research, Egyptian Knowledge Bank, Knowledge E, and the Interdisciplinary Research Excellence course leaders.
3. 30 participants will be selected by Sunday, 6 September 2020 for a scheduled start date of Wednesday, 16 September 2020.