



i2S News

July - December 2024, #68

Welcome to the July - December 2024 i2S News with the latest developments in Integration and Implementation Sciences (i2S). Family care duties meant we missed publishing a newsletter for July-September, therefore this issue covers 6 months.

From the Integration and Implementation Insights (i2Insights) blog and repository, we highlight contributions from Asia. And from i2Insights statistics we review the five most viewed systems thinking contributions. We also present i2Insights contributions since the last i2S News.

From the i2S-Talks YouTube channel, we feature a new video playlist which we host for the Oceania Regional Network of the Global Alliance for Inter- and Transdisciplinarity (ITD Alliance) and the video of the inaugural seminar of that network by Michael O'Rourke on integration. We also present the full list of videos hosted in the last 6 months.

This i2S News also features The Australian National University's *Library Guide to Transdisciplinary Problem Solving*, which provides an introductory set of references, and News from the Global Alliance for Inter- and Transdisciplinarity (ITD Alliance).

Feedback and suggestions for i2S News are always welcome!

Gabriele Bammer and Peter Deane

CONTENTS

i2Insights blog and repository

- Highlighting contributions from Asia
- The five most viewed systems thinking contributions
- There have been 26 new contributions since the last i2S News

i2S-Talks YouTube channel

- Featuring Michael O'Rourke's inaugural seminar for the Oceania Regional Network of the ITD Alliance
- 7 additional videos have been added to this repository since the last i2S News

Other updates

- Key references for transdisciplinarity
- News from the Global Alliance for Inter- and Transdisciplinarity (ITD Alliance)

About i2S News

- Aims
- How to subscribe and unsubscribe

i2INSIGHTS BLOG AND REPOSITORY**Highlighting contributions from Asia**

For i2Insights blog and repository, we actively encourage contributions from all countries and have been pleased to receive a reasonably steady stream of posts where all or some of the authors reside in Asia. There were 4 such contributions in 2024, 3 in each of 2019 and 2020, 2 in 2022, and 1 in 2016, 2017, 2021 and 2023. The years 2015 and 2018 saw no contributions from authors in this region.

There have been ten lead authors from: India (3), Japan (3), China (2), Indonesia and Sri Lanka, along with eight co-authors from: China (4), India, Japan, Laos and Myanmar. An additional three co-authors had joint appointments in China (2), and India. These are all separate individuals. Only one person contributed as both an author and a co-author on separate posts, with only one of these being counted in the statistics above. We have also appreciated having Japanese and Chinese versions of two blog posts, along with the English versions.

Contributions have covered a range of topics, particularly:

Change

- [Adaptive skilling](#) by Seema Purushothaman

Decolonisation

- [Three spaces of change for reorienting North-South research partnerships](#) by Geetika Khanduja, Peter Taylor, Andrea Ordóñez, Erica Nelson and Tracy Mamoun

Research implementation

- [Challenges in knowledge translation: a Global South perspective](#) by Fajri Siregar
- [Knowledge translation and multilingualism](#) by Chalani Ranwala
- [Using a cartoon video to achieve research impact](#) by Darren Gray, Yuesheng Li and Don McManus

Stakeholder engagement

- [A pattern language for knowledge co-creation](#) by Yuko Onishi
- [Theoretical framework for open team science / オープンチームサイエンスという考え方](#) by Yasuhisa Kondo
- [Impacts of social learning in transformative research](#) by Flurina Schneider, Lara M. Lundsgaard-Hansen, Thoumthone Vongvisouk and Julie G. Zähringer
- [Serious gaming: helping stakeholders address community problems](#) by Nagesh Kolagani

Teamwork

- [Evolution of hot topics in team science / 团队科学中热点主题的演变](#) by Ying Huang, Ruinan Li, Yashan Li and Lin Zhang
- [Outbreaks, break-outs and break-times: Creating caring online workshops](#) by The Care Operative

Transdisciplinarity

- [Three lessons for mainstreaming transdisciplinarity](#) by Lisa Andrews, Bárbara Willaarts, Andreas Panagopoulos, Radhika Kanade, Nelson Odume, Bodil Ankjær Nielsen and Ingrida Brēmere
- [Insights into interdisciplinarity and transdisciplinarity in India and Brazil](#) by Marcel Bursztyn and Seema Purushothaman
- [Boosting the transformative power of transdisciplinarity with quantum theory](#) by Cyrille Rigolot

- [Effectively leading interdisciplinary and transdisciplinary research organisations](#) by Global Leaders of Interdisciplinary and Transdisciplinary Research Organisations

Unknowns

- [Yin-yang thinking – A solution to dealing with unknown unknowns?](#) by Christiane Prange and Alicia Hennig

The five most viewed systems thinking contributions

Systems thinking and systems approaches are a cornerstone of i2S and contributions to i2Insights are always welcome. The very nature of systems thinking makes it challenging to present a useful concept, method, process or other tool in 500-1000 words, but these 5 contributions show that it can be done. Worth revisiting are:

- [How systems thinking enhances systems leadership](#) by Catherine Hobbs and Gerald Midgley (11,861 views, published in 2021)
- [Seven methods for mapping systems](#) by Pete Barbrook-Johnson and Alexandra Penn (5,216 views, published in 2023)
- [Viable System Model: A theory for designing more responsive organisations](#) by Angela Espinosa (4,482 views, published in 2023)
- [Four building blocks of systems thinking](#) by Derek Cabrera and Laura Cabrera (4,156 views, published in 2022)
- [Pragmatism and critical systems thinking: Back to the future of systems thinking](#) by Michael Jackson (3,646 views, published in 2023)

Blog posts added since the last i2S News

Integration and Implementation Insights (i2Insights) has added the following blog posts to its repository since the last i2S News:

Evaluation criteria for transdisciplinary research

By Marvin Cheung

<https://i2insights.org/2024/11/19/evaluating-transdisciplinary-research/>

From networks to systems of influence: The role of emergence in change

By Margaret Wheatley and Deborah Frieze

<https://i2insights.org/2024/11/12/emergence-and-change/>

Transforming experts into team science leaders

By Gemma Jiang

<https://i2insights.org/2024/11/05/developing-team-leaders/>

Insights into the science of complexity

By Jean Boulton

<https://i2insights.org/2024/10/29/science-of-complexity/>

Setting up your team for knowledge integration

By Shalini Misra, Megan A. Rippy and Stanley B. Grant

<https://i2insights.org/2024/10/22/integration-by-teams/>

Breaking boundaries: Transforming research with co-production and bridging knowledge systems

By Truphena E. Mukuna and Alemu Tesfaye Shekunte

<https://i2insights.org/2024/10/15/co-production-and-bridging-knowledge-systems/>

Designing serious games to address transdisciplinary problems

By Katharina Gugerell

<https://i2insights.org/2024/10/08/serious-games-and-transdisciplinarity/>

The role of frames and framing in communication and change

Edited by Gabriele Bammer

<https://i2insights.org/2024/10/01/frames-and-framing/>

Establishing, discussing, and sustaining accountability in your team: Seven strategies

By L. Michelle Bennett, Michael O'Rourke, and Edgar Cardenas

<https://i2insights.org/2024/09/24/accountability-in-teamwork/>

A framework for transdisciplinary boundary work

By Lisa Andrews, Stefania Munaretto, Heleen Mees and Peter Driessen

<https://i2insights.org/2024/09/17/transdisciplinary-boundary-work/>

Team science is an integral competency for the U.S. National Science Foundation's Convergence Accelerator Program

By L. Michelle Bennett, Edgar Cardenas and Michael O'Rourke

<https://i2insights.org/2024/09/10/funders-building-team-science-competency/>

Considerations for creating and funding new toolkits for inter- and transdisciplinary research

By Bethany Laursen, Bianca Vienni-Baptista, Gabriele Bammer, Antonietta Di Giulio, Theres Paulsen, Melissa Robson-Williams and Sibylle Studer

<https://i2insights.org/2024/09/03/creating-and-funding-toolkits/>

Three spaces of change for reorienting North-South research partnerships

By Geetika Khanduja, Peter Taylor, Andrea Ordóñez, Erica Nelson and Tracy Mamoun

<https://i2insights.org/2024/08/27/reorienting-north-south-research-partnerships/>

Three lessons for mainstreaming transdisciplinarity

By Lisa Andrews, Bárbara Willaarts, Andreas Panagopoulos, Radhika Kanade, Nelson Odume, Bodil Ankjær Nielsen and Ingrida Brēmere

<https://i2insights.org/2024/08/20/mainstreaming-transdisciplinarity/>

Metalogues and their role in communities of practice

By Janet J. McIntyre-Mills

<https://i2insights.org/2024/08/13/metalogues-and-communities-of-practice/>

A process for applying intersectionality

By Zdena Middernacht and Laurène Bounaud

<https://i2insights.org/2024/08/06/intersectionality-process/>

Photovoice as a participatory research method

By Jule Marie Huber, Claudia Bieling, María García-Martín, Tobias Plieninger and Mario Torralba

<https://i2insights.org/2024/07/30/photovoice-research-method/>

Mindset matters for interdisciplinary teams: Choose a collaborative one

By L. Michelle Bennett

<https://i2insights.org/2024/07/23/collaborative-mindset-for-teamwork/>

Embracing Afro-centric philosophies to decolonize research

By Truphena Mukuna

<https://i2insights.org/2024/07/16/afro-centric-research-philosophies/>

Structured dialogical design

By Yiannis Laouris

<https://i2insights.org/2024/07/09/structured-dialogical-design/>

Why scientific knowledge needs to be decolonised

By Alemu Tesfaye

<https://i2insights.org/2024/07/02/decolonising-scientific-knowledge/>

Understanding exclusion, sharing benefits and building in reflection in transdisciplinary collaborations

By Annisa Triyanti, Corinne Lamain, Jessica Duncan and Jillian Student

<https://i2insights.org/2024/06/25/improving-transdisciplinary-collaborations/>

The collaboration planning framework

Edited by Gabriele Bammer

<https://i2insights.org/2024/06/18/collaboration-planning-framework/>

Why is it so hard to agree on definitions of interdisciplinarity and transdisciplinarity?

By Gabriele Bammer

<https://i2insights.org/2024/06/11/defining-inter-and-transdisciplinarity/>

Team development is an essential team science competency

By Gaetano R. Lotrecchiano, L. Michelle Bennett and Yianna Vovides

<https://i2insights.org/2024/06/04/team-development/>

Towards fair transdisciplinary collaborations that honour epistemic justice

By Annisa Triyanti, Barbara van Paassen, Corinne Lamain, Jessica Duncan, Jillian Student, Jonas Collen Ladeia Torrens and Nina de Roo

<https://i2insights.org/2024/05/28/fostering-epistemic-justice/>

Practising responsible research within an Indigenous paradigm

By Norma Romm

<https://i2insights.org/2024/05/21/indigenous-paradigm-and-responsible-research/>

i2S-TALKS**Featuring Michael O'Rourke's inaugural seminar for the Oceania Regional Network of the ITD Alliance**

i2S-Talks hosts playlists for sister organisations that do not have their own YouTube channels and this has recently expanded to hosting a playlist for the newly established Oceania Regional Network of the Global Alliance for Inter-and Transdisciplinarity (ITD Alliance). The playlist is available at: https://www.youtube.com/playlist?list=PLxRQR5u7p9sdN7C_oazKZ_cXT9GIUQvV6 and videos can also be reached through the Oceania Regional Network's webpage: <https://itd-alliance.org/oceania-regional-network/>.

The network's inaugural webinar by Professor Michael O'Rourke "On the Nature and Practice of Crossdisciplinary Integration" discussed the philosophical basis of an input-process-output (IPO) model of integration. This model has the potential to split the difference between abstract and specific discussions of integration. The value of thinking in terms of integrative pathways and integrative mechanisms was highlighted. How this way of thinking about integration can be operationalized to facilitate crossdisciplinary integration in research on complex problems was also discussed.

Videos added since the last i2S News

The following videos have been added to the i2S YouTube channel since the last i2S News:

Cross-disciplinary teamwork, pluralism and integration

By Michael O'Rourke and Gabriele Bammer

<https://www.youtube.com/watch?v=2pkf0gzYLeo> (1hr and 2min YouTube video)

(Playlists: Team Science; and, Interdisciplinarity and Transdisciplinarity)

On the nature and practice of cross-disciplinary integration

By Michael O'Rourke

<https://www.youtube.com/watch?v=MZkUJ41OTng> (53min YouTube video)

(Playlist: ITD Alliance Oceania Regional Network Webinars)

Norms for inter- and transdisciplinary research: Learning from failure

By Michael O'Rourke and Jason Prior

<https://www.youtube.com/watch?v=p3HbAJhSs3Y> (44min YouTube video)

(Playlist: Interdisciplinarity and Transdisciplinarity)

The Integration and Implementation Sciences (i2S) 3.0 framework: From theory to practice

By Gabriele Bammer

<https://www.youtube.com/watch?v=-xV2VtgWWxo> (50min YouTube video)

(Playlist: Integration and Implementation sciences (i2S))

System factors that can supercharge (or Sabotage) Team Science

By Rebecca Woodland

<https://www.youtube.com/watch?v=OpD2bQFu0vA> (48min YouTube video)

(Playlist: Intereach Webinar Series)

Convergence research – What is it? What do we need to know about it?

By Joy Frechtling and Lisa Christen Gajary

<https://www.youtube.com/watch?v=UM5YbK5L-A8> (56min YouTube video)

(Playlist: Intereach Webinar Series)

A pathway for Team Science professionals: First national credential in Team Science

By Patrick Kelly

<https://www.youtube.com/watch?v=WcbC3CEYV6A> (53min YouTube video)

(Playlist: Intereach Webinar Series)

Making the integrator visible

By Anne Salmi and Stephanie Briers

<https://www.youtube.com/watch?v=zEWdV61smZ0> (45min YouTube video)

(Playlist: Intereach Webinar Series)

OTHER UPDATES**Key references for transdisciplinarity**

Ever wished you had a basic set of references for transdisciplinarity? The Australian National University (ANU) has produced a [Library Guide to Transdisciplinary Problem Solving](#). It covers: general resources, change, decision making, research implementation, unknowns, systems, context, pluralism, teamwork, stakeholder engagement, communication and integration. As well as books and journals, it also includes blogs, videos, and popular articles. Non-ANU users will be able to click through to some, but not all, resources. Gabriele Bammer chaired the working group that produced this Library Guide.

News from the Global Alliance for Inter- and Transdisciplinarity (ITD Alliance)

The ITD Alliance produces a weekly News Bulletin covering what is happening in inter- and transdisciplinarity and related collaborative boundary-crossing approaches. The focus is the activities of the ITD-Alliance and its members, along with relevant policy news in education, funding and research, as well as events and activities. If you'd like to join the mailing list, sign up at <https://itd-alliance.org/newsletter/>.

Gabriele Bammer has completed her first year as President of the ITD Alliance and is pleased to see the Alliance growing, undertaking important activities and forming a range of partnerships, all led by volunteer members. The administration has also become more streamlined and professional. And, most importantly, the Alliance is becoming more global, with 7 of 15 leadership board members now coming from the Global South.

ABOUT i2S NEWS

The aim of this newsletter is to provide regular updates (4 times per year) about what's new in Integration and Implementation Sciences (i2S), especially in three major repositories:

- the i2S website (<http://i2s.anu.edu.au>), which provides a range of information about Integration and Implementation Sciences

- Integration and Implementation Insights (<http://i2Insights.org>), which functions as a community blog, as well as a repository, for sharing concepts, methods and other research tools for understanding and acting on complex real-world problems
- the i2S YouTube channel (<https://www.youtube.com/i2S-Talks>), which provides a range of videos about various aspects of i2S.

Other updates about i2S are also provided and, from time to time, we also post news that is not directly related to i2S, but that is in line with i2S objectives.

Our target audience is researchers who tackle complex societal and environmental problems and who are interested in:

- Synthesizing knowledge from different disciplines and stakeholders,
- Understanding and managing diverse unknowns, and
- Supporting improved policy and practice responses to problems by government, business and civil society.

The three i2S repositories therefore provide new tools, as well as compiling and sharing existing tools, in 11 main areas:

- understanding the processes involved in *change*
- improving *communication*
- understanding *context*
- effective *decision making*
- incorporating, harnessing and managing *diversity*
- *integration* of multiple and varied perspectives about any problem and insights into acting on it
- *research implementation*
- *stakeholder engagement*
- taking a *systems* perspective
- *teamwork*
- understanding and managing *unknowns*.

i2S News is archived at: <http://i2s.anu.edu.au/what-i2s/i2s-publications/i2s-news>.

Useful links:

- i2S website: <http://i2s.anu.edu.au>
- i2Insights blog and repository: <http://i2Insights.org>
- i2S-Talks on YouTube: <https://www.youtube.com/i2S-Talks>
- X (Twitter): [@GabrieleBammer](https://twitter.com/GabrieleBammer)
- LinkedIn group "Global Network for Research Integration and Implementation": <https://www.linkedin.com/groups/4888295/>

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To contact Gabriele Bammer and Peter Deane, either visit <https://i2insights.org/contact/> or contact us via email at i2S@anu.edu.au.