i2S News

January/February 2019, #42

Australian National University

WELCOME

Welcome to the first i2S News of 2019. As always, the News features new additions to the resources on the i2S website (http://i2s.anu.edu.au), as well as references to the latest blog posts on the Integration and Implementation Insights blog (http://i2insights.org).

In 2019 there is a bumper crop of relevant conferences, highlighting various aspects of research integration and implementation. Check out the featured conferences below and also in the November/December 2018 i2S News (PDF 198KB).

The i2Insights blog has entered year 4, after a very successful third year. You can see the third annual review at: https://i2insights.org/2018/12/18/third-annual-review-2019/, which also provides updates on the most popular blog posts. Highlights include 59 new contributors from four new countries since 2017, with contributors now coming from 31 countries. The median number of direct views (*ie.*, via the unique URL rather than via the home page) per blog post is 490, with viewers coming from more than 90% of the 193 countries recognised by the United Nations.

We hope 2019 is off to a good start for all of you.

Gabriele Bammer and Peter Deane

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Australian National University

FEATURED TOOL

Policy impact: 10 key considerations

Purpose:
These ten considerations aim to help researchers who address important policy problems understand the complexities of influencing policy and how to become more effective in turning good evidence into policy action.

Description:
Ten key things that researchers need to think about when they want their research to influence policy are:

1. Know what you want to influence
    What change do you hope your research findings will bring about? Is it in legislation or policy? Is it greater investment, different practice or changed perceptions? Or is it something else?

2. Know who you want to influence
    First identify who has the power to bring about the change you want to see. Then identify who can influence these change agents. Figure out how you can get to these influencers, who may be people or organisations. Figure out how to build the necessary relationships and whether you are the best messenger.

3. Know when to influence
    When are your research results most likely to have impact? "For example, this could be in the leadup to an election, during a budget cycle, as part of a government consultation, ahead of an international decision-making summit, or at a key meeting." Be alert to unexpected opportunities and take advantage of them – fast!

4. Build relationships and networks
    Identify other people and organisations who share your goals in influencing policy and work with them to develop a joint plan.

5. Policy development is not a linear process
    "It is tempting to think that policy processes are linear: you identify a problem, gather evidence and implement a policy. But they aren't. Policy-making is complex, dynamic and involves a lot of different people and moving parts. Nonetheless, policy formulation does have its own formal and informal rhythms. If you understand these, you'll know where your evidence will be most useful and have greatest impact."

6. Policy-making is inherently political
    Policy-makers are not just influenced by your research findings. Their political experience and expertise also come into play, along with their own values. You may find your research used in ways you had not intended and you need to decide how you will respond.

7. Plan your engagement
    Your research is more likely to come to the attention of policy-makers if there are:
    *   A short, sharp executive summary or policy brief
    *   Clear messages
    *   No technical language

- Infographics
- Other activities, "such as press releases, public events, bilateral meetings, presentations or side events at summits and conferences."

8. Focus on ideas and be propositional
   Rather than focusing on the problem, use your research findings to tell policy-makers "what should happen, who could take action, when and how. It's also important to frame your recommendations within the realms of what is possible, both technically and politically. Be ambitious, but realistic."

9. It takes time, stick at it
   "Influencing policy takes time and commitment." It is "usually a marathon not a sprint." In addition, "be sure to set milestones and capture the small successes as you go. Continue to engage with your target audience and always keep up-to-date on the decision-making process."

10. Monitor, learn and adjust along the way
    Seek feedback and figure out how to respond, as well as adapt to new contexts and opportunities. "Continuously review, and capture your learning as you go so you can apply it to future influencing plans. And, be willing to share your learning with key partners."

Source: Draws on over 15 years of work by the Research and Policy in Development (RAPID) team at the UK Overseas Development Institute to understand how to foster sustainable policy change.

- **Reference**:
  - Tilley, H., Shaxson, L., Rea, J., Ball, L. and Young, J. (2017). *10 things to know about how to influence policy with research*. Overseas Development Institute: London, UK. Online: https://www.odi.org/sites/odi.org.uk/files/resource-documents/11205.pdf (PDF 128KB)
- **Website**:
  - https://www.odi.org/publications/10671-10-things-know-about-how-influence-policy-research

Additional tools can be found at: http://i2s.anu.edu.au/resources/tools

FEATURED VIDEO

Bias: Combatting confirmation bias

Purpose:
To provide an understanding of confirmation bias and ways to avoid it, in order to support good decision making on complex problems.

Description:
Confirmation bias manifests as follows:
1. We accept a story uncritically if it confirms what we would like to be true and reject it if it contradicts what we would like to be true
2. We accept a fact as data, even if it is an outlier which is not backed up by large-scale data

3. We accept data as evidence, even if it is consistent with rival theories, without looking for evidence that supports one theory and rules out all rival theories.

In brief:
A story is not fact because it may not be true.
A fact is not data because it may not be representative (especially if it is only one data point).
Data is not evidence – you need to check if it is also consistent with rival theories.

Three tips to overcome confirmation bias, to ensure you have reliable evidence:
1. Seek other viewpoints, especially from people you disagree with. Create a culture that encourages dissent. Encourage 'devil's advocates.'
2. Find experts who have gathered evidence, with a focus on high quality evidence. Review their credentials and check where their work has been published, as guides to quality.
3. Pause before sharing. Ask yourself: if the opposite finding was published by the same experts in the same journal, would you still be willing to believe it and share it?

- **Reference**:
  o "What to trust in a 'post-truth' world" by Alex Edmans was a talk at 'TEDxLondonBusinessSchool', London, UK in 2017. Online: https://www.ted.com/talks/alex_edmans_what_to_trust_in_a_post_truth_world?language=en

LATEST i2INSIGHTS BLOG POSTS

The i2Insights blog has recently published the following posts:

Knowledge asymmetry in interdisciplinary collaborations and how to reduce it
by Max Kemman
https://i2insights.org/2019/02/26/knowledge-asymmetry/

Strengthening the ecosystem for effective team science: A case study from University of California, Irvine, USA
by Dan Stokols, Judith Olson, Maritza Salazar and Gary Olson
https://i2insights.org/2019/02/19/team-science-ecosystem/

Tracking stakeholder engagement and research impact
by Cathy Day
https://i2insights.org/2019/02/12/tracking-engagement-and-impact/

Toolboxes as learning aids for dealing with complex problems
by Stefan Hilser
https://i2insights.org/2019/02/06/toolboxes-as-learning-aids/

Metacognition as a prerequisite for interdisciplinary integration
by Machiel Keestra
https://i2insights.org/2019/02/05/metacognition-and-interdisciplinarity/

Trust and empowerment inventory for community groups
by Craig Dalton
https://i2insights.org/2019/01/29/trust-and-empowerment-inventory/

Three "must have" steps to improve education for collaborative problem solving
by Stephen Fiore
https://i2insights.org/2019/01/22/education-for-collaborative-problem-solving/

Embracing tension for energy and creativity in interdisciplinary research
by Liz Clarke and Rebecca Freeth
https://i2insights.org/2019/01/15/embracing-tension-in-interdisciplinary-research/

Grant proposal writing for teams: Avoiding Frankenstein's monster
by Lauren Gee
https://i2insights.org/2019/01/08/team-grant-writing/

Building a global community to improve how complex real-world problems are tackled
by Gabriele Bammer
https://i2insights.org/2018/12/18/third-annual-review-2019/

FEATURED JOURNAL AND JOURNAL NEWS

Environmental Science & Policy

"*Environmental Science & Policy* promotes communication among government, business and industry, academia, and non-governmental organisations who are instrumental in the solution of environmental problems. It also seeks to advance interdisciplinary research of policy relevance on environmental issues such as climate change, biodiversity, environmental pollution and wastes, renewable and non-renewable natural resources, sustainability, and the interactions among these issues. The journal emphasises the linkages between these environmental issues and social and economic issues such as production, transport, consumption, growth, demographic changes, well-being, and health [but].... subject coverage will not be restricted to these issues and the introduction of new dimensions [is] encouraged".

While the primary focus of the journal is not on research integration and implementation, it publishes some papers about concepts and methods relevant to Integration and Implementation Sciences (i2S), for example on collaboration, modelling, knowledge synthesis and co-production.

- **Website**:
  - https://www.journals.elsevier.com/environmental-science-and-policy

GAIA column on 'Frameworks for Transdisciplinarity' Research #6

Weyrauch, V. and Echt, L. (2018). Context in the interaction between research and government policy. Frameworks for Transdisciplinary Research #6. *GAIA*, **27**, 4: 344. Online (DOI): https://doi.org/10.14512/gaia.27.4.3

Additional journals can be found at: http://i2s.anu.edu.au/resources/journals

FEATURED PROFESSIONAL ASSOCIATION

Cybernetics Society

The *Cybernetics Society* "is the UK national learned society and professional body promoting pure and applied cybernetics.

It holds scientific meetings, conferences and social events, and engages in other activities to encourage public understanding of science and to extend and disseminate knowledge of cybernetics and its associated disciplines".

The Cybernetics Society "is a member society of the *International Federation of Systems Research* (IFSR) and is affiliated to the *World Organisation of Systems and Cybernetics* (WOSC)". *Kybernetes* is the official journal of the society (and of WOSC).

The website of the society provides a collection of resources useful for orientating to cybernetics and systems thinking.

The society was launched in 1968.

- **Website**: http://www.cybsoc.org/

Additional professional associations and networks can be found at:
http://i2s.anu.edu.au/resources/associations_networks

FEATURED CONFERENCES

37th International Conference of the System Dynamics Society: Resilience and Sustainability in a Changing World

The Systems Dynamics Society's 37th International Conference calls for "research and applications that improve our understanding of how we cope with… challenges by applying Resilience and Sustainability in a Changing World. Resilient systems are those that are able to adapt and perform to shocks and disruptions. Sustainable systems are those that are managed to be resilient to expected demands. Inherent to both concepts is negative feedback, which dampens the effect of shocks and changes of the system. Resilience and sustainability principles are gaining recognition in a variety of disciplines. Improving our understanding of how we can better operate in this changing world is key to our success."

The conference welcomes "all research and documented consulting activities in System Dynamics including: applications, technical developments, software developments, and integration with other modeling and simulation techniques." Submissions are particularly encouraged from a cross-section of disciplines and domains of practice that expand understanding of resilience and sustainability principles, including those interested in real-world applications.

The conference will be held in Albuquerque, New Mexico, USA on 21-25 July 2019.

- For further details see:
    - o https://www.systemdynamics.org/conference
    - o Deadline for paper submissions, workshop and session proposals: 11 March 2019

Global Implementation Conference 2019: Implementation for Impact

"The GIC is one of the world's leading implementation conferences. It aims to promote implementation science, practice, and policy and their active application in human services in order to contribute to demonstrable and socially significant benefits to people and society.

GIC 2019 creates an opportunity to advance knowledge and expertise in how to lead, guide, and study effective implementation in diverse political, economic, and disciplinary contexts."

Topic domains for the conference programme include:
- "Effective approaches to policy implementation
- Engaging decision-makers to support effective implementation strategies
- Assessing and promoting readiness for implementation
- Approaches to the full articulation and operationalization of interventions/innovations
- Using data for continuous and meaningful improvement
- Developing and sustaining effective coaching for the purposes of implementation
- Successful efforts in taking evidence-informed practices or programmes to scale
- Navigating multi-tiered systems (e.g. country to region to district to local organizations)
- Measuring implementation capacity across inter-linking systems or within organizations
- The intersection between implementation and improvement science
- Implementation research methods
- Translating implementation science (empirical evidence) for application in implementation practice"

The conference will be held in Glasgow, United Kingdom, on 16-17 September 2019.

- For further details see:
    - o https://gic.globalimplementation.org/
    - o Deadline for submissions: 29 March 2019

International Transdisciplinarity Conference 2019: Joining Forces for Change

The aim of this conference, Joining Forces for Change, is to bring together a "growing body of practitioners and researchers who are working in different types of collaborative research and change processes, to gauge the state of the art in both research and practice from across sectors and disciplines, and to create an international forum where diverse groups can exchange experiences and learn from each other." A specific aim is to bring together "actors from different professional mandates, disciplines and sectors to engage and discuss practical examples and case studies that approach societal transformation through boundary breaking collaboration. The overall focus is on what we can learn from our collaborative experiences, case studies and practices regarding wider societal transformation, methodological innovations and theoretical development. We will specifically search for 'sites for change' in terms of spaces, practices and learnings where TD research and co-production play a crucial role."

The conference will be held in Gothenburg, Sweden, on 10-13 September 2019.

- For further details see:
  - http://www.transdisciplinarity.ch/td-net/Veranstaltungen/ITD-2019.html
  - Call for contributions:
    - http://www.transdisciplinarity.ch/fr/td-net/Veranstaltungen/ITD-2019/Call-for-contributions.html
  - Abstract submission end date:
    - 24 March 2019

Transformations 2019: Learning from Transformative Action and Thinking

"Transformations 2019 aims to provide a platform for reciprocal learning between less and more developed contexts, and between researchers and practitioners, in order to enhance both practice and theory to support transformative changes for addressing climate change and other contemporary societal and environmental challenges."

"The overarching theme of the conference is 'Learning from transformative action and thinking', where there is a huge unexplored knowledge captured in society, in action, that can inform theory and science, while science has the potential of informing practice, creating a cross fertilization between practice and theory. Practitioners, social actors, case studies, and local contexts will have a central role in the conference, with the aim of learning from successes and failures, to give recommendations to support transformative changes for addressing climate change and other contemporary societal and environmental challenges."

Contributions are sought "from any government or private organisation, civil society or academia, in one of the six themes of the conference."

Conference themes:
- "Philosophy and framing of transformation in science
- Learning from transformational stories and narratives
- Learning from each other: integrating different knowledge and thinking for transformation
- Agents of transformation: who, why, how and what
- Transformation for navigating complexity and uncertainty
- Transformation and disaster risk."

The conference will be held in Santiago, Chile on 16-18 October 2019.

- For further details see:
  - https://transformations2019.org/
  - Abstracts and proposals submission deadline: 4 March 2019

UK Interdisciplinary Learning and Teaching Conference: Practice and Knowledge Production

"Interdisciplinary teaching, scholarship and research are increasingly prioritised within Higher Education and there are many developing opportunities, programmes and examples of innovative and best practice to be disseminated to a wider audience... The conference themes will focus on the design, development and delivery of interdisciplinary study, research, and learning and teaching across the UK."

The thematic focus of the conference will be on:
- "Building Interdisciplinary Communities of Learning
- Development and Progress in Liberal Arts Provision in the UK
- Assessing and Teaching Interdisciplinarity
- Assessing the Impact of Interdisciplinary Study on Engagement, Satisfaction and Employability
- Problem/Theme based Interdisciplinary Activities
- The Future of Interdisciplinarity"

The conference will be held in Newcastle, UK, on 9-10 April 2019.

- For further details see:
  - https://www.keele.ac.uk/ilas/conferences/interdisciplinarylearningandteachingconference/
  - Registration closing date: 29 March 2019

Additional conference information can be found at:
http://i2s.anu.edu.au/resources/conferences

ABOUT i2S NEWS

The aim of this newsletter is to provide regular (bi-monthly) updates about new resources added to the Integration and Implementation Sciences website (http://i2s.anu.edu.au/resources). These resources are useful for researchers interested in Integration and Implementation Sciences (i2S), which underpins the investigation and tackling of complex real world problems, by:
- Synthesizing knowledge from different disciplines and stakeholders,
- Understanding and managing diverse unknowns, and
- Providing integrated research support for policy and practice change.

In general, each issue features tools (concepts and methods), case studies and/or approaches relevant to i2S - either a useful compilation or one or more examples of note. We also provide information about journals, professional associations & networks and conferences where researchers can learn from others, report their findings and interact with like-minded peers. The newsletter also reports on discussions in the LinkedIn group "Global Network for Research Integration and Implementation": https://www.linkedin.com/groups/4888295/ (when these occur) and new entries on the Integration and Implementation Insights blog: http://i2Insights.org.

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
- i2S on YouTube: https://www.youtube.com/user/i2sTalks
- LinkedIn group "Global Network for Research Integration and Implementation": https://www.linkedin.com/groups/4888295/
- i2Insights blog: http://i2Insights.org

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