I2S News

September/October 2016, #32

Australian National University

WELCOME

Welcome to the September/October I2S News, where we highlight new additions to the resources on the I2S website (http://i2s.anu.edu.au), as well as the latest blog posts published on the Integration and Implementation Insights blog (http://I2Insights.org). In September the blog reached a new record of more than 5,400 views, with over 3,100 viewers from 109 countries.

The I2S YouTube channel has two new playlists (on *systems thinking* and on *research implementation and change*) and is linked to an expanding set of videos, making it easier to access video resources relevant to I2S. Future additions will be featured in I2S News.

The Massive Open Online Course (MOOC) on 'Ignorance!' by Mike Smithson and Gabriele Bammer will run in a new expanded (eight week) version starting on 10 January 2017. To register go to https://www.edx.org/course/ignorance-anux-igno101x-0.

We also draw you attention to this edition's featured conference – a free online Research Impact Summit from 28-30 November, 2016.

We are running a little late for this edition. As always, we welcome contributions and feedback.

Gabriele Bammer and Peter Deane

CONTENTS

Featured Tools
- Policy and practice impact principles for researchers
- Scoping: seven phase framework

Featured Video
- Implementing evidence-based practice: four brief videos

Latest I2Insights Blog Posts
- There have been 16 new contributions since the last I2S News

Featured Journal and Journal News
- International Journal of Operational Research
- GAIA journal 'Toolkits for Transdisciplinarity' #5

Featured Association
- International Association for Impact Assessment (IAIA)

Featured Conference
- Research Impact Summit
- Other Upcoming Conferences

About I2S News
- Aims and how to contribute, subscribe and un-subscribe

FEATURED TOOLS

Policy and practice impact principles for researchers

Five principles and key associated issues for researchers to impact policy and practice.

1. Design:
- Understand what everyone wants. This can help in managing expectations of different stakeholders and project members and identifying potential issues/problems early on.
- Understand the context of the project. Use local characteristics, traditions, norms and past experiences as a starting point for planning the project.
- Take your time. Knowledge exchange is time consuming if done properly.
- Design your knowledge exchange activities carefully. Spend time researching the context, the stakeholders, and possible approaches. Design for flexibility, get feedback, and adapt your plans to suit changing circumstances.
- The early bird catches the worm. Ideally planning and research into the context and stakeholders should begin prior to project commencement.
- Get buy in. Ownership and ongoing commitment can be formal (*eg.*, monetary investment or contracted time to the project) or informal (*eg.*, regular engagement via social media).
- Independence. Ensure that the management of the research is seen as independent and neutral, so you can build trust with stakeholders. This can be achieved through a neutral organization leading the process or an independent facilitator running sessions with stakeholders.
- Mix up your methods. Plan to use a variety of methods for engaging with stakeholders and the public to suit different people's preferences.
- The process is as important as the outcome.
- Resource your impact. Generating impact takes significant time and resources. Budget for a well designed process, which includes social events, staff time, professional facilitation, refreshments and (in some cases) financial compensation to cover time and expenses for participants.
- Use knowledge brokers. Identify individuals that play a significant role in your stakeholder community and may be able to act as a champion.
- Visualise your research. Tools that use maps, illustrations, cartoons, drawings, photos and models are particularly successful.

2. Represent:
- Involve the right people. Make sure power dynamics between individuals are considered and attention is paid to selecting individuals who have the power to make a difference. If there are people or groups who doubt the value of the process keep them informed and give them the option of joining in later.
- Not just the usual suspects. Those of different ages, gender, backgrounds and cultures bring different knowledge, concerns and perspectives to the table.
- Understand and create networks. Understand the people's social networks and spend time creating connections both vertically and horizontally within and between relevant organisations.
- Personal initiative. Many impacts are based on one individual's initiative, perseverance and hard work; you need at least one individual who is willing to push the process through and maintain momentum.

3. Engage:
- Away days. Put time aside at the start of the project for the research team and key stakeholders to get to know one another's expertise, background and languages.
- Be enthusiastic. Enthusiasm is infectious and can help maintain momentum and achieve long-term involvement of participants, even when outcomes are delayed or mistakes are made.
- Find out what motivates people. Motivations can include: academic interest, to learn, fear of missing out, financial gain, professional duty, personal promotion, and to support or promote causes they care about. Be honest with participants about what they will gain through participation.
- Build capacity for engagement. Include basic training activities to improve knowledge exchange and co-production.
- Build personal relationships. Impact is all about relationships. Taking time to socialize is important.
- Build trust.
- Multiple modes of two-way communication. Whether face-to-face or via social media, use the widest possible spectrum of communication media available to you, so that everyone who is interested in your research can engage with you via their preferred mode.
- Keep in people's comfort zones. Have meetings in the local area and in a non-threatening, neutral environment. Choose activities (at least initially) that people are comfortable with.
- Enjoy! Make sure the process is enjoyable and interesting for everyone involved.
- Keep it simple. A stakeholder steering group may help in ensuring the language and approach is suitable.
- Work around people's commitments. Consult with those you want to work with to match your process to their commitments.
- Manage power dynamics. Recognize that power dynamics play a role in the process; plan for and manage this appropriately.
- Record. In order to ensure transparent, trustworthy processes make sure that your process is properly recorded.
- Keep your goals in mind. Reiterate research and impact goals throughout the process and keep to deadlines.
- Respect cultural context. Consider local attitudes to gender, informal livelihoods, social groupings, speaking out in public and so on.
- Respect local knowledge. Respect local perceptions, choices, and abilities and involve all types of knowledge when setting goals and planning for impact.
- Share responsibilities. Share out responsibilities and credit in order to help build relationships, trust in the process and foster ownership for those involved.

4. Early impact:
- Deliver quick wins. Delivery of practical outcomes early can help build trust and relationships, keeping people engaged for the longer-term.
- Work for mutual benefit. Spend time finding out what people want from the process and try hard to deliver this.

5. Reflect and sustain:
- Get participant feedback regularly. Use it to adapt techniques and deal with problems as they arise.
- Make time for reflection.

- Learn from others who have achieved impact. Visit other projects that successfully delivered impact and speak to people who have carried out similar work to what you are planning.
- Continuity of involvement. This is especially important for projects dealing with controversy.
- Maintain momentum. Review sessions, feedback forms and good facilitation can ensure that momentum is maintained.

- **References**:
    - Reed, M. S., Stringer, L. C., Fazey, I., Evely, A. C. and Kruijsen, J. H. J. (2014). Five principles for the practice of knowledge exchange in environmental management. *Journal of Environmental Management*. **146**: 337–345. Online (DOI): 10.1016/j.jenvman.2014.07.021.
    - Reed, M. S. (2016). *The Research Impact Handbook*. Fast Track Impact: Aberdeenshire, United Kingdom (details at: http://www.fasttrackimpact.com/research-impact-book).
- **Weblog**: Reed, M. S. (2016*). Five principles for achieving impact*. Implementation and Implementation Insights weblog, September 26, 2016. Online: https://i2insights.org/2016/09/27/five-principles-for-impact/

Scoping: seven phase framework

Scoping of complex social and environmental problems can be undertaken using the following seven phase framework.

Phase 1: Analyse the Context
- When did the problem attract attention?
- Who raised the problem? How was the decision to do something about the problem arrived at? What do those who raised the problem expect? What is their general situation?
- How did you and your group decide to work on the problem? Are you the best people for the job? What do those who raised the problem know about you?
- Is there anybody who is against understanding and tackling the problem? What are the objections?
- What experience do those who raised the problem have in terms of working with researchers on problems such as the current one? If there is previous experience, are there lessons to be learnt for doing things similarly or differently for the current problem?

Phase 2: Specify Objectives
- Who will recognize that the goal of improved understanding and action on the problem is achieved? How will somebody recognize that the goal is achieved?
- What exactly is to be understood and changed?
- Who is affected positively or negatively by increasing understanding and the change that is expected?
- What exactly is the positive or negative impact of increasing understanding and the change?

Phase 3: Analyse Previous Strategies to Understand and Tackle the Problem
- What has been successful in the past?
- What were the conditions? What was done to achieve the goal?

- If there are no past successes to draw on, what evidence is there that the objectives are realistic?

Phase 4: Review Potential Opposition
- Who could prevent improved understanding and change on the problem? Or even reverse the change (in case the objective was achieved)? What could he/she do?
- Who could make the problem worse?

Phase 5: Assess Your Role
- What can you and your group do to increase the chance of achieving the goal?
- What can you and your group do to decrease the chance of achieving the goal?
- Will you and your group be seen as partisan or neutral?

Phase 6: Look at Alternatives
- Without you and your group, how would the problem be addressed? How would the goals be achieved?
- If the problem is not addressed (with or without you and your group), how will it proceed?

Phase 7: Delineate Time Perspectives
- How long do those who raised the problem expect it will take to achieve the goal?
- Is the timeline for the involvement of you and your group realistic?

This framework is adapted from a nine-phase scoping tool for professional consultants to delineate a new consulting request, which is in The Change Management Toolbook (Nauheimer 1997). That tool in turn was adapted by the author and compiler, Holger Nauheimer, from Fritz Simon and Christel Rech-Simon's book "Zirkuläres Fragen" (Circular Interviews) used in psychiatry.

- **References**:
  o Nauheimer, H. (1997). *The change management toolbook. A collection of tools, methods and strategies*. Open access online at: http://www.change-management-toolbook.com/ and at: http://www.change-management-toolbook.com/downloads
  o Simon, F. B. and Rech-Simon, C. (2004). *Zirkuläres Fragen. Systemische Therapie in Fallbeispielen: Ein Lernbuch*. 6. Auflage. Carl-Auer-Systeme-Verlag: Heidelberg, Germany
- **Weblog**: Bammer, G. (2016). *Two frameworks for scoping*. Implementation and Implementation Insights weblog, August 16, 2016. Online: https://i2insights.org/2016/08/16/scoping/

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

FEATURED VIDEO

Implementing evidence-based practice: four brief videos

These four brief videos provide an introduction to implementation of evidence-based practice, drawn from experience in children's mental health organisations and schools. They cover:
1. A general overview, emphasising the importance of preparation and planning for implementation.

2. The importance of involving a team in the service provision agency to be the "champions of change", responsible for planning, executing and monitoring the implementation. The video also covers key factors in choosing the team.
3. The importance of providing coaching by an intervention expert on how to put new skills into practice, so that those implementing the new skills are supported and given feedback.
4. The concept of fidelity, which is about delivering the evidence based intervention as intended by the intervention developer. This includes differentiating between key ingredients and those where discretion is permissible.

They comprise a series on "Bringing Evidence-based Treatments into Practice"; presented by Melanie A. Barwick with the team of Raluca Barac, Melissa Kimber and Sabine Johnson:
1. Implementation of EBPs: https://youtu.be/gciSmD0s5nw
2. Implementation teams: https://youtu.be/kmegTNFoVmU
3. Coaching and Implementation: https://youtu.be/h-tXfp9fanM
4. Fidelity and Implementation: https://youtu.be/n0fQxh74OOk

LATEST I2INSIGHTS BLOG POSTS

The I2Insights blog has recently featured posts on:

1. **Key readings about interdisciplinarity/ Lecturas clave sobre interdisciplina** *by Bianca Vienni*

   https://i2insights.org/2016/10/25/interdisciplinarity-readings/

2. **Improving health care services through Experience-based Co-design** *by Glenn Robert and Annette Boaz*

   https://i2insights.org/2016/10/20/experience-based-co-design/

3. **Six lessons about change that affect research impact** *by Gabriele Bammer*

   https://i2insights.org/2016/10/18/change-and-research-impact/

4. **A co-creation challenge: Aligning research and policy processes** *by Katrin Prager*

   https://i2insights.org/2016/10/13/aligning-research-and-policy/

5. **The 'methods section' in research publications on complex problems – Purpose** *by Gabriele Bammer*

   https://i2insights.org/2016/10/11/methods-section-purpose/

6. **Should I Trust that Model?** *by Val Snow*

   https://i2insights.org/2016/10/06/trust-in-model/

7. **From integration to interaction: A knowledge ecology framework** *by Zoë Sofoulis*

   https://i2insights.org/2016/10/04/knowledge-ecology-framework/

8. **Creating a pragmatic complexity culture / La creación de una cultura pragmática de la complejidad** *by Cristina Zurbriggen*

   https://i2insights.org/2016/09/29/pragmatic-complexity-culture/

9. **Five principles for achieving impact** *by Mark Reed*

https://i2insights.org/2016/09/27/five-principles-for-impact/

10. **ICTAM: Bringing mental models to numerical models** *by Sondoss Elsawah*

https://i2insights.org/2016/09/22/adding-mental-models-to-numerical-models/

11. **A governance compass** *by Tom Gieseke*

https://i2insights.org/2016/09/20/governance-compass/

12. **Participatory processes and participatory modelling: The sustainable procedure framework** *by Beatrice Hedelin*

https://i2insights.org/2016/09/15/sustainable-procedure-framework/

13. **Harnessing analogies for creativity and problem solving** *by Christian Schunn*

https://i2insights.org/2016/09/13/analogies-in-problem-solving/

14. **Where are the stakeholders in implementation science** *by Allison Metz and Annette Boaz*

https://i2insights.org/2016/09/08/co-creation-and-implementation-science/

15. **Integration, part 2: The "how"** *by Julie Thompson Klein*

https://i2insights.org/2016/09/06/how-to-do-integration/

16. **Who sets the rules around co-creation** *by Lorrae van Kerkhoff*

https://i2insights.org/2016/09/01/knowledge-governance-and-co-creation/

FEATURED JOURNAL AND JOURNAL NEWS

International Journal of Operational Research (IJOR)

International Journal of Operational Research (IJOR) covers new theory and application of operations research (OR) techniques and models that include game theory, scheduling, project management, mathematical programming, decision-support systems, multi-criteria decision making, fuzzy logic, expert systems, and simulation.

The aim is to help with "making timely and accurate decisions using data analysis and more accurate information". While the applications are often in a business context, these tools have wider application.

- Website: http://www.inderscience.com/jhome.php?jcode=ijor

GAIA column on 'Toolkits for Transdisciplinarity'

The journal GAIA has recently published:
Bammer, G. (2016) Toolkits for transdisciplinarity - Toolkit #5: Change. *GAIA*, **25**, 3: 149. Online: http://dx.doi.org/10.14512/gaia.25.3.2

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

FEATURED ASSOCIATION

International Association for Impact Assessment (IAIA)

International Association for Impact Assessment (IAIA) is "the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programs, plans and projects."

In the IAIA Fact Sheet #1, Impact Assessment (IA) is described as follows:
"In its technical guise, IA seeks to evaluate and synthesize the efforts of disciplinary specialists, stakeholders, and regulatory authorities. By providing considered unbiased information, decision-makers are helped to develop or select policies, plans, programs, and projects, that will be sustainable as well as acceptable to people who will be affected.

In a regulatory and institutional context, IA is a legal procedure, integral of the decision-making process to which a planned intervention will be subjected. It seeks to ensure that all stakeholders, both private and regulatory, have been engaged, their interests recognized, relevant laws and regulations addressed, and that pertinent information to the pending decision has not been omitted or exaggerated."

Of most interest to I2S are a number of IAIA publications, found under the sections on best-practices, fast-tips and citations, and which cover stakeholder engagement and public participation.

IAIA was founded in 1980.

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

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

FEATURED CONFERENCE

Research Impact Summit

This free online event features interviews with 20 international experts and covers knowledge translation, implementation science, collaboration and engagement, dissemination and research impact.

The conference will be held online, on 28-30 November 2016.

- For further details please see: http://researchimpactsummit.com/

Other Upcoming Conferences

Conferences which have not been listed in previous newsletters are marked [NEW].

Interdisciplinarity, Transdisciplinarity and Action Research Methods
- 27-30 October 2016, 38th Association for Interdisciplinary Studies (AIS) Conference, Ottawa, Canada (http://wwwp.oakland.edu/ais/conferences/annualconference/)
- 7-9 November 2016, Learning for Change and Innovation World Congress (incorporating the Action Learning, Action Research Association (ALARA) Australasian Conference; and the, Global Centre for Work-Applied Learning (GCWAL) Annual Conference), Adelaide, Australia (http://www.gcwal.com.au/2016congress/)
- 11-13 November 2016, Collaborative Action Research Network (CARN) Conference: Integrating the Personal and Political in Professional Practice, Lincoln, United Kingdom (https://sites.bishopg.ac.uk/carnconference/)
- [NEW] 12-16 June 2017, Action Research Network of the Americas 2017 Conference, Cartagena, Colombia (http://www.arnaconnect.org/conferences/2017-arna-conference)
- [NEW] 3-7 June 2018, The Academy of Transdisciplinary Learning and Advanced Studies (ATLAS): Being Transdisciplinary, Cluj-Napoca, Romania (http://www.atlas-conference.org/)

Systems, Modelling and Simulation
- 16-18 November 2016, 24th National Conference of the Australian Society for Operations Research: From Trusted Data to Trusted Decisions, Canberra, Australia (http://www.asor-act.net/ASORConf/)
- 11-14 December 2016, Winter Simulation Conference: Simulating Complex Service Systems, Washington D.C., United States of America (http://meetings2.informs.org/wordpress/wintersim2016/)
- 13-14 December 2016, 7th French Conference on Complex Systems Design & Management (CSD&M), Paris, France (http://www.2016.csdm.fr/)
- 4-7 January 2017, 50th Hawaii International Conference on System Sciences (HICSS 50), Waikoloa, Hawai'i, United States of America (http://www.hicss.org/)
- 5-6 January 2017, World Complexity Science Academy VII Conference: Governing Turbulence: Risk and Opportunities in the Complexity Age, Rio de Janeiro, Brazil (http://www.wcsaglobal.org/call-for-7th-conference/)
- 20-23 January 2017, 8th International Conference on Computer Modelling and Simulation, Canberra, Australia (http://www.iccms.org/)
- [NEW] 19-22 February 2017, 2nd Asia-Pacific Region System Dynamics Conference: Charting a Path to a Humane and Sustainable Future - Asia's Leadership Role, Singapore (http://apconference.systemdynamics.org/)
- [NEW] 23-26 May 2017, 31st European Conference on Modelling and Simulation (ECMS 2016), Budapest, Hungary (http://www.scs-europe.net/conf/ecms2017/)
- [NEW] 30 May - 2 June 2017, 10th Chaotic Modeling and Simulation International Conference (CHAOS), Barcelona, Spain (http://www.cmsim.org/chaos2017.html)
- 23-26 April 2017, Symposium on Theory of Modeling and Simulation, Virginia Beach, Virginia, United States of America (http://tms-devs.org/)
- [NEW] 18-21 June 2017, 12th International Conference on Systems of Systems Engineering (SoSE): Internet of Things as System of System, Waikoloa, Hawaii (http://2017.sosengineering.org/)

- [NEW] 20-24 June 2017, 14th International Conference of Sociocybernetics: Sociocybernetics, innovation and social conflicts, Medellin, Columbia (https://sociocybernetics.wordpress.com/icsc2017_cfp_v1/)
- [NEW] 9-12 July 2017, 25th Conference on User Modeling, Adaptation and Personalization, Bratislava, Slovakia (http://www.um.org/umap2017/)
- [NEW] 15-20 July 2017, 27th Annual International Council on Systems Engineering (INCOSE) Symposium: Unlocking Innovation through Systems Engineering, Adelaide, Australia (http://www.incose.org/symp2017/home/when-where)
- [NEW] 16-20 July 2017, 35th International Conference of the System Dynamics Society: 60th Anniversary Celebration, Cambridge, Massachusetts, United States of America (http://conference.systemdynamics.org/)
- [NEW] 17-21 July 2017, 21st Conference of the International Federation of Operational Research Societies, Quebec City, Canada (http://ifors2017.ca/)
- [NEW] 7-10 August 2017, Conference of the American Society for Cybernetics: Resilience and Ethics - Implications, Salem, Massachusetts, United States of America (http://asc-cybernetics.org/2017-2/)

Team Science and Project Management
- [NEW] 12-14 June 2017, Science of Team Science 2017 Conference, Clearwater Beach, Florida, United States of America (http://www.scienceofteamscience.org/)
- [NEW] 20-22 July 2017, 11th Annual INGRoup Conference, Saint Louis, Missouri, United States of America (http://www.ingroup.net/conference.html)

Uncertainty, Risk and Decision Making
- 27-29 October 2016, European Sociological Association's (ESA) Risk and Uncertainty Research Network 22 - Mid-term Conference: Risk and Uncertainty in a Comparative Context, Aydin, Turkey (http://www.europeansociology.org/research-networks/rn22-sociology-of-risk-and-uncertainty.html)
- 30 November - 2 December 2016, 5th International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making (IUKM), Da Nang, Vietnam (http://www.jaist.ac.jp/IUKM/IUKM2016/)
- 11-15 December 2016, Society for Risk Analysis (SRA) Annual Meeting, San Diego, California, United States of America (http://www.sra.org/events/sra-2016-annual-meeting)
- [NEW] 20-23 June 2017, Bi-annual International Conference on Naturalistic Decision Making (NDM13), Bath, United Kingdom (http://www.bath.ac.uk/management/news_events/events/naturalistic-decision-making/index.html)
- [NEW] 8-10 November 2017, 2nd International Conference on Anticipation, London, United Kingdom (http://www.projectanticipation.org/index.php?option=com_content&view=article&id=97&Itemid=612)

Bridging the Gap from Research to Policy and Practice
- 27-29 October 2016, Annual Institute of the Society of Policy Scientists: Diffusion of Ideas: Linking Lasswell to the Future, Claremont, California, United States of America (http://policysciences.org/institute.php)
- 14-15 December 2016, 9th Annual Conference on the Science of Dissemination and Implementation: Mapping the Complexity and Dynamism of the Field, Washington D.C., United States of America (http://diconference.academyhealth.org/home?navItemNumber=13668)

- 20-21 June 2017, Global Implementation Conference: Expanding Implementation Perspectives - Engaging Systems, Toronto, Canada (http://gic.globalimplementation.org/)

Other (including Sustainability Science)
- 6-9 December 2016, 30th Australian and New Zealand Academy of Management (ANZAM) Conference: Under New Management - Innovating for Sustainable and Just Futures, Brisbane, Australia (http://anzam2016.com/)
- [NEW] 8-10 May 2017, 8th Annual National Organization of Research Development Professionals (NORDP) Research Development Conference, Orlando, USA (http://www.nordp.org/annual-conference)
- 27 November - 1 December 2017, XXII International Conference of the Society for Human Ecology: Envisioning pathways to just and sustainable futures - Celebrating diversity, pursuing integration, and developing liveable communities, Los Baños, Philippines (http://societyforhumanecology.org/)

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, professional development courses 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": http://www.linkedin.com/groups/Global-Network-Research-Integration-Implementation-4888295 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": http://www.linkedin.com/groups/Global-Network-Research-Integration-Implementation-4888295
- I2Insights blog: http://I2Insights.org

To subscribe or unsubscribe to the newsletter go to "I2S News" at http://i2s.anu.edu.au or contact Peter Deane at peter.deane@anu.edu.au. To contribute material please contact Peter Deane at peter.deane@anu.edu.au.