



University of Dundee

IKT for Research Stage 2

Fang, Mei Lan; Battersby, Lupin; Cranwell, Marianne; Cassie, Heather; Fox, Moya; Sterlini, Philippa

DOI:
[10.20933/100001249](https://doi.org/10.20933/100001249)

Publication date:
2022

Licence:
CC BY-SA

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
Fang, M. L., Battersby, L., Cranwell, M., Cassie, H., Fox, M., Sterlini, P., Breckenridge, J., Gardner, A., & Curtin, T. (2022, Dec). IKT for Research Stage 2: Generating Priorities and Ideas. University of Dundee.
<https://doi.org/10.20933/100001249>

General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



University
of Dundee



SIMON FRASER
UNIVERSITY

An Integrated Knowledge Translation
Toolkit for Open Research

IKT for Research Stage 2: Generating Priorities and Ideas



IKT for Research Stage 2: Generating Priorities and Ideas

Background

In 2020, the University of Dundee initiated the development of an Open Research strategy. As part of this initiative, in February 2021 the University's Library and Learning Centre together with Open Research Champions from the Schools of Health Sciences and Dentistry, formed an Open Research Working group. To build on the University's open research policy and infrastructure, the purpose of the group was to facilitate ongoing research and development of best practice approaches for our interdisciplinary environment to make outputs, data and other products of our research publicly available, building on University of Dundee's Open Research policy and infrastructure.

Through informal consultations with academic staff and students, the Open Research Working Group found that:

- access and reach of research findings can be amplified through effective knowledge mobilisation, and stakeholder and patient and public involvement; and
- there was a need for guidance and resources on how-to implement knowledge mobilisation activities with and for stakeholders throughout the entire research process – from proposal development to project completion.

In June 2021, the Open Research working group, in partnership with Simon Fraser University's Knowledge Mobilization Hub began the development of an Integrated Knowledge Translation (IKT) Toolkit, with funding support from the University of Dundee's Doctoral Academy and Organisational Professional Development. IKT is an approach to knowledge translation that emphasises working in an engaged and collaborative partnership with stakeholders throughout the research cycle in order to have positive impact.

The aim was to co-produce evidence-informed, best practice learning materials on how-to:

- maintain ongoing relationships between researchers, community stakeholders and decision-makers in research development and implementation; and
- facilitate an integrated, participatory way of knowledge production whereby researchers, practitioners and other knowledge users can collaborate to co-generate new and accessible knowledge that can be utilised in contexts ranging from supporting community development to policy guidance for practice.

The IKT Toolkit was informed by a focused evidence review and synthesis of published peer-reviewed and grey literature and consists of 8 knowledge briefs and a slide deck co-produced for use in any discipline or sector. Each knowledge brief provides practical guidance and resources to support an IKT process in each of eight key research stages: (i) Partnership Building; (ii) Generating Priorities and Ideas; (iii) Proposal development; (iv) Study Design; (v) Data Collection; (vi) Data Analysis; (vii) Reporting and (viii) Dissemination.

The current knowledge brief provides IKT guidance on Research Stage 2: Generating Priorities and Ideas.

What is 'generating priorities and ideas' in relation to IKT in research?

Stage 2 of IKT informed research is about 'generating priorities and ideas' with stakeholders who are invested in the research. Traditionally, research priorities and ideas have often been predetermined by academic researchers (Skipper & Pepler). Research priorities and ideas can be established by assessing what we already know through a review of the literature. Equally, to help make research useful and impactful, it is important to determine the challenges and issues with those who are directly impacted, as well as learn about good practice, and what has worked well in the community. It is important to note that experiential stakeholders are experts in their own lived experience, and these should therefore inform the research priorities and ideas, which should be determined jointly between academic and non-academic members such as people who live and work in the community (da Cruz, 2018). Undertaking a collaborative review of the literature could be a helpful process in ensuring that the research aims, objectives, and vision of the project are co-created and well understood across the entire team (Pollock et al., 2015; Sixsmith et al., 2021). Boxes 1 and 2 presents key principles and a checklist for how to do effective IKT in Research Stage 2: Generating Priorities and Ideas.



BOX 1: IKT Principles for Research Stage 2 - Generating Priorities and Ideas

- 1 Together with people who live and work in the community (ie, non-academic partners), determine the problems and issues that are of importance (da Cruz, 2018).
- 2 Together with partners, identify the desired outcomes and impact of the priority research topic (El-Jardali & Fadlallah, 2015).
- 3 Apply participatory working principles (refer to Knowledge Brief 1) to: (i) facilitate communication and dialogue with stakeholders who have a vested interest in the priority research topic and (ii) promote consensus building among team members (Jull et al., 2017).
- 4 Make use of IKT tools such as 'The Knowledge Funnel' to collaboratively distill and refine ideas to support the knowledge co-creation process (Graham et al., 2006).
- 5 Establish what we already know and current gaps in knowledge by conducting a collaborative evidence review that involves co-designing the evidence strategy with all key stakeholders (Barwick et al., 2009; Gagnon, 2011).
- 6 Findings from the collaborative evidence review can be used to inform the co-design of the research strategy (Campione et al., 2021).

BOX 2: IKT Checklist for Research Stage 2 - Generating Priorities and Ideas

1	Have the research priorit(ies) and desired outcomes been defined with the non-academic partners?	Yes	No
2	Is there an established process of communication with stakeholders who have a vested interest in the research priority?	Yes	No
3	Have knowledge translation tools been sought out and used to support the knowledge and ideas generating process?	Yes	No
4	Have you considered a collaborative evidence review to determine what is already known and identify gaps in knowledge?	Yes	No
5	Has the academic team and non-academic partners considered whether the research questions being posed are appropriate to addressing the social problem?	Yes	No
6	Have existing research and other evidence helped to address the research priority?	Yes	No
7	Have plans been established for how any findings/evidence/outcomes produced by the research will be used?	Yes	No
8	Has the academic team discussed with non-academic partners if there is capacity for them to engage in the process of knowledge exchange?	Yes	No
9	Has consideration been given to the timescales needed?	Yes	No

How can ‘generating priorities and ideas’ be enhanced by applying IKT mechanisms and activities?

To maximise impact, the research aim, objectives and vision should be determined by the issues and needs of the community and therefore jointly developed with those directly impacted (Boger et al., 2017). Co-generation of research priorities and ideas is crucial for developing solutions that tackle the ‘wicked problems’ of the world – notably, the complex, context-oriented social issues that are difficult to resolve through a single approach. Boxes 3 and 4 offers case examples of effective IKT implementation in Research Stage 2: Generating Priorities and Ideas. Key messages from each case example are highlighted in bold.

BOX 3: Case Example 1 – Importance of Relationship Building for Knowledge Co-creation

According to Skipper and Pepler (2020), action research begins with the question of ‘how can we improve this situation?’ followed by a process of co-creating knowledge with people (Skipper & Pepler). This approach is different from conventional research approaches in which academics create the knowledge and subsequently disseminate it to knowledge users. Skipper and Pepler demonstrate through 2 co-creation projects how they worked with stakeholders with vested interest to ‘Generate Priorities and Ideas’ which helped inform their thinking and practices to improve knowledge mobilization, and the development of a novel co-creation approach to collaborative research. For example, one of the case studies involved the ‘Stoke Reads’ project which entailed a city-wide literacy network. To initiate the co-creation process, building relationality was of utmost importance. Researchers joined the literacy network, attended monthly meetings and became involved in network activities. Through this process, relationships between researchers and educators were solidified, and subsequently a memoranda of understanding was established between organisations. **It is important to note that it was the relationships between academic and non-academic partners that drove the project.** A key output derived from this way of working was the Stoke Reads Mindset Toolkit – co-created by two teachers, two speech and language therapists, two lead researchers, and two supporting researchers.

BOX 4: Case Example 2–Collaborative Evidence Synthesis for Knowledge Co-creation and Exchange

The Centre for Research on Families and Relationships (CRFR) developed an innovative resource to help address the well documented barriers for translating research into practice (Morton & Seditas, 2018). According to Morton and Seditas (2018), the CRFR facilitative tool was designed to support stakeholders who had a personal stake in the research (such as project partners and people with lived experience) to contribute to the ‘Generating Priorities and Ideas’ stage of the research. The facilitative tool consists of a series of **questions to enable stakeholders to think about what knowledge is needed and how new knowledge will help to shape policies and services relevant to their roles and everyday lives.** The tool is premised on The Knowledge Funnel (Graham et al., 2006) to support the process of filtering general ideas to specific issues by undertaking a collaborative evidence review with considerations for: (i) whether the research question(s) are appropriate to addressing the problem; (ii) how existing knowledge could help to tackle identified issues; (iii) what the plans are for using the evidence; (iv) how such plans fit with the direction and strategy of the local community; (v) what capacity was available and needed to engage in the process of evidence to action and (vi) what timescales were feasible for undertaking a collaborative evidence review. This **process of ‘Generating Priorities and Ideas’ with stakeholders through undertaking a collaborative evidence review and via team discussions were fundamental to ensuring that research would produce results with real world impact.**

References

- Barwick, M. A., Peters, J., & Boydell, K. (2009). Getting to uptake: do communities of practice support the implementation of evidence-based practice? *Journal of the Canadian Academy of Child & Adolescent Psychiatry*, 18(1), 16-29. search.ebscohost.com.libezproxy.dundee.ac.uk/login.aspx?direct=true&db=jlh&AN=105423676&site=ehost-live&scope=site
- Boger, J., Jackson, P., Mulvenna, M., Sixsmith, J., Sixsmith, A., Mihailidis, A., Kontos, P., Miller Polgar, J., Grigorovich, A., & Martin, S. (2017, Apr 7). Principles for fostering the transdisciplinary development of assistive technologies. *Disabil Rehabil Assist Technol*, 2(5), 480-490. doi.org/10.3109/17483107.2016.1151953
- Campione, E., Wampler-Kuhn, M., & Fisher, M. I. (2021, Apr). Translating Evidence Into Practice Through Knowledge Implementation. *Rehabilitation Oncology*, 39(2), 103-110. doi.org/10.1097/01.Reo.0000000000000242
- da Cruz, C. G. (2018). Community-Engaged Scholarship: Toward a Shared Understanding of Practice. *Review of Higher Education*, 41(2), 147-167. doi.org/10.1353/rhe.2018.0000
- El-Jardali, F., & Fadlallah, R. (2015, Jan). A call for a backward design to knowledge translation. *Int J Health Policy Manag*, 4(1), 1-5. doi.org/10.15171/ijhpm.2015.10
- Gagnon, M. L. (2011, Jan). Moving knowledge to action through dissemination and exchange. *Journal of Clinical Epidemiology*, 64(1), 25-31. doi.org/10.1016/j.jclinepi.2009.08.013
- Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006, Win). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13-24. doi.org/10.1002/chp.47
- Jull, J., Giles, A., & Graham, I. D. (2017, Dec). Community-based participatory research and integrated knowledge translation: advancing the co-creation of knowledge. *Implementation Science*, 12, Article 150. doi.org/10.1186/s13012-017-0696-3
- Morton, S., & Seditas, K. (2018, Feb). Evidence synthesis for knowledge exchange: balancing responsiveness and quality in providing evidence for policy and practice. *Evidence & Policy*, 14(1), 155-167. doi.org/10.1332/174426416x14779388510327
- Pollock, A., Campbell, P., Baer, G., Choo, P. L., Morris, J., & Forster, A. (2015). User involvement in a Cochrane systematic review: using structured methods to enhance the clinical relevance, usefulness and usability of a systematic review update. *Systematic Reviews*, 4(1), 1-11. doi.org/10.1186/s13643-015-0023-5
- Sixsmith, J., Fang, M. L., Grigorovich, A., Wada, M., & Kontos, P. (2021). Working Together as a Transdisciplinary Team. In *Knowledge, Innovation, and Impact* (pp. 69-76). Springer. doi.org/10.1007/978-3-030-34390-3
- Skipper, Y., & Pepler, D. J. Knowledge mobilization: Stepping into interdependent and relational space using co-creation. *Action Research*, Article 1476750320960810. doi.org/10.1177/1476750320960810

Resources

- 1 Reflection-Action – an organisation using participatory methods to drive transformative change in many ways outside of academic contexts: reflectionaction.org
- 2 Involve – a charity that uses participatory methods to influence democratic and decision-making processes in the UK: involve.org.uk
- 3 People's Knowledge – some examples of projects in which participatory approaches are pivotal: peoplesknowledge.org/projects
- 4 Stoke Reads Mindset Toolkit: stokespeaks.org/post/mindset-toolkit

Contributors and Contact Information

Academic Team

Dr Mei Lan Fang is the Project Lead and Lecturer (Assistant Professor) in the School of Health Sciences at University of Dundee, Dundee, Scotland, United Kingdom

Dr Lupin Battersby is the International Project Co-Lead and Knowledge Mobilization Officer in the Knowledge Mobilization Hub at Simon Fraser University, Burnaby, BC, Canada

Marianne Cranwell is the Lead Researcher and PhD Student in the School of Education and Social Work at University of Dundee, Dundee, Scotland, United Kingdom

Dr Heather Cassie is a Project Co-Investigator and Baxter Fellow in the School of Dentistry at University of Dundee, Dundee, Scotland, United Kingdom

Dr Alex Gardner is a Project Co-Investigator and Lecturer (Assistant Professor) in the School of Dentistry at University of Dundee, Dundee, Scotland, United Kingdom

Dr Jenna Breckenridge is the Project's Knowledge Mobilisation Expert Informant, and Lecturer (Assistant Professor) in the School of Health Sciences at University of Dundee, Dundee, Scotland, United Kingdom

Library and Learning Services Team

Moya Fox is a Project Co-Investigator and Senior Research Support Officer (Research and Resources) in the Library and Learning and Centre at the University of Dundee, Dundee, Scotland, United Kingdom

Philippa Sterlini is a Project Co-Investigator and Research Support Officer (Research and Resources) in the Library and Learning and Centre at the University of Dundee, Dundee, Scotland, United Kingdom

Dr Thomas Curtin is a Research Publications Support Officer in the Library and Learning and Centre at the University of Dundee, Dundee, Scotland, United Kingdom

Acknowledgements


We would like to acknowledge funding support from University of Dundee's Doctoral Academy and Organisational and Professional Development. We would also like to thank University of Dundee's Creative Services for the style design and layout of the knowledge briefs; and Rebecca Coatswith, University of Dundee's Research Impact Manager for her evaluation of the IKT toolkit. It is important to highlight that this open research initiative would not be possible without the School of Health Sciences and School of Dentistry's dedicated commitment towards the open research agenda by creating the role of Open Research Champions. We also thank Dawn Adams, Assistant Librarian (Fife Campus), Service Delivery, Library and Learning and Culture and Information. Dawn helped conduct the systematic search of the literature which helped to inform the development of the toolkit. Finally, we would like to thank Simon Fraser University's Knowledge Mobilization Hub for their partnership and expertise.

Further information

For more information about the IKT Toolkit and University of Dundee's Open Research Working Group please contact Dr Mei Fang at mlfang@dundee.ac.uk

Suggested Citation: Fang, M.L., Battersby, L., Cranwell, M., Cassie, H., Fox, M., Sterlini, P., Breckenridge, J., Gardner, A., & Curtin, T. (2022). Integrated Knowledge Translation for Open Research. IKT Research Stage 2: Generating Priorities and Ideas. University of Dundee: Dundee, United Kingdom.

DOI: doi.org/10.20933/100001249

Creative Commons License: This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License 





School of Health Sciences
University of Dundee

