University of Dundee

IKT for Research Stage 2

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An Integrated Knowledge Translation
Toolkit for Open Research

IKT for Research Stage 2: Generating Priorities and Ideas

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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.**

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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**

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Further information

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Notes and reflections