University of Dundee

IKT for Research Stage 3

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An Integrated Knowledge Translation
Toolkit for Open Research

IKT for Research Stage 3: Proposal Development

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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 3: Proposal Development.

Can a wide range of stakeholders be involved and contribute to the proposal development process? Why is this important as part of IKT research?

Stage 3 of IKT informed research is about developing proposals with diverse stakeholders, particularly those situated outside of academia who are directly impacted by the research process and outcomes. Enhanced collaboration between the academic team and non-academic partners such as people who live and work in the community has been identified as crucial for ensuring that research results have tangible social and health impact (Henderson et al., 2013). During project inception or proposal development, stakeholder involvement is sometimes overlooked. Researchers can experience multiple challenges to stakeholder collaboration at this research stage. These barriers include: short time frames between funding announcements and deadlines, limited resources to ensure meaningful engagement, and delays in confirmation of funding to offset stakeholder costs (Green & Mercer, 2001). Boxes 1 and 2 present key principles and a checklist for how to do effective IKT in Research Stage 3: Proposal Development.

BOX 1: IKT Principles for Research Stage 3 – Proposal Development

1   Consider the balance of power between the academic team and non-academic partners when developing the proposal: Establish the ways in which different ideas, knowledge and expertise can be valued, respected and ultimately integrated into the proposal (Skipper & Pepler 2021).

2   Find common ground, establish an academic-practice partnership, and together clarify theoretical research assumptions and flesh out ethical challenges and risks (Jull et al., 2017).

3   Research aims, objectives and questions are foundational to any research and should be developed with non-academic partners ensure these are aligned with local priorities and contexts (Dobbins et al., 2007).

4   Engage in priority setting exercises (i.e., to establish value, usefulness, and appropriateness of the research), and scan for existing research evidence with non-academic partners to shape the proposal background, and rationale (El-Jardali & Fadlallah, 2015; Graham et al., 2006).

5   Plan ahead for common constraints (e.g., short timeframes and limited funding) and build in enough time to engage stakeholders in the proposal development phase. Planning activities can include organising weekly grant development meetings, assigning researchers to liaise regularly with non-academic partners, starting with plain language versions to elicit meaningful feedback and budgeting appropriately for non-academic partner involvement (Henderson et al., 2013). Findings from the collaborative evidence review can be used to inform the co-design of the research strategy (Campione et al., 2021).

6   Solely obtaining letters of support from stakeholders is unlikely to result in the level of collaboration necessary to strike the academic-practice-community contribution balance (i.e., input, effort, knowledge) for ensuring a successful funding outcome (Frazier et al., 2008).

7   Plan for and engage in a multi-step process of engaging a broad cross-section of stakeholders (i.e., consultations, workshops) during the grant application development phase in order to include a range of voices and gain useful input from different perspectives (Henderson et al., 2013).

8   Co-design the research methodology, making certain that data collection and analysis methods are feasible within local contexts, and accessible for participation by non-academic partners (Campione et al., 2021).

BOX 2: IKT Checklist for Research Stage 3 – Proposal Development

		Yes	No
1	Have the ideas, knowledge and expertise of both academic team and non-academic partners been valued, respected and used in the proposal?	Yes	No
2	Is there a process in place to ensure that different ideas, knowledge and expertise are integrated into the proposal?	Yes	No
3	Have you negotiated joint ground rules or rules of engagement for an equitable academic-practice-community partnership?	Yes	No
4	Have you clarified any potential ethical issues, risk of the research, or underlying assumptions of the research with non-academic partners?	Yes	No
5	Have the research aims, objectives and questions been developed with input from non-academic partners?	Yes	No
6	Have you established priorities of the research with non-academic partners?	Yes	No
7	Is there a process or plan in place to undertake consultation events or workshops for engaging different stakeholders in the proposal development to ensure that the research addresses local issues?	Yes	No
8	Have you sought input from non-academic partners to ensure that the research methods are feasible and appropriate?	Yes	No

What are some ways to co-develop proposals with a broad range of stakeholders?

There is evidence to suggest that using IKT informed community-engaged approaches and methods can help to acquire stakeholder input for the proposal development and that doing so can help to not only ensure a successful funding outcome, but in the long run, generate more impactful, sustainable research (Polk, 2015). Given that developing proposals for submission to a funding agency can be a considerable process, it is necessary to plan for and develop stakeholder engagement activities from the outset with feasibility, practicality and people's time considerations in mind. Boxes 3 and 4 offer case examples of effective IKT implementation in Research Stage 3: Proposal Development. Key messages from each case example are highlighted in bold.

BOX 3: Case Example 1 – Integrated Knowledge Translation (IKT) and Grant Development

Henderson and colleagues (2013) describe developing a grant application by undertaking a broad cross-sector stakeholder engagement consultation. The process occurred as part of their IKT plan created at the outset of their research initiative. The aim was to **develop a research programme that prioritised the engagement of knowledge users, in particular, non-academic stakeholders in the grant development, which would likely enhance relevance, impact and utility of the research for people who live and work in the community**. The focus of the work was to address the research-practice gap for understanding psychopathology; and to develop more inclusive, holistic and accessible ways in providing evidence-based information to clinicians and policy-makers on how to optimise, deliver, restructure, and fund mental health services. To **involve a broad range of diverse stakeholders across sectors, a two-phase multi-step consultation** was implemented. In Phase 1, a stakeholder consultation group was assembled. In phase 2, a survey was circulated to 333 cross-sectoral youth-serving organisations in Ontario, Canada including family and consumer organisations. The survey topics sought information on: knowledge gathering, the research agenda, and research collaboration preferences that helped to shape the grant proposal aligned with the perspectives and needs of those who live and work in the community. The survey achieved a response rate of 62%. For the grant proposal, the researchers were able to generate important input from various stakeholders on project goals, involvement, the research and opportunities for knowledge translation. **This case example shows that despite timeline constraints and feasibility challenges, it is possible to engage knowledge users in developing grant proposals.**

BOX 4: Case Example 2 – Strategic Needs Analysis at Project Inception

Smith and Love (2004) highlight the importance of stakeholder involvement in the early stages of project development as a part of the predesign and activities development process, in particular for the proposal development phase. This case example focuses on two techniques to engage stakeholders during the project building / proposal development stage in the construction industry. To provide context, in 2004, the Australian and UK construction industries were under pressure to understand how the construction industry can be better structured to meet the challenges posed by market driven economies. This required **consultation with a broad range of clients at the project development phase to better understand client strategies, and organisational needs, issues and requirements**. To do this, a predesign workshop was hosted. The goal was to develop a 'client briefing' which involved three stages: (1) stating the need; (2) confirming the need; and (3) developing a functional brief. To facilitate client briefing, the second step was to conduct a **strategic needs analysis, which is an approach that has been used to undertake a needs assessment at the project development phase**. In this case, they held a 5-stage workshop: (1) collecting information to understand the nature of the problem; (2) discussing and analyzing the problem; (3) developing ways to solve the problem; (4) deciding on a way forward; and (5) making recommendations to implement the decisions and having it reflected in the functional brief, or in the case of grant applications, integrating these into the grant or project proposal.

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Resources

1 Research Proposal Toolkit – Design Tools for Developing Multi-stakeholder Research Proposals: repository.
   library.northeastern.edu/files/neu:m044c6541/fulltext.pdf

2 A brief guide to public involvement in funding applications.
   nihr.ac.uk/documents/a-brief-guide-to-public-involvement-in-funding-applications/24162

3 A brief guide to public involvement in funding applications.
   nihr.ac.uk/documents/a-brief-guide-to-public-involvement-in-funding-applications/24162

4 ORION Open Science – encouraging co-creation through a funding call. orion-openscience.eu/
   publications/inspiring-stories/202105/encouraging-co-creation-through-funding-call

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Further information

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Notes and reflections