

LINC: Knowledge Mobilization Framework for Knowledge Brokers

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Abstract: Knowledge brokers play an essential role in bridging research and practice and mobilizing knowledge. Yet, literature offers little guidance and few examples for people and organizations engaging with educational systems in this capacity. Drawing on literature and our extensive knowledge brokerage experience, we address this gap and introduce the Learn, Illuminate, Nucleate, and Communicate (LINC) knowledge mobilization framework for knowledge brokers. We explain framework components and give examples from our project.

Knowledge mobilization

In light of the complex problems faced by our global society, the calls to strengthen bonds between educational research and practice are being sounded with greater frequency and urgency (Farley-Ripple et al., 2023). Such “efforts to understand and strengthen the relationship between research and practice” are defined as *knowledge mobilization* (KMb; Levin, 2013, p.2). One of the main impediments to effective KMb and translation of research into practice is the gap between researchers who produce research and practitioners who are supposed to use it (Ward et al., 2009). That gap is often filled and KMb is carried out by *knowledge mediators* or *knowledge brokers*—people and organizations who act as intermediaries between knowledge producers and users and translate knowledge in various ways (Farley-Ripple et al., 2023). However, despite the general consensus about the critical importance of KMb, there is still a lack of transparency and reporting of the actual *knowledge mediation* processes, strategies, and contexts (Ward et al., 2009; Zaim et al., 2024).

In this conceptual paper, we aim to address this gap and propose a KMb framework for knowledge brokers. The proposed framework draws on current knowledge in the field and our own extensive experience in knowledge mediation while acknowledging the unique and complex role knowledge brokers play in enabling multidirectional knowledge flows between communities, practitioners, and researchers. We provide examples from our project “Mapping, clarifying, and communicating key ideas about collaborative learning” (MC2) that brought together practitioners and researchers to determine which topics from computer-supported collaborative learning literature matter for translation into K-12 practice (Dragnić-Cindrić & Fusco, 2023; 2024). As such, this paper connects to this year’s ICLS theme by answering its call for work that honors the expertise of teachers and researchers and elucidates ways to build partnerships that center teachers’ needs and solve problems of practice.

Conceptual framework

Our conceptual framework is based upon Levin’s (2013) KMb framework and Bronfenbrenner’s (1993/1994) socio-ecological model (SEM). Levin’s framework includes three domains of the KMb enterprise: knowledge production (i.e., research), knowledge use (i.e., practice), and knowledge mediation, which connects them. Levin emphasized the social, multidirectional nature of KMb and the dynamic character of its participants, who may work in more than one domain and move between them (Torres, 2022). Because of this emphasis on the permeability of the domain boundaries and their intersecting and overlapping nature, Levin’s framework offered unique advantages for our work over other KMb frameworks (e.g., Gough et al., 2011; Graham et al., 2006).

The SEM was introduced as a model for human development (see Bronfenbrenner, 1993/1994). It places the learner at the center of five nested spheres of influence: microsystems, mesosystems, exosystems, macrosystems, and chronosystems (Kilanowski, 2017). In the proposed LINC framework, we used it to support our thinking about the ecological nature of KMb work (Farley-Ripple et al., 2023) and the strong influence of socio-ecological factors on what practitioners perceive as valuable for translation from research into practice.

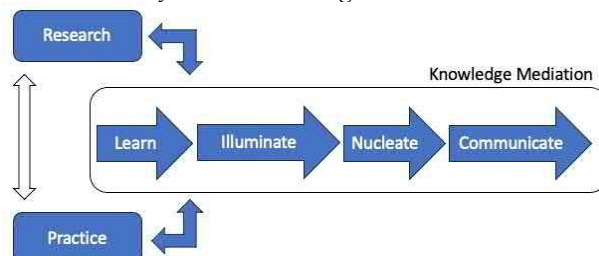
Process and methods

We began developing the framework by reviewing the KMb literature for key lessons about KMb processes, their actors, and the existing frameworks (e.g., Ward, 2017). We focused on aspects relevant to knowledge brokers and knowledge mediation work, which includes finding, interpreting, and evaluating evidence, facilitating engagements between participants, identifying salient practice-based questions, and building capacity for knowledge use (Ward et al., 2009). Next, we extracted lessons across our KMb projects by identifying overarching themes related to the prevailing knowledge mediation processes and activities (Braun & Clarke, 2006). We integrated practices extracted from literature and empirical-based lessons in our proposed framework.

The proposed LINC framework

The resulting KMb framework for knowledge brokers is a process model—it describes steps or strategies to translate knowledge into practice and offers practical guidance for KMb planning and execution (Nelson, 2015; Ziam et al., 2024). We conceptualized it with four broad stages spanning the knowledge mediation function: Learn, Illuminate, Nucleate, and Communicate (LINC; Figure 1).

Figure 1
The Preliminary LINC Knowledge Mobilization Framework for Knowledge Brokers



Learn. Engaging in multi-level learning at the project start is essential for the initial understanding of problems and needs of practice, the project's scope and purpose, relevant research literature, relevant expertise distributed across practitioners and researchers, and salient aspects of contexts in which they work. This step also requires evaluating knowledge broker's expertise and its alignment with the emerging interest area. In MC2 project, we engaged in early conversations with practitioners and researchers to learn what instruction and learning looked like in their contexts and what they wished they could extract from research. They expressed concerns about power imbalances between researchers and practitioners and how they might shape decisions on what to translate from research into practice. These insights shaped our approach in the next stage.

Illuminate. In this stage, knowledge brokers and project participants build in-depth knowledge about relevant parts of literature, evaluate evidence, illuminate participants' opinions about what is valuable for translation from research into practice, and the internal and socio-environmental factors that shaped their views. In our project, to ensure a power balance between practitioners and researchers, we conducted a modified Delphi method study to ensure participants' anonymity while eliciting their expert opinions (see Dragnić-Cindrić & Fusco, 2024). We found out about the serious societal pressures STEM teachers face that shape how they implement collaborative learning and which research topics are useful to them in their contexts.

Nucleate. Taking on a specific research topic for KMb requires forming a nucleus of people interested in it and vital evidence-supported ideas relevant for practice. Knowledge brokers' expertise in facilitating engagements to build relationships is key in this phase. We formed small practitioner/researcher teams based on their interests and engaged them in sessions to jointly ideate and decide what knowledge matters, for whom, and why. Initial ideas about how to communicate the knowledge emerged in this stage and were refined in the next.

Communicate. In the LINC framework, communication encompasses multidirectional knowledge exchange between practitioners, researchers, and knowledge brokers. It involves deconstructing the chosen topic from the research literature, transforming it for use in practice, and the external dissemination of the final products, including implementation and evaluation. Deciding how to communicate is the key aspect of this phase. It involves identifying the intended audience and its existing expertise levels, and converging on precise language that captures both practitioners' and researchers' perspectives and voices. In our MC2 project, where the teacher leaders (i.e., coaches) were the intended audience, the practitioner/researcher teams decided they wanted primers to follow a specific format, with sections on topic highlights, research background, teacher recommendations, and resources. To ensure that we captured practitioners' voices, practitioners either co-wrote with researchers or shared ideas through discussion and reviewed what researchers wrote. Before dissemination, practitioners and researchers who did not create the primer reviewed it for disciplinary content and usefulness.

Scholarly significance

To our knowledge, the proposed LINC Framework is the first KMb framework for knowledge brokers in learning sciences. As such, it provides much-needed guidance and process steps educational knowledge brokers need to take as part of the knowledge mediation function, as well as relevant conceptual frameworks that bear on their work. As knowledge brokers and learning scientists, we hope the LINC framework will lead to a productive peer dialogue at the annual meeting that will help us improve it. This framework is a first step toward developing a more comprehensive set of guidelines for knowledge mediators and identifying core competencies and capacities that can support them in carrying out their KMb mission.

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