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University of Calgary, Canada
Anita Caduff,
University of California, San Diego,
United States

*CORRESPONDENCE

Joel R. Malin
✉ malinj@miamioh.edu

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Equity-centered knowledge brokering: taking stock of challenges, strategies, and possibilities

Joel R. Malin^{1*} and Samantha Shewchuk²

¹Department of Educational Leadership, Miami University, Oxford, OH, United States, ²Research Associate III, University of Delaware, Newark, DE, United States

The pursuit of equity is a cornerstone of progress across diverse fields. Emerging literature across several fields has begun to focus on how knowledge brokers can take an equity-centered approach. This narrative synthesis draws upon that literature to explore what it means to be an equity-centered knowledge broker and to consider the challenges and possibilities inherent in that role. It identifies critical equity issues/dimensions vis-à-vis five main brokering strategies. From this review, the strategy *facilitating relationships* emerges as a first-order strategy for equity-centered brokers, with impacts stretching into all other areas. Therefore, equity-centered brokers should attend heavily to developing authentic, trusting relationships, value diversity, and elevate multiple forms of knowledge. This article also highlights some challenges and ongoing tensions relevant to equity-centered brokering. Relational, equity-centered knowledge brokering is time- and resource-intensive. Likewise, ongoing debates center on the merit of assuming a neutral brokering posture. Overall, it is hoped this article will benefit knowledge brokers, those with whom they partner, and those scholars who seek to understand and support them.

KEYWORDS

knowledge brokering, knowledge mobilization, narrative synthesis, ethics, equity, social justice, relationships, power

Introduction

In today's rapidly evolving world, pursuing equity is a cornerstone of progress across diverse fields. Whether in healthcare, education, or environmental conservation, the imperative to foster fairness and inclusion resonates profoundly. Advancing equity aligns with moral imperatives and promotes more resilient, innovative, and prosperous societies. However, achieving equity is complex and demanding, requiring concerted efforts to dismantle systemic barriers and address deep-rooted disparities. Research evidence can be potent in this endeavor, offering insights, evidence, and solutions to inform equitable policies and practices.¹ Research empowers stakeholders to make informed decisions and drive meaningful change by examining patterns, identifying gaps, and evaluating interventions. From uncovering the drivers of inequality to assessing the impacts of

1 We understand research evidence broadly as "the result of systematic investigation, regardless of whether or not it emanates from a research setting" (Boaz and Davies, 2019, p. 5). It is connected with one of three main knowledge forms (episteme); in our view robust and useful knowledge emerges from processes wherein research evidence is integrated with technical knowledge (techne) and practical wisdom (phronesis; see Ward, 2017; Malin et al., in press).

interventions, research can support joint efforts to achieve more equitable outcomes.²

However, the journey from research to action is not straightforward. Bridging the gap between knowledge generation and mobilization requires the work of knowledge brokers, intermediaries, and boundary spanners (“BIBs³,” see Neal et al., 2023), who engage in connective work to ensure findings translate into tangible policies and practices. Yet, BIBs’ work is challenging (Rycroft-Smith, 2022; Conklin et al., 2013). In specific contexts—for instance, those featuring distrust between communities, contestation over what constitutes robust knowledge, and substantial political polarization—BIBs’ challenges only compound, and fraught choices, calculations, and compromises can become unavoidable. For example, when dealing with contested topics and ideas, BIBs have sometimes felt the need to tread carefully and strategically (Pielke Jr, 2007; Kislov et al., 2017). They have done so in varied ways, such as forging alliances, moderating their language, and/or sidestepping fraught topics and focusing on more “feel-good” topics. The latter has often manifested in identifying individual-level problems while failing to grapple with more contested structural issues or root causes of inequity (Malin and Lubienski, 2022; Malin and Rind, 2022; Hanauer, 2019).

Emerging literature—in areas such as education, public administration, health, and conservation/environment—has begun focusing on how BIBs can take an equity-centered approach. Given the many choices BIBs must make within the context of their work and their ethical and material implications, we believe it is important to draw from that burgeoning literature to identify critical issues, considerations, and guiding principles.

Aim of article

This article accordingly explores what it means to be an equity-centered BIB, considering the inherent challenges and possibilities. We recognize BIBs operate within larger ecosystems and use various strategies to address diverse aims, which leads to inevitable messiness and ambiguities. Nevertheless, surfacing the key issues and considerations at play will benefit BIBs, those who study them, and those with whom they partner and seek to influence.

Organization of article

The remainder of this article is organized as follows. The next section defines BIBs and the conceptual resources used to frame this article. This section also defines equity and equity-centeredness and shares assumptions and caveats that are carried forward. Then, the methods undertaken to complete the analysis are described. Afterward, the article’s main section outlines key equity problems, considerations, and choices facing BIBs vis-à-vis

their main strategies. The article concludes by reflecting on cross-cutting themes, considering implications for BIBs and scholars.

Definitions and conceptual framing

This section provides definitions and conceptual framing for the article. We conceptualize BIBs as actors embedded within larger systems and promoting evidence use through five main strategies: *facilitating relationships*, *disseminating evidence*, *finding alignment*, *capacity building*, and *advising decisions* (Neal et al., 2023). BIBs can be understood as strategic actors who—to be effective—must be attuned and responsive to social and political systems. Further, equity-centered brokers must address issues of distribution, recognition, and representation (Fraser, 2008) as they carry out these strategies.

BIBs are actors embedded within larger systems who engage in five core strategies to encourage evidence use

Individuals or organizations with connections to research, practice, or policymaking are crucial for bolstering evidence use. Frequently referred to interchangeably as brokers, intermediaries, or boundary spanners (BIBs), these actors occupy network positions within larger systems that enable them to connect with otherwise separated people and groups (Burt, 2007) to support exchanging information, resources, or perspectives.

BIBs are found in all parts of larger systems. In education, for instance, some teachers routinely share and integrate knowledge within their schools (e.g., see Farley-Ripple and Grajeda, 2019; Malin et al., 2020; Malin and Brown, 2020; Malin, 2020). Others regularly bring together researchers and policymakers to discuss issues and exchange knowledge (Bogensneider and Corbett, 2011) while still more focus primarily on influencing broader cultural values or ideas or promoting national or international reform (Steiner-Khamsi et al., 2024a,b). The education space indeed includes a vast and expanding array of BIBs (Douglass et al., 2018; Lubienski et al., 2022; Steiner-Khamsi et al., 2024a,b), and there has been a heightened focus on knowledge brokering as a means of bringing about evidence-informed policy and practice (Cooper and Shewchuk, 2015; Rycroft-Smith, 2022).

BIBs engage in a range of strategies to encourage evidence use. These strategies are central to their work and thus require attention and definition (MacKillop et al., 2020; Neal et al., 2023). Having conducted a multi-sector review,⁴ Neal et al. (2023) identified five main strategies. *Facilitating relationships* involves activities to foster the exchange of information and knowledge among different groups, whether to forge new connections or strengthen existing ones. *Disseminating evidence* entails translating

² We also recognize that issues around research production, mobilization, and use can guide us toward non-equitable outcomes, a possibility we consider as we seek to unpack what it means to engage in brokering strategies in equity-centered ways.

³ In the remainder of this article, we use the terms BIB and broker interchangeably.

⁴ Neal et al.’s review built upon prior work that sought to identify BIBs’ strategies. For example, they empirically expanded upon Ward et al.’s (2009) identification of three main strategies (knowledge management; linkage and exchange; and capacity building) while drawing from and across sector-specific literature such as Cooper’s (2014) seminal scholarship in education.

and communicating research findings to various audiences through platforms, syntheses, or summaries. This process can involve both one-way and two-way flows of information. *Finding alignment* requires collaboration with knowledge producers and users to address relevant issues, identify problems, and evaluate potential solutions. BIBs often strive to establish common ground among stakeholders by facilitating dialogue or promoting collaborative knowledge creation. *Capacity building* focuses on enhancing the skills and capabilities of individuals to promote or encourage research use. For example, this may involve training practitioners or policymakers in critically interpreting research evidence or improving researchers' ability to communicate their findings to a broader audience. Finally, *advising decisions* involves directly applying research evidence to inform decision-making. Boundary spanners may explain choices, present trade-offs, or advocate for specific interventions.

We accordingly bring to our analysis the understanding that BIBs are strategic actors whose activities and decisions should be understood contextually—e.g., in relation to the communities that are being connected and to brokers' placement within systems.

The equity dimensions of BIBs' contextualized work

As described above, BIBs play a crucial role in facilitating the exchange of information, resources, and expertise between different groups using various strategies, and this work can occur at different levels. This section builds on this conceptualization of BIBs by focusing on the extent to which BIBs embed equity in their work. However, to do so, we first define the term equity.

Equity is a multidimensional concept with diverse interpretations depending on the context and subject of study. This complexity is evident in recent systematic reviews of equity in fields such as environmental conservation (Friedman et al., 2018), healthcare (Lane et al., 2017), and education (Ling and Nasri, 2019). Regardless of the field, discussions of equity often revolve around outcomes. In other words, achieving equity in outcomes means ensuring that individuals or groups, regardless of their background or circumstances, have access to and experience similar levels of success, wellbeing, and opportunities. Scholars examining equity contend that achieving equitable outcomes necessitates engaging in equitable processes and practices (Friedman et al., 2018; Lane et al., 2017; Ling and Nasri, 2019). This involves engaging in processes and practices that (a) promote fair and just **distribution** of resources and opportunities among individuals, (b) **recognize** the value of individual and group-based differences, and ensure everyone is treated with respect and humanity, and (c) prioritize the fair and equitable **representation** of individuals, communities, and groups in decision-making and social/interactive processes (e.g., ensuring all voices are heard, respected, and given appropriate platforms for expression and participation). For this article, then, being *equity-centered* means consistently/unwaveringly focusing on these equity dimensions within ones' work. It accordingly also entails work to **share power** in decision-making processes

and fairly distribute resources and opportunities (Baldrige et al., 2024).

The extent to which BIBs' work is equity-centered varies depending on various factors, including their values, priorities, and the contexts in which they operate. On one hand, BIBs have the potential to advance equity by ensuring that diverse perspectives, voices, and evidence are included in policy discussions and decision-making processes. They can actively seek out and elevate the voices of marginalized or underrepresented communities, facilitate inclusive dialogue, and advocate for policies and practices that address systemic inequalities. Additionally, equity-centered BIBs may prioritize building relationships and collaborations with historically excluded or marginalized communities, working to understand their needs, priorities, and experiences, and incorporating this knowledge into the research and information they share.

However, it is also important to acknowledge that BIBs may face challenges centering equity. For example, they may encounter institutional or systemic barriers that limit their ability to prioritize equity, such as funding constraints, organizational mandates, or political pressures. In addition, they may need to navigate power dynamics and competing interests among stakeholders, making it challenging to ensure that equity considerations are given sufficient attention. Furthermore, BIBs may bring their own biases, assumptions, and limitations to their work, influencing how they engage with and represent different perspectives.

Methodology

We carried forward this framing and sought to address the following two main questions:

1. What "BIB challenges" are found in the research literature?
2. What "BIB actions/strategies" are found in the research literature?

We reviewed the available literature on BIBs to understand better these actors' roles in promoting equity by searching Google Scholar in March of 2024. We searched for *knowledge broker*, *intermediary*, and *boundary span* to capture literature describing these individuals and organizations. We also included the terms *ethic*, *equit*, *fair*, *politic*, and *power* within our searches to capture publications sensitive to the different aspects of equity that BIBs may attend. Over 700,000 results were identified using these search parameters. Due to the large number of hits, we sorted the results by relevance. We reviewed the titles and abstracts of every article on each Google Scholar page until we found no more relevant articles (up to page 9). To be included in the review, the article needed to discuss both brokering and equity in some form (not all articles addressed it directly—some included more indirect discussions). For example, articles that did not discuss brokering, and/or articles that discussed brokering but did not include any content that related to equity dimension/s were excluded. We did not limit our search to a particular field. We took this approach to ensure our conceptualization of equity in BIB work is robust and multifaceted. As such, we included articles from organizational studies, sustainability and environmental studies, education, public policy and governance, health sciences, and community-based

research. We also supplemented this search by adding a handful of articles we knew to be germane, given our activities in these areas. In total, 57 articles were uncovered using this approach.

The articles were uploaded in NVivo (qualitative coding software). We read each article and independently coded them in relation to the 5 BIB strategies (capacity building, dissemination, exchange, facilitation, and finding alignment). Afterward, we met to discuss each article and how we coded them. Disagreements about coding were resolved through consensus; in this study, “consensus” meant talking through these disagreements until both researchers agreed a particular code was appropriate, and a change was made to our master file. Once we agreed on what should be coded to each strategy, we read through the excerpts belonging to each strategy to identify themes. Using this study’s research questions as a guide, we next coded excerpts regarding whether they identified: *problems or challenges* BIBs face when engaging in the strategy and the *actions* BIBs take to engage in the strategy. The excerpts for each strategy were then coded for whether they were a problem/challenge or action. Afterward, we further disaggregated the data by generating codes for uncovered problems/challenges and actions.

Given time and resource limitations and the diffuseness of the field, this is not a fully comprehensive review of available literature; we have likely omitted some relevant articles on the topic. Nevertheless, we aimed to reach conceptual saturation to produce a narrative account of equity-centered brokering. Following Corbin and Strauss (2014, p. 263), we sought to work up to the point where “categories are well-developed” and “further data gathering and analysis add little new to the conceptualization.” Still, given that this is not a fully exhaustive review, we suspect we have failed to fully achieve such saturation. Our intention, rather, was to provide individuals involved/interested in the equity dimensions of BIB work with a broader understanding of the existing literature.

Equity-centered knowledge brokering considerations by strategy: narrative synthesis

To mitigate equity-related challenges and ensure that BIBs’ efforts are equity-centered, BIBs must critically reflect on their practice and actively engage in ongoing learning. This section surfaces and discusses equity-relevant choices and aspects of BIB work. We break this down into subsections by strategy and then conclude by extracting a few emergent dimensions that transcend these strategies. Table 1 also provides a summary of key content addressed in the remainder of this section, by strategy.

Facilitating relationships

Facilitating relationships is central to BIBs’ work. Broadly, BIBs engage in two types of relational work – leveraging existing relationships and building new ones (Neal et al., 2023; Yanovitzky and Weber, 2019; Lomas, 2007). Leveraging existing relationships involves utilizing connections the BIB already has within their network to achieve sought-after benefits. Building new

relationships involves seeking out and connecting with additional individuals or entities.

Leveraging existing relationships is often useful—for one, it can be efficient to latch onto something already existing vs. building something new. Indeed, BIBs are sometimes wise to partner with others with similar goals or who already have robust relationships with a particular community (Caduff et al., 2023). For example, such partnerships can facilitate broader knowledge dissemination (Opstoel et al., 2024; see **Dissemination**). Yet, bringing an equity-centered perspective necessitates carefully considering the network composition and participants—with a critical eye to understand who is and is not being included within these existing networks (**representational equity**; Allan and Phillipson, 2017; Yosso, 2005).

BIBs also frequently focus on *building new relationships*; this is important work, even if it is also challenging and time-intensive. Brokers regularly and often intentionally interact with and seek to forge relationships with people holding distinct perspectives and priorities (**representational equity**; Mosher et al., 2014); such differences stem from various factors, such as distinct lived experiences (including those shaped by systems of privilege and oppression; Chávez, 2005; Goodrich et al., 2020; Gutiérrez and Jurow, 2016) and distinct positions and roles in broader systems. Some also may have experienced harm (or benefits) in similar situations, projects, and contexts. For example, members of communities of color who are invited to participate in community-based research might have previously been harmed by such work—e.g., researchers who made racist assumptions about their communities, superficially or tokenistically sought their “participation” but ignored or devalued their input, and/or conducted research that chronicled disparate outcomes but failed to grapple with root causes (Denner et al., 2019; Henderson and Laman, 2020; Sullivan et al., 2001). Such negative experiences, in turn, complicate present-day relationships, impairing the development of trust and the ability to exchange/integrate knowledge, form plans, etc. (see also: **Finding Alignment**).

Certain principles, attributes, and considerations addressed in emerging literature can guide equity-centered brokers in their relational work. Centrally, BIBs’ ability to forge relationships across differences hinges on their values and commitments and how they enact them. BIBs should *authentically value* the people they interact with, their identities and cultures, and the knowledge and assets they bring (**recognitional equity**; Fricker, 2007; Vakil et al., 2016). BIBs must honor and seek to learn from different relational partners’ experiences and expertise (Wallerstein and Duran, 2006). BIBs should understand that some persons, by “some feature of their social identity” (Fricker, 2007, p. 28), have disproportionately been in situations where their knowledge and capacities have been discounted. However, these people are uniquely positioned to identify equity issues, social needs, and potential solutions (i.e., they possess *epistemic privilege*: see Moya, 2002, p. 479; **recognitional equity and distributional equity**). However, such persons might sometimes initially be wary of new relationships, especially with people from different communities or identities (racialized and politicized trust/mistrust: see Vakil et al., 2016). Over time, robust and mutually beneficial relationships can develop.

Vakil et al. (2016) further suggest that “establishing trust with community partners, especially in communities that serve

TABLE 1 Knowledge mobilization strategy, definition, central challenges, and recommended actions (selected), with connections to equity dimensions.

Knowledge mobilization strategy	Definition	Central challenges	Recommended actions (selected), with connections to equity dimensions
Facilitating relationships	Activities to foster the exchange of information and knowledge among different groups, whether to forge new connections or strengthen existing ones.	<ul style="list-style-type: none"> • Time- and other resource-intensivity of relational work • Existing networks may be non-inclusive • Trust may be impaired based on prior harms • Relationships may be superficial and/or disempowering 	<ul style="list-style-type: none"> • Authentically value diverse people, identities, cultures, knowledges (<i>representational and recognitional equity</i>) • Elevate epistemic privilege (<i>recognitional equity</i>) • Acknowledge (and seek to rectify) power and resource disparities (<i>distributional equity</i>) • Combat stereotypes and other forms of oppression (<i>recognitional equity</i>) • Empower relational partners to shape development of agendas and goals, at minimum (<i>distributional equity</i>)
Finding alignment	Requires collaboration with knowledge producers and users to address relevant issues, identify problems, and evaluate potential solutions. BIBs often strive to establish common ground among stakeholders by facilitating dialogue or promoting collaborative knowledge creation.	<ul style="list-style-type: none"> • Time- and other resource-intensivity of alignment work • Binary frameworks can prevent nuanced understandings of complex issues • Existing power dynamics and differentials can prevent equitable exchange • Organizations and incentives can sometimes constrain meaningful alignment work • Attention toward multiple system levels may be necessary, even if the main focus is at one level (e.g., a school) 	<ul style="list-style-type: none"> • Foster active engagement and collaboration of all relevant parties (<i>representational equity</i>) • Communicate transparently, including about underlying assumptions • Build in opportunities for feedback and refinement • Alter traditional power dynamics and be willing to amplify certain knowledges and concerns (<i>distributional equity, recognitional equity</i>) • Cultivate alignment at multiple system levels • Foster reciprocal accountability and responsibility (<i>recognitional equity, representational equity</i>)
Advising decisions	Directly applying research evidence to inform decision-making. Boundary spanners may explain choices, present trade-offs, or advocate for specific interventions.	<ul style="list-style-type: none"> • It is difficult to give useful advice outside meaningful, substantive relationships • Advice-giving requires trust and deep understanding • There are tensions between whether BIBs should focus on informing/advising vs. advocating/prescribing • Research does not lend itself to “neutral” advice-giving • Advocacy may be associated with temptations to stretch findings or cherry-pick evidence • Advice-giving that is insensitive to context may be harmful 	<ul style="list-style-type: none"> • Open, multi-directional communication and trust are preconditions to successful advice-giving (<i>recognitional equity</i>) • First, engage in relational work to understand and respond to genuine needs (<i>recognitional equity</i>) • Call on others as needed; serve as a matchmaker (<i>representational equity</i>) • Tease apart means and ends; work toward just ends (<i>distributional equity</i>) • Use power/authority to work against inequity (<i>distributional equity</i>) • Seek also to receive advice, particularly from those who are most impacted by the work that is ongoing (<i>representational and recognitional equity</i>)
Capacity building	Focuses on enhancing the skills and capabilities of individuals to promote or encourage research use.	<ul style="list-style-type: none"> • Problematic assumptions can be tied to efforts to build capacity • Capacity building efforts traditionally have been delivered in top-down manner • Such efforts typically fail to build internal commitment and agency and thus are ineffective • Capacity building efforts are often generic in nature and not tailored to particular roles, contexts, goals, and needs 	<ul style="list-style-type: none"> • Create opportunities for open dialogue, active participation, where constituents can collaboratively identify needs (<i>representational and recognitional equity</i>) • Tailor capacity-building effort to specific roles and needs, and provide equal access to resources (<i>distributional equity</i>) • Acknowledge and celebrate the unique strengths, experiences, and perspectives each individual brings to the learning environment (<i>representational and recognitional equity</i>) • Approach capacity building in systemic, multi-level manner and seek to establish collaborative partnerships with external stakeholders, for effectiveness and sustainability (<i>representational equity</i>)
Dissemination	Translating and communicating research findings to various audiences through platforms, syntheses, or summaries. This process can involve both one-way and two-way flows of information.	<ul style="list-style-type: none"> • Often, dissemination has been pursued in one-way manner, outside of meaningful relational processes • Absent participatory processes, products/information being shared often may not be relevant or responsive to particular audience desires and needs • Knowledge may be shared using insensitive or deficit-laden language • Some equity topics are discursively evaded, which is an expression of power • Knowledge sharing sometimes involves overstatement/inflation of evidence 	<ul style="list-style-type: none"> • Embed dissemination in relational processes (<i>representational and recognitional equity</i>) • Work with target audience to develop products and processes in service of knowledge mobilization (<i>recognitional and representational equity</i>) • Communicate in a manner that is consistent with and does not assault people’s values (<i>recognitional equity</i>) • Ensure that knowledge products are accessible along multiple dimensions (<i>distributional equity</i>) • Leverage power and privilege to directly discuss and not avoid communicating regarding equity topics (<i>distributional equity</i>)

students from non-dominant groups, requires not only a personal working relationship but also a political or racial solidarity” (p. 199). About this, [Gutierrez and Lewis \(2005\)](#) note how naming differences and acknowledging power and resource disparities can be the first critical steps in building trust ([Gutierrez and Lewis, 2005](#); **distributional equity**). If BIBs act this way and design equitable structures and processes (e.g., [Hatch et al., 2023](#); see also **Finding Alignment**), mutual interpersonal trust and new knowledges can be expected to emerge over time. What may be most required are sustained commitment and contact across time, open communication, ongoing reflection, and a willingness to learn/adjust ([Campano et al., 2015](#); [Farrell et al., 2019](#); [Gutierrez and Lewis, 2005](#)).

BIBs must act on the conviction that multiple perspectives and diversity are valuable, even essential; they are an *epistemic good* ([Campano et al., 2015](#)), helping relational partners better understand the world (**recognitional equity**). Equity-centered brokers should operate from this understanding, valuing and elevating diverse knowledges (e.g., by active listening and by highlighting the expertise of those from non-dominant groups; [Hatch et al., 2023](#)) while combatting stereotypes and other forms of oppression that exist and emerge in micro- and broader contexts.

BIBs’ work and relationships should be characterized by mutuality. Minimally, this implies the need for concerted efforts to empower relational partners to shape the development of agendas and goals ([Klar et al., 2018](#)). Beyond this, it may be desirable to foster relationships defined by joint work/co-production ([Korhonen et al., 2024](#); [Phipps et al., 2017](#)). For BIBs pursuing the latter, we suggest that literature regarding research-practice partnerships, community-based participatory research, and social design experiments provide many transferable insights. Transcending these approaches is a strong and healthy appreciation for diverse knowledges and the power that lies in their integration ([Malin et al., in press](#)).

Finding alignment

Finding alignment centers on finding common ground across stakeholders regarding “opinions, values, interests, goals, or agendas” ([Neal et al., 2023](#), p. 102). When people work and think together to achieve a common goal, a great deal can be accomplished (e.g., see [Kania and Kramer, 2011](#)).

A vital strategy for achieving alignment is active engagement and collaboration, which involves bringing together all relevant parties to ensure that diverse perspectives are represented. Workshops facilitating open dialogue create spaces for stakeholders to express their viewpoints, fostering a shared understanding and commitment to common goals. Boundary objects possess “interpretive flexibility” and thus can be quite useful as “mediating devices” as knowledge brokers help constituents negotiate complex discussions and align their efforts ([Sarkki et al., 2020](#), p. 163). [Fenwick \(2004\)](#), among others, notes the crucial role of trust in this process. By clearly communicating underlying assumptions, trust can be built among participants ([Moore et al., 2018](#)). This transparency helps stakeholders grasp each other’s positions,

which is essential for bridging and aligning interests. Another critical aspect of fostering alignment is adaptability and inclusive participation. Encouraging all stakeholders to contribute to shaping initiatives enhances their sense of ownership, leading to greater engagement and commitment from diverse groups. Providing opportunities for feedback and refinement ensures that the outcomes genuinely reflect the collective insights of all participants, aligning their interests and goals. Moreover, embracing a broader perspective is essential for achieving alignment. Moving away from simplistic binary frameworks allows for a more nuanced understanding of complex issues. By recognizing the interconnections among various concerns, stakeholders can identify shared objectives and collaborate more effectively, fostering a deeper sense of unity and alignment across different interests.

Despite some built-in complexities related to engaging people with diverse backgrounds and perspectives (see **Exchange**), some principles from the literature can enhance brokers’ ability to find alignment in equitable ways and to equitable ends. An ongoing task for equity-centered BIBs is to alter traditional power dynamics so all communities’ needs, priorities, and interests are elevated and respected ([Chávez, 2005](#); [Vakil et al., 2016](#); **recognitional equity**). For example, [Hatch et al. \(2023\)](#) point out that traditional dynamics place mainstream science knowledge systems above Indigenous knowledge systems. However, this pattern must be disrupted in the context of true Indigenous-mainstream scientist collaboration. BIBs, accordingly, play critical roles in opening up a “new discovery space,” which can facilitate the melding of goals ([Hatch et al., 2023](#), p. 41). Accordingly, Indigenous knowledge holders should be

treated well, fully informed, provided veto, consulted on use and application, included in interpretation, and provided opportunities to learn about the mainstream science conducted with their knowledge or in their territory. Boundary spanners desire to create projects with Indigenous leadership and involvement from the beginning ([Hatch et al., 2023](#), p. 41; **representational and recognitional equity**).

These principles hold across communities and knowledge forms; as noted under **Exchange**, all partners must be equitably involved, and the unique strengths and knowledge that they bring must be recognized ([Penuel, 2017](#)).

Without such efforts, there is a risk that genuine differences will not surface—or, if they do, they will then be “reconciled” inequitably ([Medina, 2013](#)). BIBs must understand that some partners’ silence does not signal happiness or alignment; in some communities, norms, and codes do not dictate speaking up if one is unhappy ([Chávez, 2005](#)). Likewise, suppose scientists and their opinions are accorded more weight or given special access to decision-makers when disputes occur. In that case, subsequent decisions are likely to reify the status quo while failing to respond to community concerns and needs adequately. If, on the other hand, BIBs can facilitate an open dialogue among participants and can design structures and approaches that seek to balance voice and power ([Qureshi et al., 2018](#); [Chávez, 2005](#)), it is more likely productive alignment will be reached in time.

BIBs, therefore, must be flexible and genuine listeners (Hatch et al., 2023) and have a propensity and a desire to relate to others across boundaries (Many et al., 2012). They must also be proactive in forging these connections and willing to engage in ongoing relational work (Sullivan et al., 2001). Their work often entails ongoing negotiation and co-creation of new forms of social practice—i.e., norms, tools, and rules for thinking, speaking, and interacting (Drach-Zahavy, 2011; Penuel et al., 2013; Wenger, 1998).

An equity-centered BIB must also seek alignment around activities and goals that promise to benefit the communities involved (Many et al., 2012; **distributional equity**). This may mean, for instance, *amplifying* the concerns of community members who object to a planned project that appears inflexible, insensitive, and/or extractive (McKeon and Gitomer, 2024; Sullivan et al., 2001). It also may mean working proactively to engage a wide set of community members before goals are set, recognizing that it is difficult, if not impossible, to identify a small set of “representatives” who can adequately speak for broader groups (Minkler, 2005; **representational equity**). BIBs are key in ensuring people can be actively engaged in decision-making about matters affecting them (La Brooy and Kelaher, 2017).

In this alignment work, it is important to consider the enabling or constraining roles of organizations such as universities and BIBs such as research funders. For example, researchers may find it challenging to engage flexibly in problem exploration with constituents before beginning a project if their funding is conditional on conducting a particular study (Sullivan et al., 2001; **distributional equity**). Moreover, university expectations too often push them toward traditional research projects rather than pursuing those requiring time-intensive relational and alignment work (Campano et al., 2015). Likewise, BIBs should recognize that all levels of the education system (e.g., local, district, state, and national) are intertwined (Caduff et al., 2023); BIBs might accordingly find it incumbent to cultivate alignment at multiple levels—for instance, seeking to gain state-level support for their local efforts. This may also include attending to environmental conditions such as policy windows (Orphan et al., 2021) and could require adopting/adjusting one’s communicative frames (Penuel et al., 2013) to persuade and achieve such support in multiple venues.

Lastly, equity-centered BIBs should recognize that while total alignment of perspectives may be impossible, aligning around shared commitments to one another can still be possible. Medina (2013) accordingly highlights relationships in which there is a “coexistence of different perspectives” and that are “regulated by something deeper: being accountable and responsible to one another” (p. 276). Here, we can also learn from alliances and coalitions in the education policy space, which (although sometimes problematically) often converge on shared central beliefs even when there is disagreement on some secondary ones (DeBray et al., 2014).

Advising decisions

Advising decisions as a BIB involves providing guidance and recommendations to clients or stakeholders based on insights, expertise, and information gathered or synthesized

from various sources (Neal et al., 2023). When advising decisions with an equity-centered approach, BIBs must consider several issues.

The first point is that such advice-giving, too, typically occurs (as it should) in the context of relationships. Policymakers, for example, prefer to obtain information and advice from trustworthy sources (Bogenschneider, 2020). Indeed, the most useful advice is responsive to and placed within the context of recipients’ key issues and agendas (Bogenschneider, 2020; DeBray et al., 2020), while context-free advice is invariably too generic and otherwise problematic (Callard, 2024). This suggests that open, multi-directional communication and trust are crucial preconditions to successful advice-giving (Tiggelaar and George, 2023). A BIB who seeks to be able to advise decisions (and/or to facilitate partners’ ability to do so) therefore, should first engage in relational work so that they will be able to understand and respond to genuine needs. And they may find it expedient to call on others as needed, such as experts or opinion leaders—e.g., when an educator or a policymaker has questions that require a particular type of expertise, the BIB can function as a matchmaker (**representational equity**; Sharples and Sheard, 2015).

A point of contention is whether a BIB should focus on informing/advising vs. advocating/prescribing (Hetemäki, 2019; Kim and Pogach, 2014; Rose et al., 2018). The former, sometimes called honest brokering (see Andereggen et al., 2012; Malin, 2020; Baveye, 2023; Pielke Jr, 2007; Rantala et al., 2017), may be associated with a halo of goodness and qualities such as neutrality, humility, and non-partisanship. In some instances, indeed, such a stance appears to be advantageous. Bogenschneider (2020), for instance, described taking pains to provide forums where policymakers from all political persuasions could learn about and discuss relevant science related to family services. They explained that doing so had large payoffs, enabling them to build trust and open channels to make evidence-informed policy impacts over time. Likewise, Lentsch (2010) argues national academies may stand out among crowded fields precisely because of their impartiality, lack of conflicts of interest, etc.⁵

Others, however, point out that research is never neutral and that pretending otherwise can be harmful and disingenuous (Doucet, 2021). Moreover,

Choices about what scientific evidence to communicate and when, how, and to whom reflect values. This fact becomes especially salient when the science pertains to a contentious individual decision or policy choice (National Academies of Sciences Engineering and Medicine, 2017).

BIBs typically possess a measure of power and authority that should be used to work against inequity. They can, for instance, use their authority “to create conditions that would make their

⁵ In the U.S., however, a recent issue underscores that even national academies and their partners can face large challenges in their knowledge brokering work: A U.S. National Academies of Sciences, Engineering, and Medicine (NASEM) expert committee, which had been charged with recommending ways to combine Western and Indigenous means of understanding the natural world, was dissolved after large and fundamental disagreements emerged over how to approach the work (see Mervis and Pérez Ortega, 2024).

frames more likely to resonate” (Coburn et al., 2008, p. 380). They may also be less encumbered by some external forces and thus able to “push for ‘third order changes’ that [promote] equity” (Brezicha and Hopkins, 2016, p. 386). However, this power also carries the risk of perpetuating inequities or facilitating corrupt behavior if not wielded carefully (Forkmann et al., 2022). Brokers can inadvertently prioritize certain voices or interests, leading to imbalanced outcomes that may normalize unethical practices. Accordingly, Doucet (2021) suggests it can be productive to tease apart ends and means, such that a researcher (or broker) could advocate for *ends* (e.g., ending poverty) while serving as an honest broker about different *means* (e.g., presenting several alternative policies for achieving those ends). Doucet calls for researchers (and we extend this to BIBs) to be “forthcoming about our commitment to just ends, like racial equity and BIPOC communities flourishing, while providing access to a broad range of evidence to decision-makers to achieve those ends” (para. 11; **distributional equity**).

Indeed, BIBs can sometimes assist and support persons positioned to make (or not make) equity-centered decisions, which can be politically challenging and require both courage and strategy. For example, equitable state-level funding distribution is morally just, but it is reliably opposed by some who are happy with the status quo. A BIB might assist advocates for equitable funding by providing critical data, findings, and resources to support decision-makers, not only by neutrally providing data but also by helping them to justify their decisions or frame them with various constituents in politically viable ways (see **Finding Alignment**). For instance, superintendents or principals are positioned to advocate for just policies and programs, which will also likely be opposed by some constituents. A BIB could assist these individuals by helping them operate strategically given their local political contexts (see Brezicha and Hopkins, 2016) and supporting their ability to manage and navigate the politics of these decisions.

When advocating, however, it is important to resist pressures to stretch or cherry-pick evidence to achieve these ends (Malin and Lubienski, 2022; Malin and Rind, 2022; Verger et al., 2019); instead, BIBs should focus on how to communicate in a way that comports with the best evidence on a topic. BIBs should also be aware of the contexts or populations for which particular findings are applicable and avoid advocating beyond these contexts/populations (National Academies of Sciences Engineering and Medicine, 2017). Broadly, if/when research findings are troubling to an advocate, it is important to avoid the temptation to misrepresent them. It may be possible instead to compellingly argue for particular changes using a different frame—for example, arguing for equitable substantive representation of women on corporate boards not because they promise to bring more significant profit to a company (which, according to some research, they do not), but because this would “serve social justice while also “promot[ing] more compassionate egalitarian social policy (Eagly, 2016, p. 213; **representational and recognitional equity**).

Lastly, it is important to consider advice flowing in multiple directions, as something that can emerge from collective activity. For example, a community board could provide advice and direction to enhance relations between researchers and researched communities and hold others accountable (Sullivan et al., 2001). Again, the key point is that those who stand to be most

directly impacted by the ideas, problems, and solutions under consideration should be heavily represented and highly valued in processes and forums (McCall et al., 2017; **representational and recognitional equity**).

Capacity building

In the context of BIBs’ work, *capacity-building strategies* focus “on bolstering the skills, understanding, or self-reliance of those involved in the process of evidence-informed decision-making” (Neal et al., 2023, p. 102). They may be more specifically focused on building people’s capacity to appraise research evidence or provide technical assistance to enhance their ability to implement evidence-based programs (Neal et al., 2023).

Considering this strategy from an equity-centered lens brings several issues and considerations. First, problematic assumptions can sometimes be tied together with one’s efforts to build capacity. Denner et al. (2019), for example, detailed how an organization initially struggled in their connections with a BIB, concerned that they might be exhibiting a “white savior complex” and attempting to deliver “help” in a “top-down manner” (p. 6). These early concerns reflect lived experiences and the troubling reality that many BIBs continue to operate in this manner—for instance, Western actors who conduct capacity development projects in developing countries (Heizmann, 2015). Stoll (2009, p. 123) points out that “top-down capacity-building strategies rarely build the internal commitment and agency necessary to sustain improvement.”

So, what can be done? Equity-focused capacity-building efforts prioritize empowering individuals within educational systems to determine their development needs and the approaches they want to take to address them. This means creating opportunities for open dialogue and active participation, where educators, students, and community members can collaboratively identify the required skills and resources. BIBs can support tailored solutions that reflect their specific contexts by fostering an environment where individuals feel confident expressing their unique perspectives and aspirations. This approach enhances personal and professional growth and strengthens the entire educational ecosystem by promoting a sense of ownership and accountability (Kislov et al., 2017).

Once needs are identified, objectives can be established, and capacity-building efforts can be tailored (Caduff et al., 2023; Trujillo and Woulfin, 2014) to different roles. For instance, Caduff et al. (2023) emphasize that providing tailored support in education may involve offering hands-on tools for those directly involved in providing services while offering more abstract insights to administrators to shift their mindset. Concurrently, BIBs can encourage **distributional equity** by ensuring individuals have equal access to resources, such as educational materials, training programs, and mentorship opportunities, regardless of their background or identity (Caduff et al., 2023).

BIBs can also facilitate interactive, participatory, and engaging learning and sharing opportunities. This collaborative effort promotes shared understanding when BIBs organize capacity-building initiatives requiring participation from diverse teams. It

encourages mindset shifts among participants, fostering a culture of shared responsibility for educational outcomes. By fostering collaboration among diverse stakeholders, BIBs enhance capacity building within educational systems while steering clear of top-down approaches. To address **representational** and **recognitional equity** issues, BIBs can acknowledge and celebrate the unique strengths, experiences, and perspectives that each individual brings to the learning environment. They can create a culture of respect and inclusivity where differences in race, ethnicity, gender, identity, sexual orientation, ability, and other dimensions of diversity are valued and affirmed. This approach engages educators, policymakers, and community members in collaborative environments where all voices are heard and help partners develop self-efficacy and agency, recognizing their talents and ability to enact positive change (Collien, 2021; Stoll, 2009). By contrast, traditional, top-down approaches to capacity building “rarely build the internal commitment and agency necessary to sustain improvement” (Stoll, 2009, p. 12). Such collective engagement enhances the system’s capacity, ensuring that solutions are co-created rather than imposed.

Another effective participatory method for co-created capacity building involves establishing collaborative partnerships with external stakeholders, such as parents, universities, and community members. These partnerships facilitate collaboration between schools and external entities to develop actionable improvement strategies and promote continuous learning among all participants. By creating a broader support network, these partnerships foster ongoing resource sharing and mutual support. Emphasizing local context and tailored approaches allows these collaborations to align capacity-building efforts with the community’s specific needs, ultimately enhancing the effectiveness and sustainability of educational initiatives (McCall et al., 2017; Thompson et al., 2019; Wilcox and Zuckerman, 2019).

We conclude this section by asserting that capacity building should be approached in a systemic, multi-level manner (Kislov et al., 2017; Phipps et al., 2017) that integrates the diverse elements discussed above. By centering equity in capacity-building strategies, BIBs can empower individuals within systems to identify their development needs and pursue tailored solutions that reflect their unique contexts. This requires fostering open dialogue and collaboration among educators, students, and community members, ensuring that all voices are heard and valued. Moreover, engaging in participatory learning and forming partnerships with external stakeholders enriches the capacity-building process, promoting continuous support and resource sharing. Ultimately, this holistic approach enhances individual skills and agency and strengthens the ecosystem as a whole, leading to sustainable and meaningful improvements in evidence-informed decision-making.

Dissemination

Dissemination, in the context of BIBs’ work, involves the translation and communication of evidence to/with relevant audiences (Neal et al., 2023). Considering dissemination from a quality and equity-centered lens brings several key considerations into view.

As with other strategies, it is helpful also to recognize that dissemination can/should occur within relational processes. Embedding dissemination within relationships—vs., for example, simply pushing information out to audiences while lacking such connections—is preferable in part because it means the information the sender shares is more likely to be attuned to what the receiver actually wants to know and already knows, understands, and believes (National Academies of Sciences Engineering and Medicine, 2017). Likewise, it accounts for the fact that trust and credibility (which can be built relationally) are essential to whether or not a person will attend to or be willing to act on what is being shared (Kislov et al., 2017; National Academies of Sciences Engineering and Medicine, 2017; Northey and Leland, 2024). Beyond this, there is potential for BIBs to work *with* target audiences to develop both products (e.g., a policy brief) and processes (e.g., networks in which knowledge can flow bi-directionally) in service of knowledge mobilization. Community-based design researchers, for example, show how it can be possible and desirable for community partners to think alongside researchers regarding potential products to develop (Greenberg et al., 2020). Ultimately, the “issue of what gets written, for what audiences, and with what data” is significant (Vakil et al., 2016, p. 206). Moreover, others remind us that curating and synthesizing existing information to meet particular needs and policy agendas can be highly beneficial (Orphan et al., 2021; Weakley and Waite, 2023; **recognitional and representational equity**).

Given the inherent relationality of this strategy (when done well), many of the already-named principles and strategies apply to dissemination. Broadly, it is important to become well-attuned with an audience’s strengths, needs, perspectives, and constraints. This implies the need for prolonged contact with diverse representatives of these communities (**representational equity**); even within organizations, for example, people in different areas may interpret things differently and need different types of information (Heizmann, 2015). Communication should be consistent with—and careful not to question or assault—people’s values (National Academies of Sciences Engineering and Medicine, 2017; **recognitional equity**). Knowledge should be shared and exchanged in clear, respectful language and should be accessible according to various meanings (Rycroft-Smith, 2022). Knowledge sharing across boundaries, we are reminded, is not power-free, and the language that is used shapes people’s understanding, emotions, and receptivity to messages and messengers (Heizmann, 2015).

Beyond this, there are some particular considerations for dissemination. First, if one wishes to maximize knowledge mobilization (at least, within particular contexts), it is wise to develop and execute a comprehensive media strategy (e.g., see Orphan et al., 2021; Phipps et al., 2017; Steiner-Khamsi et al., 2024a). This may include cultivating relationships behind the scenes, partnering with others with more reach into key audiences, venue shopping and making media pitches, leveraging focusing events, tailoring communications to different audiences, ensuring information is publicly accessible, and strategically sharing using social media (Colonomos, 2019; Phipps et al., 2017; Robertson, 2015). One may also wish to use

storytelling/narrative and operate from the understanding that combining stories and numbers/facts is more compelling than one or the other (National Academies of Sciences Engineering and Medicine, 2017; Orphan et al., 2021). Moreover, one should be iterative and adaptive, adjusting to an evolving landscape (National Academies of Sciences Engineering and Medicine, 2017). Performing in a sophisticated way in these spaces may be increasingly important given the over-supply of evidence and the presence of other actors and intermediaries who are guided by ideology but are skilled at commanding attention in these spaces (Lubienski et al., in press; Malin et al., in press; DeBray et al., 2014).

Troublingly, some BIBs have been shown to evade equity topics discursively (McCoy-Simmons et al., 2023) rather than, as they should, focus on equity issues and solutions as a way to mobilize and advocate for change. As Winkel and Leipold (2016; as cited in McCoy-Simmons et al., 2023) remind, the evasion of equity topics such as the racialized impacts of COVID is an *expression of power*, preventing these issues from reaching public and/or policy consciousness and debate. Equity-centered BIBs need to leverage their power and privilege to discuss and not avoid these topics so that they can be part of efforts to bring about social justice (**distributional equity**). Our language influences our thoughts, so we must ensure that the words we use (i.e., when engaged in dissemination) reflect our best, most accurate understandings. This also means being careful to communicate uncertainty (National Academies of Sciences Engineering and Medicine, 2017) to avoid overstating or inflating evidence, even if we think our intentions are good.

Conclusion: summing up and looking forward

This narrative synthesis aimed to explore what it means to be an equity-centered BIB and to identify issues and considerations in relation to BIBs' primary strategies. Reflecting now, some cross-cutting patterns are also evident.

Most importantly, we conclude that authentic, trusting relationships underpin equity-centered brokering. Accordingly, we conceptualize *facilitating relationships* as a first-order strategy, with implications across all other strategies. Strong, healthy relationships enable other strategies' execution—and, by contrast, tenuous or power-imbalanced relationships complicate or stymie the work. For example, BIBs seeking to advise particular people will invariably need to have established trust with them beforehand. Furthermore, the actionability of that advice depends on how it responds to their needs and is delivered in a way that is considerate of what they know and want to know. Across these strategies, there appears to be no substitute for relationships and prolonged contact.

Closely related, across all strategies, valuing diversity and elevating multiple forms of knowledge is imperative. Overall, the findings are compatible with an understanding of knowledge brokering as “the creation of knowledge-in-context”—aligning with the view that “the most powerful knowledge (in and beyond education) frequently arises from meaningful and sustained connection between differently-situated people, knowledges, and ways of knowing” (Malin et al., in press).

Considerations centering the concept of *power*—i.e., attentiveness to and correction of power imbalances, power sharing, just use of measures of power/privilege, and empowerment—were also prevalent across and appear to transcend individual strategies. We believe this pattern warrants further attention and elaboration. For one, if facilitating relationships is a first-order strategy and if equitable outcomes are being sought, clearly power imbalances can create a major barrier to brokers' work. Accordingly, naming differences and acknowledging power (and resource) disparities is a key first step to trust building. Further, BIBs should seek to share power relative to the shaping of agendas and goals, and structures should be intentionally designed to balance voice and power, ideally with a long-term goal of fostering relationships defined by joint work/co-production. Of course, such configurations are best suited for BIBs who truly understand, value, and elevate the knowledge that all communities bring to the work. Given such dispositions, BIBs are likely to leverage what measure of power and privilege they have to advance efforts to advance social justice.

A tension relates to the time- and resource-intensiveness of relational, equity-centered brokering. Equitable processes, especially those involving many people, take time and require financial, cognitive, and affective resources. By contrast, other approaches to brokering (e.g., the one-way push of written research summaries to generic recipients) are clearly less time and resource-intensive. Although we cannot resolve this tension, the relational work described in this article's main section is indispensable.

Another tension relates to whether, when, and how a broker should assume a *neutral posture* vs. being transparent about their values and commitments and how they affect their thinking and work. Within equity-centered brokering, we align with those who point out that research is neither neutral nor is brokering—and we see the benefits associated with being *transparent about one's commitments*. Doucet provided a helpful guide, noting how it is possible to distinguish between brokering means and ends. Accordingly, an equity-centered broker could clarify their commitment (*ends*) but then work earnestly with others around various potential *means* to an end.

Our work is not without limitations. First, we did not conduct a comprehensive review, with the implication being that we may have missed certain advances and themes that are germane to the topic at hand. Related, we were unable to fully describe how BIBs' ethical entanglements (Malin et al., in press) and strategies may vary relative to their locations in larger systems. Accordingly, future research might productively follow our lead in certain ways while also pursuing a more exhaustive, systematic review and considering the use of a frame such as Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979) to examine how system location may affect BIBs' strategies. In principle, we recognize BIBs' work is deeply contextual, and we therefore suggest that important nuances will likely appear if our methods and frameworks are suited to detect them.

We therefore do not intend to provide the final word on these critical topics. Instead, we hope we have laid out some key contours of what it means and entails to be an equity-centered knowledge broker. In turn, we hope this is useful to BIBs and those who partner with them, as well as scholars in the space who are interested in understanding and supporting ethical knowledge brokering work.

Author contributions

JM: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Writing – original draft, Writing – review & editing. SS: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Software, Writing – original draft, Writing – review & editing.

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