Mediated, Evidence-Informed Practice as Impact

Joel R. Malin, *Miami University*

Abstract

This study presents a conceptualization of mediated, evidence-informed practice as a form of impact within the education context, then examines whether and how a particular intermediary organization, Edutopia, is having such an impact. Extant open- and closed-ended survey data are analyzed. Survey respondents routinely reported using content hosted or featured by Edutopia in their professional practice, and provided specific insights regarding how they were doing so. These findings provide strong evidence that an educational intermediary can variously impact educators' practices. The study provides a conceptualization and model that may be useful for other intermediaries and for scholars who are interested in examining impact and knowledge mobilization in and beyond education.

Mediated, evidence-informed practice as impact

In and beyond the United States, educational intermediary organizations[1] (IOs) are increasingly being recognized for their importance to research use processes (Cooper, 2014; Honig, 2004). Given that educators rarely directly interact with researchers (Farley-Ripple, May, Karpyn, Tilley, & McDonough, 2018) or directly engage with primary research (Cordingley, 2008), IOs are vital. Researchers—and research infor-

mation—and practitioners are typically linked or mediated through various third-party organizations (Cooper, 2014; Farley-Ripple & Grajeda, 2020; Farley-Ripple et al., 2018; Penuel, Briggs, Davidson, Herlihy, Sherer, Hill, Farrell, & Allen, 2016). Accordingly, IOs are key to serious efforts to improve the connections between research and practice and to facilitate evidence-informed educational practice (Malin & Brown, 2020).

Nevertheless, and though education-focused IOs have increased in numbers and sophistication, scholars to date have focused more on those aimed at influencing national- and/or state-level *policy* (e.g., Malin & Lubienski, 2015; Lubienski, Scott, & DeBray, 2011) than on those aimed at directly engaging with or influencing educational *practice*. The latter entities are thus particularly underexplored, neither well understood nor able to draw upon a well-developed research base to support their work (Malin, Brown, & Trubçeac, 2018). Moreover, and central to this article and this special issue, little empirical work is available regarding such intermediaries' *impacts*—their influences or effects (Gorard, See, & Siddiqui, 2020).

To begin to address these key issues, the present study examines whether and how a high-profile intermediary entity called Edutopia is having a particular impact. Specifically, it analyzes whether, how, and why the content/knowledge Edutopia hosts and/or promotes is being used in educational practice. Accordingly, this study first advances and relies upon an understanding of *impact* as the stimulation of the *professional use* of certain favored evidence-informed practices and ideas.[2] It is maintained that for Edutopia and many other practice-focused IOs, the stimulation of professional use is at or near the top of their impact agendas.

Review of literature

The review that follows addresses two main areas. First, it describes the recent and general push for researchers and research-focused entities and IOs to make and demonstrate research impact, and it broadly discusses different approaches to conceptualizing and measuring impact. Second, it considers what "impact" might mean from the perspective of a practice-focused IO. This section advances a conceptualization of impact as intermediated, evidence-informed practice. It also includes relevant background regarding Edutopia, the IO that serves as a theory-building case.

Making, measuring, and demonstrating intermediary organizations' impact in education

The focus in some jurisdictions appears to have moved from emphasizing research *use* to emphasizing research *impact*. Though the general concept that research should have an impact (e.g., by improving teaching and learning) is difficult to contest, this altered policy and practical focus carries certain challenges. For instance, to the extent that *research use* is not particularly well understood or consistently defined (Malin, Brown, & Saultz, 2019; Farley-Ripple, 2016; Gitomer & Crouse, 2018; Penuel et al., 2016), an emphasis on *impact* seems likely to only heighten confusion: What exactly is research impact—and how can it be observed and measured?

Some existing scholarship is informative. For example, Amanda Cooper's (2014) research—which revealed eight brokering functions being performed by what she

termed "research brokering organizations [RBOs]"[3] (p. 30) in Canada—can provide a foundation from which to consider how IOs might make and measure research impact. Cooper's (2014) study revealed RBOs performing the following eight major brokering function/s: "linkage and partnerships, awareness, accessibility, engagement, capacity building, implementation support, organisational development and policy influence" (p. 46).

As Amanda Cooper, Joelle Rodway, Stephen MacGregor, Samantha Shewchuk, and Michelle Searle (2020) argue, this framework provides "fertile ground" (p. 98) for thinking through brokering strategies and the metrics that can be applied to assess their impacts. Different brokering functions necessitate different knowledge mobilization strategies, which in turn oblige or preference different impact measurement. For instance, the *linkage and partnerships* function would be focused on what they term "collaboration indicators," such as the number of new partnerships formed and social network growth, whereas the *engagement* function would focus on "use indicators" (Cooper et al., 2020, p. 99), such as the number of people intending to use the information and the number of people adapting the information.

Edutopia's primary brokering function according to this schematic concerns the *engagement* function: "increasing engagement with research content through making it appeal to more of our senses" (Cooper, 2014, p. 47, italics removed). For example, Edutopia's new #HowLearningHappens video series—a 20-plus video collection that had been viewed 7.5 million times as of May 23, 2019 (Riddell, 2019)—uses video to explore how schools can "better align their practices with what the science says about human learning" (George Lucas Educational Foundation, 2019a, n.p.). This collection, featuring Linda Darling-Hammond and Pamela Cantor, "pairs research insights with a variety of insights from schools, all grounded in the science of learning and development" (George Lucas Educational Foundation, 2019a, n.p.). These videos span several topics and categories, beginning with introductory materials and then addressing cultivating a belonging mindset, fostering positive relationships, building academic confidence, developing foundational skills, and establishing positive conditions for learning. Given Edutopia's engagement emphasis, "use indicators" are particularly salient. Edutopia performs other brokering functions as well; for instance, its platforms and its knowledge exchange approaches (including the Twitter chats it hosts every month or so) serve a linkage and partnerships function, "facilitating connections among diverse stakeholders and supporting collaboration" (Cooper, 2014, p. 47). Ultimately, though, Edutopia's chief priority concerns stimulating educators' professional use of particular strategies and ideas. In other words, fostering professional use is key to its impact agenda, and thus indicators of use are (and ought to be) central to its impact measurement/evaluation program.

Research impact as mediated, evidence-informed practice

For many IOs (Edutopia included), a central purpose is to influence particular end users, whether they are educators, policymakers, and/or members of the public. In the U.S., efforts to tighten research-practice connections are longstanding, albeit against the challenging backdrop of fluctuating governmental support, with most such efforts featuring the development or leveraging of IOs, such as the Regional

Educational Laboratories and the What Works Clearinghouse (Farley-Ripple, Tilley, & Tise, 2017). Education practice-focused IOs have pursued a variety of approaches. John Bush (2017) surveyed the international landscape and suggested these linking agents typically fulfill one or more of the following three roles: they 1) create resources to distill and communicate research-based evidence; 2) convene partnerships between research and practice; and/or 3) support practitioners as they engage with evidence and test its local impacts.

In Edutopia's case, the first aim is primary. More specifically, Edutopia aims to influence educational practitioners by promoting and stimulating the adoption or adaptation of particular practices; this is achieved through media activities and products, such as YouTube videos, blog posts, and social media posts. Edutopia seeks to shine a "spotlight on what works in education, [showing] people how they can adopt or adapt best practices" (George Lucas Educational Foundation, 2019b, n.p.). Thus, a central intended *impact* concerns stimulating the professional *use* of the ideas and strategies Edutopia promotes.

Edutopia is one part of the George Lucas Educational Foundation, a nonprofit foundation established in 1991 by filmmaker George Lucas (George Lucas Educational Foundation, 2019c). The foundation moved all its content online to the Edutopia website in 2010. Content includes YouTube videos, blog posts, and other resources. Edutopia has a large and multi-platform social media presence; as of July 28, 2019, they had about 1.35 million followers on Facebook, 1.1 million on Twitter, 138 thousand on Instagram, 113 thousand on Pinterest, and 105 thousand subscribers on YouTube.

Edutopia currently focuses on six core strategies: "project-based learning, social and emotional learning, comprehensive assessment, teacher development, integrated studies, and technology integration" (George Lucas Educational Foundation, 2019d). The flow and form of a large portion of the site's content (which typically revolves around the organization's core strategies) is consistent with research evidence; these core strategies, for example, are buttressed by literature reviews posted to the website. Similarly, research evidence is sometimes explicitly presented and central to the messaging (e.g., the new How Learning Happens videos; George Lucas Educational Foundation, 2020a) and the research-based content being produced by Youki Terada, Edutopia's research and standards editor (George Lucas Educational Foundation, 2020b). However, Edutopia is not focused exclusively on promoting research knowledge. For example, it often shares strategies and tips that were developed by educators and that, though apparently consistent with the spirit of Edutopia's core strategies, have not yet been systematically researched. In this regard, Malin et al. (2018) found Edutopia to feature and share all three main knowledge types as articulated by Vicky Ward (2017)—scientific/factual knowledge, technical knowledge, and practical wisdom—though with a preference toward the latter type, which includes judgments, values, and beliefs.

This study incorporates the realistic and cross-disciplinary understanding that at the point of *use*—the emphasis of the present study—research evidence is invariably integrated with other forms of knowledge and knowing (e.g., see Nutley, Davies, & Hughes, 2019). As Julie Nelson and Carol Campbell (2019) explain: "Research is

a core element of EIPP [evidence-informed policy and practice], but it does not pro-
vide the sum total of evidence needed for EIPP" (p. 133). This notion is applicable
to education, given the "near-universal agreement" (Cain, Brindley, Brown, Jones, &
Riga, 2019, p. 3) that research alone is an insufficient practical and professional
guide (see the review by Cain et al., 2019). Donald McIntyre (2005), for instance,
argues that research generates knowledge that differs from that which educators
need. Christopher Winch, Alis Oancea, and Janet Orchard (2015) acknowledge these
challenges and nonetheless argue that research can contribute variously to the de-
velopment of educators' practical knowledge, though not without acts of imagination
(i.e., active transformation and the context-sensitive application of research insights).
Edutopia might be viewed as facilitating such imaginative acts and, accordingly, fos-
tering evidence-informed practice. Malin and colleagues (2018) conjectured that
Edutopia's integration of different knowledge types was key to its popularity among
educators and likely strengthened its practical influence.

As such, the present study advances a conceptualization of research impact as
mediated, evidence-informed practice. In other words, from the perspective of an IO
such as Edutopia, stimulating evidence-informed practice via its mediated processes
and products constitutes a sought-after form of research impact. This conception is
based on the understanding that the facilitation of evidence-informed practice is a
worthy and realistic goal, and one that Edutopia pursues through its core products
and processes. As noted previously, this study takes up a relatively open understand-
ing of research evidence, admitting knowledge obtained via various methodologies
but envisioning that it has been obtained systematically and has passed through qual-
ity control mechanisms such as a blind peer review. Given these definitions and im-
plications (Malin et al., 2018), the instances of professional use as presented in this
study can be understood as falling within a particular class of impact, and these can
also be seen as instances of evidence-informed practice.

Data and methods

This study treats Edutopia as a practice-focused IO "case" and seeks to explore the
extent and ways in which its features and content are being used professionally (i.e.,
whether and how it is achieving a central, desired *impact*). Edutopia was selected
due to its prominence in this realm and its willingness to share pertinent data with
the researcher. This study drew from two main data sources: results from Edutopia's
2017 Audience Profile Survey (APS; N = 6,860; developed by Harvey Research, Inc.)
and from the 2018 Edutopia Impact Survey (EIS; N = 3,675) (see Appendix for ad-
ditional information). Several survey items from the EIS and the APS enable the ex-
amination of professional use as a form of impact (see Appendix, "Key Items").

Qualitative (open-ended) and quantitative (Likert-scale) survey responses were
brought together to address this study's main research question. Addressing the ex-
tent of use was relatively straightforward and relied primarily on quantitative re-
sponse data. Analyzing the manner of use was supported by prior scholarship
describing distinct "types" of research use (i.e., instrumental, conceptual, tactical).
The following definitions, utilized in Penuel et al. (2016) and based upon Carol
Weiss and Michael Bucavalas' scholarship (1980), were adopted for this study:

Instrumental use: Research is applied to guide or inform a specific decision.

Conceptual use: Research induces changes in the way a person views either a problem or the possible solution space for a problem.

Symbolic/political use: Research is used to validate a decision or legitimate a decision already made.

This study also assumes other types of evidence (and/or combinations of evidence types) can be used in these same ways. Weiss (1979), for instance, noted how research is but one part of a complicated decision-making process, and Malin and colleagues (Malin, 2016; Malin et al., 2019) described how educators variously utilized multiple evidence types to support their work and decision-making. Thus, as applied to this study, a survey respondent's description of implementing a particular Edutopia-promoted strategy is coded as an instance of instrumental evidence use. This is based on the understanding that a package of evidence, including but not limited to research evidence (Malin et al., 2018; Weiss, 1979), has been used instrumentally—in this case, influencing a respondent's decision to try a new educational approach.

To manage voluminous data, the researcher then also selected and analyzed qualitative, open-ended data from random data samples ($N = 500$ respondents for each survey). The respondent profile for these samples approximated the full survey respondent profiles, with minor departures. Both samples, for example, slightly over-represented teachers relative to the full samples (60% versus 52% in the APS and 59% versus 57% in the EIS, respectively). The researcher's goal for this study was relatively modest: to obtain an initial understanding of use extents, types, and conditions. Accordingly, analyses also attended to a respondent's professional role and the level and arena within which use was reportedly occurring (e.g., classroom, grade level, school, district). Throughout, the researcher remained open to emergent codes and patterns.

Limitations

This study includes some limitations. First, it relies on extant data, and primarily on data that were obtained via one form of data collection (survey methods). Survey research includes certain risks relative to interpreting self-report data (Gitomer & Crouse, 2019). Likewise, researchers' ability to make population-level inferences is hampered when survey respondents are not representative of the intended population. These challenges are especially likely when response rates are low, as appears to be true with data being analyzed as part of this study. For instance, based on the estimate that approximately 1.2 million potential participants received or were exposed to the APS, less than 0.6 percent of them completed the survey. Accordingly, efforts have been made to avoid making such inferences while interpreting these data. In spite of these challenges, surveys are commonly used in social science research and in studies of research use, as they possess certain key advantages. Chiefly, they can obtain specific responses from a large number of respondents with efficiency; they can reveal the distribution of responses for particular questions or scales;

and they can "investigate beliefs, practices and experiences associated with [the use of research evidence]" (Gitomer & Crouse, 2018, p. 30). This study is also limited in that it does not clearly enable the isolation of systematic research use or research impact. In brief, the methods and data sources used as part of this study do not enable the researcher to precisely identify the degree to which "professional use" as described by Edutopia community members is research-based or that respondents' decisions were based upon research evidence versus other forms of evidence. However, and as previously argued, this study is based on the understandings that: 1) Edutopia embeds and includes research evidence in a variety of ways; and 2) at "the point of use" (Nutley et al., 2019, p. 242), practitioners and policymakers invariably integrate research evidence with other forms of knowledge and knowing.

Results

This study's results are presented within two subsections. The first subsection describes evidence related to the *extent* of professional use (i.e., the extent to which Edutopia community members are utilizing Edutopia's ideas and strategies). The second subsection addresses the *manner* of professional use.

Extent of professional use

Data sources providing information regarding the extent to which Edutopia's ideas and strategies are being professionally utilized included portions of the 2018 Edutopia Impact Survey (EIS); portions of the 2017 Audience Profile Survey (APS); and an #EdutopiaChat follow-up poll and survey.

The 2018 EIS included an item asking respondents whether they had "tried a specific tip or strategy as a result of hearing about it from Edutopia." This item was thus focused particularly on assessing the *instrumental* use of evidence (also addressed in the next section). Among respondents (N = 3,675), 79 percent answered affirmatively. Table 1 provides response patterns by professional category.

Table 1. Percent responding affirmatively to item "Have you tried a specific tip or strategy as a result of hearing about it from Edutopia?"

Professional role	Number of respondents	Percent responded affirmatively
K–12 teacher	2,106	82.4%
School staff	169	69.6%
Principal	445	83.5%
District staff	137	75.6%
Superintendent	23	91.3%
Professional developer	446	77.4%
Other	635	69.0%

The 2017 APS also contained several items concerning the extent and nature of professional use, and this survey's design permitted the analysis of a broader spectrum of "use" types (see the following subsection for a fuller analysis). Responding to a series of professional use-related statements, participants indicated considerable

and varied use of the material. For example, 89 percent of respondents either agreed or strongly agreed that Edutopia has "given me tips or strategies that I have implemented." Segmenting by respondent type, 96 percent of administrators and 91 percent of kindergarten to Grade 12 (K–12) teachers (including aides) agreed or strongly agreed with this statement. Seventy-seven percent noted Edutopia is "an important part of my professional learning."

Edutopia also uses Twitter to poll and survey participants directly following its #EdutopiaChat sessions. For the September 2018 chat, a Twitter poll ($N = 63$) asked participants, "Will today's chat make a difference in how you do things in your classroom or school?" In response, 33 percent selected, "Yes, a big impact," and 27 percent selected, "Yes, it helped somewhat." September survey respondents ($N = 13$) indicated the chat was "useful" ($M = 4.6$, on a 1–5 scale); 12 of 13 indicated it would "affect how [they] do things in the classroom."

Altogether, the data converge to illustrate that Edutopia is being professionally utilized to a large extent, at least among survey/poll respondents, providing fairly strong evidence that Edutopia is indeed achieving one of its most highly prioritized goals. Stronger evidence might include, for instance, observations of use to complement the survey data and more attention to depth of use (for more on this, see Discussion).

Manner of professional use

This analysis of the manner of research use is supported in part by prior research regarding different evidence use types. This analysis also attends to the level at which use occurs.

Instrumental use—when research or other evidence (Weiss, 1980) is applied directly to decision-making—was most common and abundant within the data reviewed, a result that might relate in part to the data-collection techniques. Both surveys contained qualitative and quantitative items and response data that were appraised as addressing instrumental evidence use. On one item on the APS survey, "Edutopia has given me tips and strategies that I have implemented," responses were as follows: strongly agree (39%), agree (50%), neutral (9%), disagree (1%), strongly disagree (0%). Another APS item, in checklist format, asked respondents how they have "used Edutopia resources in [their] classroom," and 96 percent checked at least one item (certain options for this item do not, however, fit the "instrumental use" category). Certain options within this item provide additional detail regarding the types of instrumental uses that are occurring; for example, 37 percent of respondents indicated "using technology in new and more transformative ways," 37 percent indicated they "shifted toward more student-based learning," and 32 percent "offered more project-based learning experiences."

Similarly, 79 percent of EIS respondents affirmed that they had "tried a specific tip or strategy as a result of hearing about it from Edutopia." The EIS follow-up item—"What specific tip or strategy did you try and how did it go?"—provided complementary qualitative detail. For instance, when a teacher responded about trying to implement "peace corners" in the classroom following exposure to this concept via Edutopia, it was assumed they: a) judged the evidence presented as compelling,

and b) decided to directly apply this evidence in their professional lives (in this case, deciding to adopt peace corners). Descriptions such as these were thus coded as instances of instrumental evidence use.

Most instrumental uses occurred at the classroom level (this is consistent with Edutopia's focus and also provides useful insights into the various ways in which many teachers shape and adjust their learning environments). Teacher respondents described trying and using a variety of tips and strategies shared by Edutopia, and these uses were found by Edutopia staff to map closely onto their core strategies. Table 2 provides classroom-level examples for each of the six core areas.

Table 2. Example of classroom-level use by Edutopia core area

Core area	Classroom-level example
Project-based learning	Teacher describes using project-based learning planning tips
Social and emotional learning	Teacher describes implementing morning meetings to build community
Comprehensive assessment	Teacher describes using formative assessment and exit slips
Teacher development	Teacher describes filming self (while teaching) for developmental purposes
Integrated studies	Teacher describes using cross-curricular approaches
Technology integration	Teacher describes efforts and technologies related to "flipping the classroom"*

Note: *a strategy and form of blended learning in which new concepts/content are introduced outside class and then actively explored/applied in class

Although most instances occurred at the classroom level, some also were evident at team, grade, school, or district levels. For instance, a principal reported that staff tried some technology that Edutopia had reviewed. (The study assumed that these reviews affected the decision to use the technology.) A superintendent described using information related to the design of learning environments (floor-planning arrangements). School administrators also often described particular approaches being undertaken on a school-wide scale, but it was not always clear whether these decisions were informed by Edutopia material or if the materials were being used to reinforce or facilitate ongoing professional learning that had already been implemented (see *Symbolic/Political use*, p. 10).

Conceptual use refers to instances when evidence influences or enlightens how professionals think about problems or solutions (Penuel et al., 2016). The APS survey in particular contained a small set of items and response data that were interpreted as suggesting or illuminating conceptual evidence use. For example, 77 percent of respondents agreed with the item, "Edutopia is an important part of my professional learning" (the detailed breakdown is: disagree strongly (1%), disagree (3%), neutral (19%), agree (48%), and agree strongly (29%)), suggesting conceptual use. Similarly, a few response options to the item, "How have you used Edutopia resources in the classroom?" suggest conceptual uses. The following response options suggest interactive/dialogic uses of Edutopia resources, perhaps serving to conceptually alter the problem or solution space around important topics: shared links or copies (58%),

discussed topic(s) with colleagues (56%), presented information in a teacher-training course or workshop (25%), and presented information at faculty meetings and/or conferences (24%). An assumption here is that these instances regularly include conceptual evidence use (this should be further explored in a future study).

Qualitative data complemented these data. On the APS, an open-ended item asked, "Who would you recommend Edutopia to and why?" Some responses provided insights into the ways in which Edutopia content and/or participation in the Edutopia community is conceptually supportive. For instance, respondents described how Edutopia provides "thought-provoking" material that served to "stretch [their] thinking" and "provide a different view." As noted by a teacher and technology specialist, "There are a lot of different perspectives to help keep me informed of what could possibly support my kind of environment." Some specific payoffs of these shifts to professional thinking were also reported. One teacher, for instance, described becoming more empathetic with students, and another described becoming a better, clearer communicator. (Instances when educators described feeling validated or reaffirmed by the content were more common, but arguably affirmation serves a key function for educators as well.) Also, although conceptual use was most frequently described at an individual level, there were also many suggestions that evidence was being conceptually employed at larger levels. For example, a district administrator described sharing these materials with principals and other colleagues because it "spurs conversations, helps us to think strategically and build vision."

An unanticipated result relates to the extent to which educators reported being "inspired" by content. For example, 65 percent of APS survey respondents agreed that Edutopia resources helped them to get inspired or recharged. Qualitative data support that getting inspired or energized is key for some educator respondents. For a curriculum director respondent, the material helps to "serve as a catalyst for action in schools," while for a high school teacher it can "help educators recharge and approach curriculum from a fresh perspective." A school-level administrator noted, "We all … need to be reminded of how we want to be in the classroom." Although more study is needed to better understand this "inspiration" or "energizing" function, it is conjectured that being inspired serves initially to expand one's sense of professional possibilities—if so, inspiration may fit most closely within the conceptual evidence use category.

Symbolic/political use refers to situations when evidence is used to justify or support decisions that have already been made. Two response options to the APS item, "How have you used Edutopia resources in the classroom?" suggest symbolic/political uses of Edutopia material. Thirty percent of respondents affirmed that they "gathered evidence/validation for classroom practices [they] wanted," and 16 percent indicated that they "shared [Edutopia material] with parents and/or community members to gain buy-in." While these are interpreted as symbolic/political uses, it should be noted that these options were affirmed at relatively low levels. Qualitative data from the EIS provided some further insights. For instance, a principal described using Edutopia material to develop project-based learning practices in their school, and a staff development coordinator/coach described the utility of technology integration materials. It was assumed that decisions had already been made to implement pro-

ject-based learning practices and pursue technology integration, and the Edutopia materials were used to facilitate/strengthen implementation. These data also suggested that symbolic/political use was more likely to occur when respondents were administrators or in non-classroom positions (e.g., instructional coaches).

Two other use types include *imposed* (when there are mandates to use research) and *process use* (referring to what is learned when practitioners conduct research) (Tseng, 2012). These types were more difficult to discern within the data set, but that does not mean that Edutopia content is not used in these ways. This difficulty could be a reflection of data structure.

Discussion

This study presented a conceptualization of mediated, evidence-informed professional use as impact, and then examined the ways in which one IO (Edutopia) is demonstrating such an impact and to what extent. Evidence presented herein supports that Edutopia content is being professionally used (i.e., making an impact) and provides initial insights into how it is being used. This discussion reflects on these results in light of extant literature, and given the current push to measure and document research impact.

Figure 1 depicts this study's basic argument and findings. Impact is understood broadly as an influence or effect. Edutopia and other practice-focused IOs may have numerous intended impacts, but invariably a chief aim relates to the stimulation of professional use (in doing so, it is argued that they are stimulating *evidence-informed practice*). Using an existing evidence use typology, the specific nature of use can be further categorized and evaluated. This study's results have provided strong evidence that Edutopia is having this broad and central impact and, further, that it is influencing educators' professional thoughts (*conceptual* use) and decisions (*instrumental* and/or *tactical* use).

Figure 1. Depiction of mediated impact (stimulation of professional use)
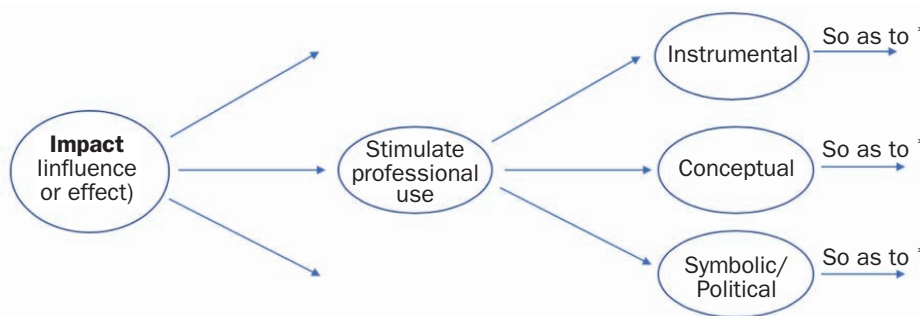
Note: *In this case, the assumed ultimate intended impact is to improve youth/student outcomes (and, potentially, to make broader social impacts)

As is now well recognized (see Gitomer & Crouse, 2019), it is challenging to measure research (and other evidence) use in education. In that regard, though this study is also imperfect—see, for example, the Limitations section regarding this study's primary reliance on extant survey data—it is also plain from the results that Edutopia-hosted content is being professionally used by a large number of educators. It is influencing many educators' thoughts, decisions, and professional behaviors. Moreover, and though patterns of use demand further study, the analysis presented

herein revealed varied uses. Accordingly, this study supports the notion that an educational IO can substantially influence educators' professional thinking and practice, and it provides some detail regarding specific uses that could occur or could be instigated.

These results underscore that, indeed, it is possible for research evidence—alongside and integrated with other forms of evidence—to "directly 'reach' the practice of education" (Cain et al., 2019, p. 2). In other words, research can have an influence on core practice that is "unmediated by policy" (p. 2). In turn, these results serve to reveal that educators still possess considerable decisional space regarding core aspects of teaching and learning. Indeed, the results show that IOs might provide a throughline to what Stephen Ball (2017, p. 10) refers to as "little-p" policies: policies that are not formally codified but that can nonetheless become regularized practices. Likewise, it might be suggested that Edutopia is, through its products and processes, facilitating a hybridizing, teacher-centered model of "inside out" (Tyack & Cuban, 1995, p. 138) educational reform. Looking to the future after historically analyzing U.S. reforms, David Tyack and Larry Cuban (1995, p. 136) suggested the "central purpose of reform" ought to be to "improve *learning*," which ultimately meant making "[positive] encounters between students and teachers more common." To do so requires multiple foci, but *must* include practitioners in defining problems, developing and sharing solutions, and then hybridizing them to fit their varied circumstances (Tyack & Cuban, 1995). Thinking in this manner, Edutopia's products and processes could be viewed as fostering the spread and hybridization of some such knowledge among teachers and other educators.

Still, it is important to note that this study provides limited insights into the *depth* of educators' research and other evidence use (see Coburn, 2003; Farley-Ripple et al., 2018). To more fully understand "the activities, roles, routines, and tools by which research meaningfully and systematically informs educational decisions" (Farley-Ripple et al., 2018, p. 238) requires additional and more up-close data collection approaches (e.g., in-depth interviewing, observations of key deliberative forums).

It is worthwhile also to consider *why* Edutopia is being valued and utilized. This is a salient question given that it appears to be accomplishing something that is at or near the top of many IOs' "impact hierarchies"—i.e., they appear to be attaining or approaching their desired impact. Preliminary research about this topic (Malin et al. [2018] suggest Edutopia is being valued for a combination of features. They are being appreciated, for instance, for providing a wide array of authentic and relevant content (the message), and likely also for their messengers (in many cases, educators, who are perceived to possess useful and credible knowledge). Their messages are typically delivered in narrative form and with compelling, emotive appeals; these and other features align with recommendations for increasing research utilization (Oliver & Cairney, 2019). Also, and perhaps to the dismay of some purists, it is likely that Edutopia content is appreciated in part *because* it does not solely communicate "research," but rather because its messages more closely reflect real-life evidence use insofar as it showcases multiple ways of knowing (Nutley et al., 2019).

In conclusion, this study has advanced and demonstrated a means of conceptualizing, measuring, and appraising a particular form of research impact—research impact as mediated, evidence-informed professional use. Professional use, in turn, was further partitioned into various types, based upon extant scholarship. In so doing, the researcher was demonstrating a form of impact that is at the core of Edutopia's aim (and, presumably, that of many other IOs). In a sense, perhaps the conversational and substantive shift toward emphasizing research impact is positive, offering an opportunity to reimagine what constitutes impact in light of organizational and other particularities. Impact may have multiple meanings and may be indicated in various ways, depending upon specific aims. In any case, however, "use as impact," as demonstrated here, may be at (or very near) the top of the hierarchy of hoped-for impacts for many IOs[4]; accordingly, the conceptualization and methodology described here may be broadly useful (though again, ideally in combination with other, more intimate data collection approaches). Likewise, perhaps the results in terms of reported professional use can provide something of a benchmark against which certain similarly focused IOs can compare. In this vein, the results as reported herein may skew toward the high end of what IOs can expect: Edutopia appears to be relatively well resourced, to have developed a trusted and recognizable brand, and overall to be executing an impressive methodology and set of processes for mobilizing educational knowledge (see also Malin et al., 2018). Finally, it is hoped that scholars interested in these areas will seek to further develop and/or challenge the central concepts and ideas developed and shared through this study. For example, this study's focus on facilitating evidence-informed practice (versus, for example, professionals' use of "pure research") understandably may not appeal to all. In this regard, some may wish to build upon this research by more precisely examining the relative contributions of different forms of evidence to educators' thinking and decision-making.

Notes

1. Intermediary organizations are understood for this study as those aiming not to provide direct services but rather to support those provided by other organizations (in this case, PK to grade 12 schools/districts) (Honig, 2004).
2. For this study, practices and professional thinking based on a combination of experience and pertinent research and/or evaluation evidence are understood to be evidence-informed (England Department for Education, 2014).
3. Cooper (2014) introduced and applied this term to "third party intermediaries whose active role connecting research producers and users is a catalyst for knowledge mobilisation" (p. 30).
4. Arguably, Edutopia's ultimate goal is yet larger; it aims to impact *youth outcomes* (e.g., improving their learning and social-emotional functioning). Appraising Edutopia's success relative to this aspiration would necessitate another approach to impact measurement.

Website

George Lucas Educational Foundation, https://www.edutopia.org/

References

Ball, S. (2017). *The education debate* (3rd Ed.). Bristol, UK: The Policy Press.

Bush, J. (2017). Am I an evidence broker? Reflections on a trip to North America [Blog post]. Retrieved October 20, 2019, from https://www.evidenceforlearning.org.au/news/am-i-an-evidence-broker-reflections-on-a-trip-to-north-america/.

Cain, T., Brindley, S., Brown, C., Jones, G., & Riga, F. (2019). Bounded decision-making, teachers' reflection and organisational learning: How research can inform teachers and teaching. *British Educational Research Journal*. Retrieved August 8, 2019, from https://onlinelibrary.wiley.com/doi/10.1002/berj.3551

Coburn, C. E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, *32*(6), 3–12.

Cooper, A. (2014). Knowledge mobilisation in education across Canada: A cross-case analysis of 44 research brokering organisations. *Evidence & Policy: A Journal of Research, Debate & Practice*, *10*(1), 29–59. doi: 10.1332/174426413X662806

Cooper, A., Rodway, J., MacGregor, S., Shewchuk, S., & Searle, M. (in press). Knowledge brokering: "Not a place for novices or new conscripts." In J.R. Malin & C. Brown (Eds.), *The role of knowledge brokers in education* (pp. 90–107). New York: Routledge.

Cordingley, P. (2008). Research and evidence-informed practice: Focusing on practice and practitioners. *Cambridge Journal of Education*, *38*(1), 37–52.

England Department for Education. (2014). *Online information*. Retrieved from www.education.gov.uk. Accessed on December 16, 2015.

Farley-Ripple, E., & Grajeda, S. (2020). Avenues of influence: An exploration of school-based practitioners as knowledge brokers and mobilizers. In J.R. Malin & C. Brown (Eds.), *The role of knowledge brokers in education* (pp. 65–89). New York: Routledge.

Farley-Ripple, E., May, H., Karpyn, A., Tilley, K., & McDonough, K. (2018). Rethinking connections between research and practice in education: A conceptual framework. *Educational Researcher*, *47*(4), 235–245. doi: 10.3102/0013189X18761042

Farley-Ripple, E., Tilley, K., & Tise, J. (2017, April). *Brokerage and the research-practice gap: A theoretical and empirical examination*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.

Farley-Ripple, E.N. (2016, May 24). Measuring the use of research evidence: Four challenges for the field. New York, NY: William T. Grant Foundation. Retrieved March 15, 2018, from http://wtgrantfoundation.org/measuring-use-research-evidence-four-challenges-field.

Gitomer, D.H., & Crouse, K. (2019). *Studying the use of research evidence: A review of methods*. New York, NY: William T. Grant Foundation. Retrieved March 10, 2019, from wtgrant foundation.org/studying-the-use-of-research-evidence-a-review-of-methods.

George Lucas Educational Foundation. (2019a). *How learning happens*. Retrieved July 15, 2019, from https://www.edutopia.org/how-learning-happens.

George Lucas Educational Foundation (2019b) *Edutopia*. Retrieved July 15, 2019, from https://www.edutopia.org/profile/edutopia.

George Lucas Educational Foundation (2019c). *Frequently asked questions*. Retrieved July 15, 2019, from https://www.edutopia.org/about/contact/faq.

George Lucas Educational Foundation (2019d). *Core strategies for innovation and reform in learning*. Retrieved July 15, 2019, from https://www.edutopia.org/about/edutopia/core -strategies.

George Lucas Educational Foundation (2020a). *How learning happens*. Retrieved April 15, 2020, from https://www.edutopia.org/how-learning-happens.

George Lucas Educational Foundation (2020b). Youki Terada. Retrieved April 15, 2020, from https://www.edutopia.org/profile/youki-terada.

Gorard, S., See, B.H., & Siddiqui, N. (2020). What is the evidence on the best way to get evidence into use in education? *Review of Education*. Retrieved April 16, 2020, from https://onlinelibrary.wiley.com/doi/abs/10.1002/rev3.3200.

Honig, M. (2004). The new middle management: Intermediary organisations in education policy implementation. *Educational Evaluation and Policy Analysis*, *26*(1), 65–87.

Lubienski, C., Scott, J., & DeBray, E. (2011). *The rise of intermediary organizations in knowledge production, advocacy, and educational policy* (ID No. 16487). Teachers College Record. Retrieved March 10, 2019, from http://www.tcrecord.org/.

Malin, J.R., & Brown, C. (2020). Joining worlds. In J.R. Malin & C. Brown (Eds.), *Connecting the dots between research and practice: The role of knowledge brokers, mobilizers and boundary spanners in education* (pp. 1–12). New York, NY: Routledge. doi: 10.4324/978042 9462436

Malin, J.R., Brown, C, & Trubçeac, A. (2018). Going for broke: A multiple case study of bro-
kerage in education. *AERA Open*, *4*(2), 1–14. doi:10.1177/2332858418769297.

Malin, J.R., Brown, C., & Saultz, A. (2019). What we want, why we want it: K-12 educators'
evidence use to support their grant proposals. *International Journal of Education Policy
and Leadership*, *15*(3), 1–19.

Malin, J.R. (2016). Educators' use of research and other evidence within local grant founda-
tion applications. *Planning and Changing*, *47*(1), 82–100.

Malin, J.R., & Lubienski, C. (2015). Educational expertise, advocacy, and media influence.
Education Policy Analysis Archives, *23*(6). Retrieved March 10, 2019, from http://epaa.asu
.edu/ojs/article/view/1706

McIntyre, D. (2005). Bridging the gap between research and practice. *Cambridge Journal of
Education*, *35*(3), 357–382.

Nelson, J., & Campbell, C. (2019). Using evidence in education. In A. Boaz, H. Davies, A.
Fraser, & S. Nutley (Eds.), *What works now? Evidence-informed policy and practice*
(pp. 131–145). Bristol, UK: Policy Press.

Nutley, S., Davies, H., & Hughes, J. (2019). Assessing and labelling evidence. In A. Boaz, H.
Davies, A. Fraser, & S. Nutley (Eds.), *What works now? Evidence-informed policy and prac-
tice* (pp. 225–246). Bristol, UK: Policy Press.

Oliver, K., & Cairney, P. (2019). The dos and don'ts of influencing policy: A systematic review
of advice to academics. *Palgrave Communications*, *5*(21), 1–11.

Penuel, W.R., Briggs, D.C., Davidson, K.L, Herlihy, C., Sherer, D., Hill, H.C., Farrell, C., &
Allen, A-R. (2016). *Findings from a national survey of research use among school and district
leaders* [Technical report No. 1]. Boulder, CO: National Center for Research in Policy
and Practice. Retrieved June 15, 2017, from http://ncrpp.org/assets/documents/NCRPP
_Technical-Report_180302.pdf.

Riddell, R. (2019, May 23). Common cents: George Lucas Foundation details strategy of ex-
ploring innovation without being prescriptive. *Education Dive*. Retrieved July 15, 2019,
from https://www.educationdive.com/news/common-cents-lucas-foundation-details-strategy
-of-exploring-innovation-wit/555269/.

Tseng, V. (2012). The uses of research in policy and practice. *Social Policy Report,* *26*(2), 1–24.

Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*.
Cambridge, MA: Harvard University Press.

Ward, V. (2017). Why, whose, what and how? A framework for knowledge mobilisers.
Evidence & Policy: A Journal of Research, Debate and Practice, *13*(3), 477–497.

Weiss, C. (1979). The many meanings of research utilization. *Public Administration Review*,
39(5), 426–431. doi: 10.2307/3109916

Weiss, C.H. (1980). Knowledge creep and decision accretion. *Knowledge*, *1*(3), 381–404.

Weiss, C.H., & Bucuvalas, M.J. (1980). *Social science research and decision-making*. New York,
NY: Columbia University Press.

Winch, C., Oancea, A., & Orchard, J. (2015) The contribution of educational research to
teachers' professional learning: Philosophical understandings. *Oxford Review of Education*,
41(2), 202–216.

Appendix

Additional details about the 2017 Audience Profile Survey (APS) and the 2018 Edutopia Impact Survey (EIS)

Audience Profile Survey

Author: Designed, hosted, and administered by Harvey Research, Inc.

Primary objectives: "To learn more about the informational habits and professional interests and activities of the Edutopia audience, as well as their opinions of the website and social media channels" (Harvey Research, Inc., unpublished summary report).

Administration dates and methods: Invitations via website, e-newsletter, and social media channels (online/electronic survey), with $250 Visa gift card drawing incentive. Responses were collected from January 5 through January 26, 2017.

Population: "1,223,134 potential respondents received or were exposed to the invitation" (Harvey Research, Inc., unpublished summary report).

Responses: 6,860 completed responses.

Respondent profile:

- 52% are teachers in K–12; 11% are administrators, 9% are staff development director/coordinator/coach
- 76% are engaged in public school environments, 20% private, 15% college/university
- 62% are engaged with a Title 1 eligible school
- 44% engaged with a school, including 50% or more students eligible for free/reduced price lunch
- 87% visit Edutopia.org and/or social media sites at least monthly; 61% at least weekly, 16% daily

Key items (relative to this study):

Reflecting on your experiences and communications with Edutopia during the past year, to what extent do you agree with each statement? [Likert: disagree strongly, disagree, neutral, agree, agree strongly]

- Edutopia has increased my knowledge of effective models in education (89% agree or strongly agree)
- Edutopia has given me tips and strategies that I have implemented (89% agree or strongly agree)
- Edutopia is an important part of my professional learning (87% agree or strongly agree)

How have you used Edutopia resources in your classroom? (Please check all that apply)

- One or more (96%)
- Got inspired/recharged (65%)
- Shared links or copies (58%)
- Discussed topic(s) with colleagues (56%)
- Discovered new ideas to implement with students (55%)
- Used technology in new and more transformative ways (37%)

- Shifted toward more student-centered learning (37%)
- Offered more project-based learning experiences (32%)
- Gathered evidence/validation for classroom practices I wanted (30%)
- Incorporated more social-emotional learning (26%)
- Presented information in a teacher training course or workshop (25%)
- Changed my teaching style (24%)
- Presented information at faculty meetings and/or conferences (24%)
- Used more varied and authentic assessments (20%)
- Incorporated more formative assessment (20%)
- Shared with parents and/or community members to gain buy-in (16%)
- Revised school or district curricula (8%)
- Developed school- or district-wide programs (8%)
- Other (3%)
- I have not used information from Edutopia (4%)

Edutopia Impact Survey

Author: Developed, hosted, and administered by Edutopia staff; hosted on Typeform.com.

Primary objectives: This brief, five-item survey was primarily intended to appraise if and how survey participants tried specific tips or strategies from Edutopia.

Administration dates and methods: Invitations were distributed via e-newsletter and social media channels (online/electronic survey), no incentive was offered. Responses were collected from October 13–21, 2018 (from Facebook and Twitter audience) and from October 28 through November 7, 2018 (from email subscribers).

Population: 430,763 potential respondents received or were exposed to the invitation, including 349,516 Facebook followers, approximately 56,822 Twitter followers, and 24,425 email subscribers.

Responses: 3,675, including 548 via social media and 3,127 via email subscribers

Respondent profile:

- 57.3% are teachers in K–12, including: 24.2% elementary; 18.3% middle school; 23.3% high school
- 2% student teacher
- 12.1% are principals or school administrators,
- 4.3% are district staff, 0.6% superintendents
- 11.9% professional developers
- 17.7% "other"
- 87% visit Edutopia.org and/or social media sites at least monthly, 61% at least weekly, 16% daily

Key items (relative to this study):

Have you tried a specific tip or strategy as a result of hearing about it from Edutopia? [Yes/No: 79% said "Yes"]

What specific tip or strategy did you try and how did it go? [Open-ended response]