Knowledge Mobilization in Education: The Marshall Memo Case

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Abstract

The importance of intermediation between communities primarily engaged in research production and those primarily engaged in practice is increasingly acknowledged, yet our understanding of the nature and influence of this work in education remains limited. Accordingly, in this study we utilized case study methodology, aspiring to understand the activities and signature product of a particularly influential mediator of current educational research, news, and ideas. We also examined its professional contribution as perceived by educators who experienced it. Data analyses suggest that subscribers greatly appreciate several aspects of the product, which was found to draw from a wide range of source material that varied in terms of its research centeredness and its practical implications.

Knowledge Mobilization in Education: The Marshall Memo Case

The drive to foster better connections between research and practice is strong, including and extending beyond the field of education (Nutley, Walters, & Davies, 2007). In education, the research-policy-practice gap is a widely recognized problem (Hargreaves, 2000; Bryk, Gomez, & Grunow, 2011). If educators were more research engaged and connected, many assume, precious teaching and learning improvements would follow. Evidence to support this supposition is emerging (Goldacre, 2013; Mincu, 2014; Supovitz, 2015). However, despite various efforts, it has proven challenging to broadly strengthen research-practice connections. There are several obstacles. At root are deep cultural and structural divides between those inhabiting primarily research production (e.g., universities) and research use (e.g., K-12 schools) contexts (Caplan, 1979; Levin, 2013). Absent large-scale, coordinated activities that would directly join them, knowledge mediators (also referred as mobilizers, brokers, intermediaries, and translators) who can bridge these worlds are essential (Daly & Finnigan, 2014; Levin, 2013).

Accordingly, such individuals/entities' major function in the education context is increasingly noted. Lubienski, Scott, and Debray (2011) described a vast network of U.S.-based intermediary organizations, many purportedly aiming to enhance decision-makers' research use. Most, however, focus narrowly (e.g., promoting school choice reforms), strive to influence state/national policy more so than teaching practice, and/or deliver messages that are driven more so by ideology than by rigorous, scientific evidence (Malin & Lubienski, 2015; Lubienski et al., 2011). In contrast, the present study focuses upon a prominent mediator (and his product) that is broadly focused, designed expressly for the K-12 educator, and positioned as neutral in its coverage of research and other practice-relevant information.

Recognizing their potentially bedrock function in the education ecosystem but also the dearth of research describing the nature of their work and its influence (Levin, 2013), we therefore conducted a case study of Mr. Kim Marshall and his widely circulated[1] weekly product for K-12 educators, *The Marshall Memo*. This publication is developed from his review of an array of publications and selection of material he deems will "have the greatest potential to improve teaching, leadership, and learning" (*The Marshall Memo*, 2017, n.p.). In conducting this research, we are guided by these four questions:

1. How is *The Marshall Memo* operated, and what is its intended contribution?
2. What are the qualities of the material that is translated and shared?
3. To what extent is two-way communication evident?
4. What does *The Marshall Memo* mean to the educators who interact with it?

In the literature review that follows, we first describe what is known about research use and engagement, focusing on barriers and facilitators. We then describe existing research that illuminates the functions of mediators, and their preferred skills and qualities.

Key Barriers to Research and Research-Based Knowledge Exchange

Three major barriers to effective research engagement stem from characteristic deficiencies in terms of its accessibility, relevance, and timeliness (Hering, 2016). Related to access, academic researchers—who collectively produce copious, and often practice-relevant, research—usually share their work passively, merely making information available via traditional means (e.g., journal articles) for would-be users to find and review (Cook, Cook, & Landrum, 2013; Dearing & Kreuter, 2010). An immediate disconnect arises: Educators typically

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[1] According to Mr. Marshall (personal communication, August 18, 2016), The Marshall Memo is the third largest US-based education publication, trailing only the American Federation of Teachers' *American Educator* and ASCD's *Educational Leadership*. Mr. Marshall declined to provide specific subscriber numbers but has offered there are "tens of thousands of subscribers."

do not turn to the academic literature (for one, most academic journals restrict access; Saunders, 2015), nor do they attend the same professional conferences.

Research also often fails to provide relevant, useable information (see Lysenko, Abrami, Bernard, Dagenais, & Janosz, 2014). Research products tend to be dense and protracted, conforming with university conventions but under-attending to the practical implications of findings (Brown, 2011). As well, scholars gear toward knowledge production (Firestein, 2012) and may not deeply consider of what is relevant to practitioners (Hering, 2016). Concerning timeliness, even research that is accessible and relevant may not be available to practitioners when needed to aid decision-making (Sarewitz & Pielke, 2007; Hering).

These impediments (and others; Malin, 2016; Lysenko et al., 2014) are not easily addressed. For one, the contexts in which most educational research production (e.g., universities, think tanks) and most K-12 practice (schools) occur are vastly disparate (Caplan, 1979). The dominant cultures within which researchers and practitioners reside differ: Researchers, for instance, tend to revere theory/abstraction (Ward, House, & Hamer, 2009), while educational decision-makers desire concrete and relevant evidence (Schneider, 2014). Publications in (often paywalled) peer-reviewed journals have long been "currency" for academics, and institutions have been slow to tilt their incentives toward different priorities (Hering, 2016).

Facilitating Research and Research-Based Knowledge Exchange: Brokerage

Given these barriers and the improbability they can be independently resolved, next we turn our attention to individuals, organizations, and structures that could serve some connecting or bridging function. Related to the aforementioned barriers, for instance, these agents could enhance access to high quality and relevant research (and filter through what may be less useful), translate original works, and/or forge connections between researchers and practitioners.

Delving into the literature, one must contend with several terminology-related issues: Several overlapping terms are employed to describe these individuals and entities—e.g., brokers, intermediaries, mediators, boundary spanners, translators, and mobilizers—and researchers' definitions are inconsistent. A key distinction is to what extent scholars indicate or imply evidence from 'research' is or should be privileged over other evidence forms. Cooper (2013), for instance, studied 'research brokering organizations,' and Finnigan and Daly (2014) described 'research mediators.' Others, like Ward (2016), instead applied the modifier 'knowledge,' signifying a more open approach that would incorporate additional evidence sources. For this research paper, we concern ourselves primarily with *knowledge mobilization* (KMb), viewing it as the broadest and most encompassing term, and therefore one can accommodate a wide range of processes and activities that are carried out within the mediation context: e.g., practice-relevant knowledge translation, dissemination, linkage or exchange activities, capacity building, and other efforts to enhance knowledge-based action. When describing the individuals who engage in these processes, we follow Ward and colleagues (2009) and use the term *broker*.

We recognize most individuals/entities do not engage in all processes—and indeed, most probably do not regularly succeed in *mobilizing* knowledge (Cooper, 2015). We also know that brokers vary in terms of their motivations, types and sources of evidence they promote, and along other dimensions (Ward, 2016). Nevertheless, our adoption of these terms reflects accumulating evidence that mere diffusion and/or translation of knowledge is usually insufficient to influence action (Contandriopoulos, Lemire, Denise, & Tremblay, 2010; Ward et al., 2009). A priori, although we expected Mr. Marshall's activities would geared more so toward translation and dissemination (knowledge management; Ward et al.; Oldham & McLean, 1997) and less toward promoting exchange of knowledge and fostering KMb, we were open to the full range. Other terms may connote more limited roles and, thus, have overly constrained our focus.

Some research—albeit primarily from outside education and in the health sector—now exists concerning the roles, functions, and preferred qualities of those functioning as brokers. However, most scholarship focuses upon research production (e.g., scholars who are active with practitioners) and use (e.g., practitioners highly regarded as knowledge hubs) contexts, rather than the mediation context (Ward, 2016; Levin, 2013). This issue in education is magnified (Cooper, 2013). Tseng (2007) notes: "Intermediaries often play a significant role in interpreting, packaging, and distributing research evidence for policymakers and practitioners…Given their central role in research use, [they] should receive more focused attention" (p. 18).

Educational intermediary organizations in general have mushroomed in recent decades. Rich (2005) noted a four-fold increase in think tanks from the 1970s to the early 2000's. Lubienski and colleagues (2011) described a widely expanding, intricately networked intermediary sector. They viewed these groups as strategically inhabiting the gap between traditional (and largely passive) research producers and decision-makers. These groups, however, were usually focused on high level policy advocacy and advocacy-based research, and indeed their proliferation may add to, rather than subtract from, issues for local practitioners.

By contrast, individuals/organizations that focus upon shaping/enhancing local educational practice have received substantially less attention. Thus, we searched beyond education for insights. In an influential conceptual piece anchored in the health care sector, Ward et al. (2009) focused upon "knowledge brokers" and noted their potential to supply "The missing link in the evidence to action chain" (p. 267). She described brokers' primary role: "to make research and practice more accessible to each other" (2009, p. 268). She also emphasized that brokering seeks, or should seek, to foster an equitable relationship between research and practice, and include multiple types of evidence (e.g., tacit knowledge residing in practitioners' minds and practical contexts) (Ward et al., 2009; Roth, 2003). Knowledge brokering, she further noted, "can reside in individuals, organisations, or structures" (p. 268). This conceptualization appears to be well suited to education:

> Learning for teachers…has to build on and/or be related to what learners know, can do, believe and care about already. Unless learners have the opportunity to make such connections, new knowledge, ideas or skills are all too often quietly forgotten, discounted or simply remodelled and shoe-horned in to pre-existing practices and beliefs (Cordingley, 2008, p. 42).

Early understandings of brokering flow from the private sector, where brokers have been encouraged to diffuse knowledge, in an effort to fuel innovation (Ward, 2009; Roth, 2003). More recently, the term also has been re-tailored to the public sector. Oldham and McLean (1997) proposed three frameworks for considering knowledge brokering in the public sphere: knowledge system, transactional, and social change.

The knowledge system framework emphasizes the role of the broker in the creation, spread, and/or application of knowledge. It emphasizes knowledge sharing, dissemination, and translation (Sin, 2008) and is designed to address several aforementioned structural barriers. In the U.S., the What Works Clearinghouse and the ERIC database exemplify brokering tools primarily fitting within this framework. Though knowledge systems approaches are frequently employed (Ward et al., 2009), in isolation they are not enough to stimulate use (see Levin, 2013).

The transactional model focuses on strengthening relationships/interfaces between knowledge producers and users; brokers are positioned as “intermediaries or linkage agents” (Ward et al., 2009, p. 4), and interpersonal contacts and strong communication are emphasized. It is based on understandings that active dialogue, participation, and exchange regarding research and/or the research process are the best ways to stimulate knowledge use (Nutley et al., 2007). This model emphasizes network and partnership formation (Ward et al., 2009). In U.S. education, research-practice-partnerships (Coburn & Penuel, 2016) may primarily fit within the transactional model.

The social change model, the least used and least well-articulated (Ward et al., 2009), is concerned with capacity building—e.g., with strengthening educators’ abilities to identify, interpret, and conduct research. This approach is reasonable in education given many teachers’ reported lack of confidence and skill in these areas (Galdin O’Shea, 2015). In education, a small and growing set of networked improvement communities (Bryk et al., 2011) appear to exemplify the social change model.

KMb is promising but poses several challenges. First, it is time and resource consuming (Ward et al., 2009), and perhaps prospective brokers do not wish to make such lofty investments (Contandiopoulos et al., 2010). Each of the previously described brokerage models is uniquely taxing; for instance, the linkage and exchange model necessitates considerable time and energy to build/nurture relationships (Ward et al.). A second challenge relates to brokers’ role confusion and/or the multiple roles they often play (Ward, 2016).

The final challenge relates to the considerable, wide-ranging skills that are needed to perform the different functions. A knowledge system function, for instance, requires skills related to gathering, appraising, and tailoring research and other evidence (Robeson, Dobbins, &

DeCorby, 2008; Ward et al., 2009), while linkage/exchange requires networking skills and considerable credibility (Lomas, 2007). More generally, the literature suggests flexibility, inquisitiveness, and self-confidence are key attributes (see Ward, 2009).

Lomas (2007) studied 400 ‘knowledge brokers’ in the health sector and outlined a set of valued attitudes and skills, including that they be:

> “entrepreneurial (networking, problem solving, innovating); trusted and credible; clear communicator; understands the cultures of both the researcher and decision making environments; able to find and assess relevant research in a variety of formats; facilitates, mediates and negotiates, and; understands the principles of adult learning” (p. 130).

Education-focused researchers have also highlighted the importance of trust and credibility for individuals engaged in KMb or related activities, perhaps above all else. Studying research use as part of school board member deliberations, Asen and Gurke (2014) found these decision-makers judged not only the credibility and trustworthiness of the evidence presented to them “but also the person presenting” it (p. 61). Tseng and Nutley (2014) similarly describe the importance of relational trust, and Daly, Finnigan, Moolenaar, and Che (2014) found trust salient in determining the size and strength of research brokering networks.

Recently, Ward (2016) developed a framework related to KMb, organized around four key questions about these individuals/entities. It is fundamental to the present study and is therefore detailed in the conceptual framework that follows.

Conceptual Framework

We rely upon Ward’s knowledge mobilization framework (2016), developed out of her systematic, cross-disciplinary review of 47 knowledge mobilization models in the scholarly literature. The framework is organized around four questions: “Why is knowledge being mobilised? Whose knowledge is being mobilised? What type of knowledge is being mobilised? How is knowledge being mobilised?" (Ward, 2016, p. 1). Answers to these questions in relation to the various models formed 16 sub-categories in total. For instance, three 'answers' (categories) emerge from the question regarding knowledge types: scientific/factual knowledge, technical knowledge, and practical wisdom. Some models isolated one knowledge type, whereas some included all knowledge types (see Appendix One).

Ward's (2016) framework deeply informed our analysis and mapped closely to our research questions, as shown in Table One. However, it does not fully engage with information pertinent to the present study regarding a) the quality/nature of summarized or translated material (e.g., its length, style, emphasis); and b) key skills/qualities of the knowledge mobilizer. To supplement, we draw primarily from Cordingley (2008), who suggests enhanced user uptake of research (and, presumably, other sources of knowledge) will arise from various features, including: accessibility (physical); conciseness; and user-friendly language that is clear, simple, and jargon-free. These and related findings guided our analysis into the qualities of Memo content (which was best studied in relation to original content), and inspired the development of a small number of categorical and quantitative measures (described in methods). We also drew from previously described research by Lomas (2007) and others that has detailed several key qualities (including perceived trustworthiness and credibility) these persons ought to possess. We studied Mr. Marshall, his product, and its meaning to educators with those findings in mind.

Table 1. This study's research questions and their connections with Ward (2016) framework.

Research Question	Primary Connection	Secondary Connection
One	Why is knowledge mobilized?	How is knowledge mobilized?
Two	What type of knowledge is mobilized? Whose knowledge is mobilized?	Why is knowledge mobilized?
Three	How is knowledge mobilized?	
Four	(Is it actually being mobilized?; If so, in what ways?)	

Methods

To address our research questions, we primarily pursued qualitative inquiry, treating The Marshall Memo and Mr. Kim Marshall as a 'case'—one involving a knowledge broker residing in education's mediation context, and perhaps facilitating knowledge mobilization, in the field of education. We thus pursued and conducted a single case study (Yin, 2009). This methodology fits our purposes, as we aspired to deeply investigate a contemporary and meaningful phenomenon over which we had little control (Yin).

We took numerous approaches as we addressed each research question. Specifically, we twice interviewed Mr. Marshall (total time: 2 hours, 58 minutes) and exchanged several clarifying emails, analyzed the contents of 15 Marshall Memos (including 116 individual items; these Memos spanned more than 3 months of 2016—April 4 through July 11), content analyzed Mr. Marshall's website (marshallmemo.com), investigated the searchable archive that is accessible to subscribers, and acquired and analyzed an internally created, June 2015 survey of subscribers (N = 4,450 respondents). We simultaneously pursued data collection and analysis and triangulated between sources (Yin, 2009). For instance, in our second interview with Mr. Marshall, the we shared emergent impressions with Mr. Marshall and pursued and aimed to clarify areas of discrepancy. As a research team, both authors also repeatedly met and communicated until we could attain consensus with respect to our codes and categories, and our broader interpretations of the data as a whole.

Measures

Our interest in better understanding the nature of original and source content inspired the development of a small number of simple categorical and quantitative measures. These are described below, according to their focus on original source material or summarized (Marshall Memo) content:

Measures Related to Original Source Material

We classified all original material to which we secured access (*N*= 114; 97.4% of total) by *source type* (e.g., peer reviewed, blog post, professional magazine), *peer-reviewed* (yes/no), *article type*,[2] *accessibility* (freely accessible or not), and *number of references to peer-reviewed research* (recorded as a precise number up to 10, or >10). We also tracked whether/to what extent the original source/publication had a *social media presence*. Analyzing the content of the original, summarized work, we coded it regarding whether it *primarily drew from education or different field/s*, whether its *primary implications were for teaching and/or leadership* and/or for *practice or policy*, and we appraised its *actionability for practitioners*. We also tracked the author/s of each article and classified their primary professional roles (e.g., academic, practicing educator, journalist). When possible[3], we also recorded the original's *number of words* and calculated/recorded, using Microsoft Word functionality, its *readability* (Flesch Reading Ease and Estimated Grade level).

Measures related to Marshall Memo Summary/Translation

For all items found in Marshall Memos 631-645 (*N* = 15 Memos; *N* = 116 items), we recorded their *number of words* (excluding title and trailing information) and *readability*. We also judged their *actionability* for practitioners and sought to understand the ways in which the Memo material departed from the original in terms of emphasis.

Limitations

[2] We built from categories utilized by Farley-Rippl and Jones (2016): empirical; review of literature; and conceptual, theoretical, or advocacy. We ultimately identified 8 categories.

[3] For the shorter pieces (*N*= 60; 51.7%), it was feasible to copy/paste the originals material into Microsoft Word to make these calculations.

This study is limited in two primary respects. First, although case study approaches are frequently valuable and well suited to the present study, the ability to generalize findings can be limited (Yin, 2009). Perhaps this particular case is unique in ways that limit application or overlap to other instances of educational knowledge brokering and mobilization. Another limitation relates to the data upon which we drew for this study. For instance, we significantly relied upon Memos covering a particular time period—perhaps those spanning a different time period would have somewhat different qualities. We also relied on subscriber survey results shared by Mr. Marshall, and did not have ability to calculate a survey response rate, nor to compare respondents to non-respondents. These groups may differ in systematic way/s, thereby distorting our picture concerning the Memo's meanings to those who interact with it (RQ4).

Case Context

The Marshall Memo, published weekly since 2003, is "A Weekly Round-Up of Important Ideas and Research in K-12 Education" (The Marshall Memo, 2017, n.p.). It is "designed to keep principals, teachers, superintendents, and other educators very well-informed on current research and best practices" (The Marshall Memo). Initially, Mr. Marshall focused wholly on school principals. They remain his top concern, but his readership has expanded. To develop each Memo, he subscribes to more than 60 publications (see https://marshallmemo.com/publications.php) and scans through copious articles each week, ultimately choosing "5-10 that have the greatest potential to improve teaching, leadership, and learning" (The Marshall Memo). He avoids "breaking news" (Marshall, personal communication, June 16, 2016) or national policy-related material, focusing instead on what appears to reside within educators' locus of control. He then crafts tailored article summaries, provides e-links to originals (when available), and highlights a set of quotes. The Memo also often includes a set of "short items" containing links to resources. It is emailed as a document to subscribers each Tuesday; subscribers also may read it in HTML format or listen to a podcast version. It is meant to be readable within 20 minutes. Subscribers of the Memo also have web access to a member's area where they can access prior issues, review "classic articles," or search an archive. An individual subscription costs $50, and bulk pricing is available.

Mr. Marshall operates semi-independently, with a part-time assistant and informal support from his spouse (proofreading and discussion). Mr. Marshall's website bio emphasizes his longstanding educational engagement and points to his many education writings. He worked for many years in Boston Public Schools, including 15 as a principal, 6 in central office (director of curriculum, then director of planning), and 9 as a teacher. He now works as a Leadership Coach with New Leaders (an alternative leadership preparation provider). Also, each year, he puts on "around 100 full-dress workshops," coaches principals, and provides other consulting services (personal communication, April 13, 2017). He holds an undergraduate degree from Harvard College, an M.Ed. from Harvard Graduate School of Education (GSE), and an honorary doctorate from Harvard. Earlier, he attended public (Washington, DC) and private schools in the U.S. and the United Kingdom.

Results

In this section, study results are first detailed by research question. We then conclude with a sub-section in which we connect to and extend beyond the Ward (2016) framework.

Development, Operation, and Intended Contribution

The following supplements the contextual information previously provided. While working as a K-12 educator, Mr. Marshall experienced the time demands and complexities inherent to educational leadership (especially the principalship) and aimed to partially address these strains by producing an informative, concise, and useful publication:

> "I [had] a strong feeling that most people in schools don't have time to read...I was trying obviously from the very beginning to bridge this gap between the very busy 24-7 world of school leaders and superintendents and all this great literature that is out there, so that was…the mission of the Memo from the beginning."

He launched the Memo with networking support and seed money from two friends and colleagues, Jonathan Schnur (a considerable education influencer: e.g., senior advisor to ex-President Obama and ex-Secretary of Education Duncan) and Jon Saphier (edu-consultant). Initially, Mr. Marshall recalls, there "couldn't have been more than…115 people." From the beginning, the Memo was delivered weekly and core concepts remain, with some evolution and enhancements over time (e.g., searchable archive, different/more sources, podcast).

Mr. Marshall confines his Memo work to two intense days weekly: Sundays entail reading and selecting articles, and Mondays entail writing, revising, and initiating the dissemination process. He is occasionally being invited by the schools and the groups of educational practitioners to deliver workshops, and trainings as well. He has developed a sustainable routine. He has thus far resisted entry into social media but has reflected at length about doing so.

Qualities of Marshall Memo and Source Material

To address this question, we rely most heavily upon our analysis of Memos (*N* = 15) and the original content from which they drew. We supplemented this analysis by interviewing Mr. Marshall and analyzing his reflections. The analyzed memos spanned 3+ months in 2016 and included 116 'full summaries' (*Mdn* per memo = 8). Mr. Marshall's readings and selections during were broad, drawing from 52 distinct sources that formed 11 publication categories. Table 2 represents a classification of sources by type. Of 116 summarized items, 21 (18.1%) drew from peer-reviewed journals, and three more (2.6%) represented NBER working papers or IES-commissioned reports. Traditional news sources (e.g., *The New York Times* and *The Atlantic*; 17.2%), education-specific news (e.g., *Education Week* and *The Chronicle of Higher Education*; 15.5%), publications produced by professional organizations (e.g., ASCD's *Educational Leadership* and the National Education Association's *American Educator*; 14.7%) and professional magazines (e.g., *Phi Delta Kappan* and *School Administrator*; 13.8%) also appeared with high frequency. The specific sources covered most frequently were *Education Week* (11), the ASCD journal *Educational Leadership*, and *The New York Times* (10 each).

Table 2. Frequency Table Representing Source Types of Original Articles.

Source Type	*N*	%
Peer-reviewed journal	21	18.1
Traditional news (broad)	20	17.2
Education-specific news	18	15.5
Professional organization, periodical	17	14.7
Professional magazine, education	16	13.8
Professional magazine, non-education	6	5.2
Think tank / Advocacy organization	5	4.3
Consultant-based material (direct)	5	4.3
Education Foundation	4	3.5
Non-peer reviewed, working paper or report	3	2.6
Book	1	0.9

Mr. Marshall also lists on his website (at https://marshallmemo.com/publications.php) the frequencies with which he has drawn from different sources since the Memo's inception. His most frequent sources are *Education Week*, *Educational Leadership*, *Phi Delta Kappan*, the *New York Times*, and *Principal Leadership*. *The Reading Teacher,* a peer-reviewed journal, is 8th.

Although many original articles were available to us without invoking institutional access (e.g., *The New York Times* allows limited access), just 24 items (21%) appeared in fully 'open access' outlets. This finding reinforces that Mr. Marshall is, indeed, is serving to enhance educators' access to material he appraises as relevant. He reads broadly, noting "the good stuff…is so widely scattered," and expressing "I want my readers to have access to every good piece of educational thinking or practice or research that's out there."

Nearly all sources from which Marshall draws have social media (Twitter) presences, some quite large (e.g., 4.23 million followers for *Harvard Business Review*); we therefore assume many of the articles Mr. Marshall summarized also were traversing social media.

Classifying the original material by the type of structure/argument it made, we identified 8 distinct categories (see Table 3 below). The majority of articles (62%) were classified as *conceptual/theoretical/advocacy*; 8% of these appeared as 'op-eds' for major news outlets like *The New York Times* or *The Atlantic*. *Descriptions of practice*, *empirical articles*, and *journalism/reporting* were the next most frequent categories (Appendix Two provides an example of an article fitting into each category).

Table 3. Classification of Original Articles by Structure and/or Argument Made

Type	*N*	%
Conceptual/Theoretical/Advocacy	71	61.2
Description of practice	11	9.5
Empirical	11	9.5
Journalism/reporting	8	6.9
Review of literature	6	5.2
Derivative	4	3.4
Unclassified - Could not access	2	1.7
Academic critique of article or response to critique	2	1.7
Crowdsourced ideas from practice	1	0.9

Mr. Marshall provided additional insights into the material he tends to most highly value, noting "I love the pulled together stuff." Although he also appreciates and selects some stand-alone, empirical studies, he notes they often "tend to be too narrow." By contrast, "the reviews…the meta-analysis type (articles), they've done a lot of work for me, and that is really helpful." Reflecting on the materials he ultimately selects, Marshall has become increasingly focused and efficient: "What I'm looking for is does this message make sense to a principal? Is it helpful? Is it something that they should be thinking about? Does it reinforce important things? Does it say something new?"

Mr. Marshall also described the personal/professional perspective he brings to bear. He noted studying with Ronald Edmonds, an originator of effective schools research, and his own longstanding interest in the achievement gap and how to close it. He also described himself as a progressive educator and noted, "I have some strong views…but at the same time, I try to be fair minded." He also reflected, "There's definitely a Kim Marshall perspective [in the Memo], and that is actually what people are paying for. They're trusting that my eye, as I look at this stuff, is a good eye." He ultimately strives to "do an intellectually responsible job of summarizing each article, without bias," and he periodically seeks out feedback from subscribers regarding his effectiveness in this regard.

Nearly 75% of the original articles, we determined, drew primarily from the field of education. An additional 10%+ drew primarily upon psychological findings or topics (e.g., motivation, grit, etc.). Related, Mr. Marshall expressed the belief that subscribers tend to appreciate articles "with a very broad social psychological perspective." We appraised that about 42% of articles were primarily leadership-relevant and about 45% were primarily pertinent to practice (about 7% applied to both, and 5% applied to neither). We found that most articles directly pertained to educational practice (e.g., leadership strategies, instructional methods), although we noted about 26% appeared more so to hold local policy implications.

We also analyzed the number of direct references to scholarly research within original articles. The explicit research basis of original material widely varied: In 34.5% of cases, 10 or more research references were identified; in 29.1%, zero such references were made. We also noted that some authors employed research sources sparingly but strategically. For instance, two academics co-writing for *The New York Times* referenced just two studies, but one of these was to a published review of scores of pertinent research. Referring to research in this manner enabled the author/s to efficiently support a claim within the confines of a concise op-ed. Additionally, in many instances we noted within non-empirical pieces a convoluted, multi-stage research referencing process. For instance, an *Education Week* article about the efficacy of 1:1 laptop initiatives linked to a prior *Education Week* article, the latter one providing a summary of research regarding teachers' practices.

The Memo, Marshall indicated, was never intended to draw solely from academic research. Describing material he featured, encouraging educators to collectively perform Stack Audits (e.g., reviewing all homework given by teachers over a particular time period; we agreed this was probably not yet a research-validated intervention), Marshall noted,

> I'm not waiting around for researchers to validate that. I assume it would be. I just think that I'm floating that out there. I'm putting that out there, saying, "What do you think of this?" I hope a lot of people pick up on that.

We also reviewed affiliations/roles of the original article author/s (see Table 3). The largest share of items was partially or solely authored by academics or researchers (49.1%), followed by education journalists or editors (12.9%), education authors/consultants/former educators (12.1%), and currently practicing educators (8.6%).

Table 3. Original Article Author/s, By Professional Role.

Role	Frequency	Percent
Academic	57	49.1
Educational journalist or Editor	15	12.9
Educational author/consultant/former educator	14	12.1
Educational Practitioner (current)	10	8.6
Non-educational journalist or Editor	9	7.8

Think Tank / Advocacy organization, professional	3	2.6
Mixed authorship team (academic/consultant)	2	1.7
Mixed authorship team (academic/practitioner)	2	1.7
Writer/journalist (outside education)	2	1.7
Non-educational author/consultant	1	0.9
Poet/Essayist	1	0.9

The Memos ranged from 11 to 14 single-spaced pages in length, and individual items were concise though quite variable (M = 561.41, SD = 348.54). Summarized material was always substantially shorter than original material but varied by article, a reflection of Marshall's desire to assist busy educators while extracting out the most important points:

> It does strike me that sometimes a 45-page *Teachers College Record* article, I do in half a page because that's the substance. The substance of it is a fairly simple, important point. With Ron Ferguson's (article) this week, his was a 67-page paper and I think I took five pages to do that one.

Mr. Marshall also tended to emphasize practical applications of the original content while de-emphasizing methodological details. He generally "trust(s) that any article in a peer reviewed journal" is methodologically solid, which then frees him to practice skimming of some portions while focusing attention more so on the practicality value of the article.

Memo summaries' readability (Flesch Reading Ease: M = 42.66; Grade Level: M = 12.42) tended to be lower than found within original material (calculated when possible, N = 61; Flesch Reading Ease: M = 51.1; Grade Level: M = 10.9). We believe this finding, although unexpected, may relate to the fact that Marshall's task in some ways necessitates awkward writing (e.g., "In this *Chronicle of Higher Education article*, Rob Jenkins (Perimeter College of Georgia State University) reflects on…"). Readability is also subjective and depends on readers' content knowledge and experiences in relation to what is written; Mr. Marshall is writing for a specific audience that overlaps on these dimensions. We were unable to calculate readability for the lengthier original articles; we expect those would have tended to drive down the readability averages.

We also judged the individual summaries regarding their actionability, and identified 22.2% as 'low', 37.3% as 'medium', and 31.8% as 'high.' These were challenging and subjective appraisals to make. We believe summaries frequently improved upon the actionability of original material in several senses (e.g., by making it accessible, by 'vouching' for it, by rendering it more concise and emphasizing practical aspects while de-emphasizing extraneous details).

Extent of Two-Way Communication

On one hand, communication is largely unidirectional, representing passive and mediated dissemination of material (via the Memo) from Mr. Marshall to his subscribers. However, several nuances and qualifications are apparent and are described in this sub-section.

First, trailing each summary item (where possible), Mr. Marshall shares authors' email information. He is therefore at least inviting or facilitating connections between subscribers and the authors. We were unable, as part of this study, to determine to what extent subscribers do in fact reach out to authors.

Related, Mr. Marshall noted he frequently engages with subscribers who react to material he includes. As part of this study, we were unable to quantify how often this occurs, and what might be the impact of these connections. Marshall's educational consulting also keeps in close contact with practitioners and likely informs his Memo-related work, perhaps aiding his sense of what educators are craving. Marshall's interactions with research and federal policy communities appear to be less frequent, though he shares summaries with authors as a courtesy. He also described connections to some academics (e.g., the Dean of Harvard GSE) and policymakers (e.g., former U.S. Secretary of Education John King, a friend and subscriber), and noted that "80-

90" U.S. Department of Education employees were Memo subscribers in mid-2016, as well as "all key staff" at Massachusetts' education department.

Mr. Marshall's communications and pricing structure reflect his desire to increase use of the material he shares; he views structured sharing and dialogue about the material as a route toward enhancing use. In a May 10 email, for instance, he encouraged subscribers to have a teacher team or whole staff "read a summary 'live'…and then discuss, perhaps using a protocol, about implications." As a school principal, Marshall reflected that he was "big on sharing articles with people" and at that time he

> had this blithe assumption that people would read them, number 1, and number 2, act on them. It turns out that most people don't do that. That's why I am periodically reminding people and pushing people in the Memo to set up a protocol discussion of an article in a faculty meeting and to do some follow up because people can read stuff and then nod and then move on and not do anything…That's why I particularly encourage people to give it to teacher teams, have people actually read it and do a structured protocol.

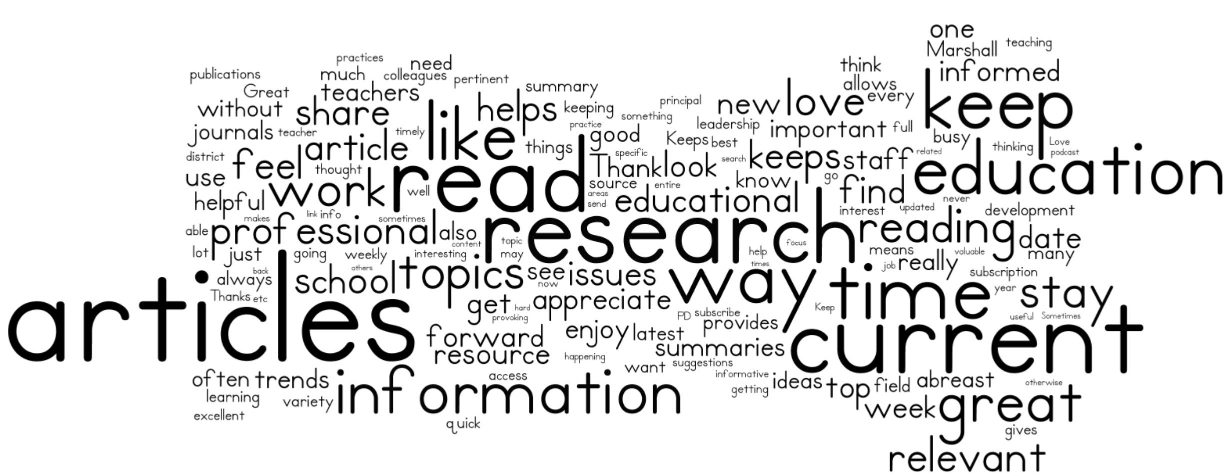
Survey responses suggest that many subscribers "clip and share Marshall Memo summaries with colleagues"—on this closed-ended item, 13.6% said they do so "nearly every issue," 32.3% do so "fairly often," and 41.9% do so "occasionally." Among those who responded affirmatively on this item, emailing or giving hard copies is most common (83.8%), although nearly one-quarter indicated they facilitate live readings and discussions, 11.7% discuss the Memo in study groups, and 8.3% reported using social media. A significant share of survey respondents also admitted to forwarding the full Memo to colleagues, although this is not permitted. Altogether, although the Memo initiates as one-way communication, in many cases it then stimulates dialogic communication within educational organizations. In a sense, then, many of Mr. Marshall's subscribers are themselves positioned as brokers or mobilizers.

As noted previously, Mr. Marshall has considered but so far refrained from utilizing social media in relation to the Memo. He is most concerned about its likely time-intensiveness ("The thing that holds me back most is time) and how to handle the sharing subscription-based material ("I can't give it away…people are paying for this."). He has also thus far heeded advice from a confidant and social media expert that the Memo has a particularly intimate feel and identity and thus may be better without a social media presence.

Meaning of Marshall Memo to Educators

Subscribers' responses to a Summer 2015 Memo survey comprised our primary RQ4 data source. We particularly focused upon the open-ended item, "What does the Memo mean to you? And do you have suggestions… [improvement]?" and supplemented our survey analysis by drawing upon closed-ended responses. The overwhelming majority of the 2,210 responses were positive (consistent with other survey data). Below we describe the tentative picture that emerged from our analysis (see also Figure 1).

Figure 1. Word Cloud: Survey Respondents' Comments Regarding the Memo's Meaning



The Marshall Memo is viewed by many as a significant time saver for busy educators/leaders, allowing them to stay current (some qualify: about trends, professional thinking, and/or research). Many expressed appreciation for the breadth of material or perspectives. Many also valued the access it provides, and/or described it as a starting point for further investigation. Noted a superintendent, "it (gives) you the synopsis of really what it was about. And if you really wanted, you could dig through some of the primary resources." This type of Memo use aligns with Marshall's view that it can serve as "tailored PD," provided that readers "follow up on" what they find most pertinent. Responding to a Likert-scale item, nearly 60% of survey respondents reported that they "quite frequently" (47.2%) or "almost every time (12.3%) "click on e-links and read the full article or access other information."

Subscribers frequently encounter professionally-relevant material within the Memo. On a separate Likert-scale item, 32.1% of respondents indicated the articles summarized are "exceptionally helpful and intriguing" and 64.8% indicated they are "relevant and interesting." Some also viewed it as professional development and some reported that it made them feel more professionally connected.

When asked to "describe the impact of reading the Memo" on their work, 24.0% indicated it is "a major enhancement: I have used a number of ideas from the Memo" and 74.4% characterized it as "very informative; makes me feel on top of the research."

We analyzed the open-ended responses to seek examples of how the Memo is used; the responses, we found, tended to be non-specific. Material was frequently reported to validate existing thinking or work. Some responses also suggest it served to challenge a practice/stance, provoke thought and reflection, or shape priorities. Instrumental use was also described (e.g., "to back up my vision for my school").

Regarding sharing, some report selectively sharing material with interested parties. On a different survey item, 88% of respondents noted sharing at least occasionally. Some report using it to plan for professional development, and others describe it as supplying material for weekly faculty or parent/community communications. Some reportedly reside in contexts where multiple colleagues receive it; there it can serve as "a base for group discussion."

Mr. Marshall was also asked to describe how he believes the Memo is most frequently used, and his responses tended to mirror survey respondents' reports: "it's provoking new thinking, it's affirming things that they're doing already that are good. It's giving them ideas that they can pass along to people."

Connections to Ward's Framework for Knowledge Mobilizers

In this subsection, we make explicit connections to Ward's (2016) framework, and we also suggest a small number of departures or extensions that we observed. Regarding the *why* question, we found evidence that the Memo has potential to address all but four categories Ward identified (all except the *production* of research/scientific knowledge). Beyond Ward's framework, survey-responding subscribers most often reported it to influence their thoughts (reinforcing or altering existing ideas) and very few recounted specific changes to their behaviors or practices. Also, interpreting the *why* question more broadly, we note that Marshall is aiming to enhance busy educators' *access* to professionally meaningful information (conceived broadly) and is doing so as part of a for-profit operation. Regarding *what type(s) of knowledge* are being shared, he includes all types (scientific/factual, technical knowledge/skills, and practical wisdom). Regarding *whose knowledge* is being shared, he draws from numerous sources (see previously provided results for a more specific breakdown), though most frequently they are professional knowledge producers or reporters/journalists (outside Ward's framework); he also draws from practitioners or consultants. Lastly, regarding *how he mobilizes knowledge*, his dominant method is to disseminate knowledge. Some of his efforts relate to knowledge synthesis as well; he often selects material that is broad (synthesized) in nature, and his search engine could help educators who wish to more deeply explore particular topics. We note he also seeks to make connections/broker relationships (via the email contact information) and encourage interactive learning and co-production (by periodically encouraging structured sharing of Memo material). Survey results suggest that a significant share of subscribers heed this advice, which means Marshall/the Memo may be viewed as the originator of what then becomes a large network of knowledge brokers/mobilizers.

Discussion

This study examined the process and product of a popular broker of educational knowledge, Mr. Kim Marshall. We addressed four research questions, drawing especially from Ward's (2016) knowledge mobilization framework. Recognizing the key role brokers can play in education—but also noting the dearth of research examining what they do and why and how they do it—we set out to deeply study this prominent case. Here we reflect upon key findings, connecting them to the literature and making recommendations. We also describe implications for educators as well as those who primarily occupy, or who are contemplating entry into, education's mediation context.

We conclude, first, that The Marshall Memo is valued by many of the educators who subscribe to it. Despite previously noted data limitations, we reach this conclusion based both on the pattern of positive survey responses and the product's overall longevity and wide circulation. Its longstanding popularity also underscores that, indeed, a market exists in education for evidence/knowledge that can influence practice or policy (Brown, 2014). We suspect this market is particularly robust in the U.S., where "what works" approaches are enshrined in policy, with laws like *No Child Left Behind* motivating educators to identify/select evidence-based interventions. Compounding their issues, many educators likely struggle to access useful information and/or have been frustrated in their efforts to sift through copious material of variable merits (Malin & Lubienski, 2015).

Acknowledging this market suggests a different way to answer Ward's question of *why* knowledge may be mobilized. Ward focused on the practical impacts individuals/organizations appeared to be seeking to make and identified five; most also were evident in the Marshall Memo case. Ultimately, though, Mr. Marshall produces this product for a price, aiming to satisfy educators' desires for helpful ideas and knowledge. Market-drive competition in this realm could drive up information quality and strengthen brokers' knowledge mobilization strategies (and, ultimately, improve educational practice) under certain circumstances. More research is needed to better understand this market in education. Specifically, researchers should seek to better understand what educators presently desire from brokers/mediators, how they currently strive to meet their needs, and the extents to which they are satisfied.

Mr. Marshall's product simultaneously seeks to address several previously identified barriers to research use (Nutley et al., 2007), especially those related to access, time, and relevance. He attends both to physical access (e.g., by providing web links), when possible, and to cognitive/linguistic access, tailoring his language and focus to a professional audience. He scours a great deal of material and, on busy practitioners' behalf, he then sifts, selects, and then writes about what he predicts is most relevant. Further addressing time and relevance, Mr. Marshall provides concise summaries, and the links and search engine he provides enable practitioners to further pursue what is most relevant. The website search repository also provides access to accumulated Memo material and a means of finding topically-organized information.

Prior research suggests that new knowledge (research-based and otherwise) is most likely to be ‘used’ by educators when it flows through interpersonal relationships and social relationships (Daly, 2010), and when knowledge exchange processes become part of an organizational culture (e.g., Brown, Daly & Liou, 2016; Datnow, Park & Lewis, 2013). Marshall’s suggestions to subscribers regarding how to share/dialogue about Memo material suggests he understands and aims to promote such engagement, extending the Memo’s influence beyond the individual and into the broader context. Survey responses support that many respondents are heeding this advice. Even if respondents differ dramatically from non-respondents and even if subscribers do not represent the population of educators in the U.S., the raw numbers from the survey are impressive; for instance, 3,549 respondents indicated they at least occasionally share portions of the Memo with colleagues. Much of the sharing is reportedly occurring within meetings and study groups, where socially interactive learning may occur (see Spillane, Healey and Parise, 2009). Interestingly, too, the brokerage in many cases is not beginning with Mr. Marshall; he sometimes draws from material written by individuals who could be characterized as brokers, referring to other brokers, and so forth.

Nevertheless, supposing the Marshall Memo is a tool whose use should be maximized (we interrogate this assumption later), we conclude more could be done to meet this goal. One-way communication (from various knowledge producers to educators, via Mr. Marshall) characterizes the delivery of the Memo. Although Mr. Marshall invites subscribers to connect with these persons, a recent national survey suggests educators rarely take such actions (see Penuel et al, 2016). Mr. Marshall’s work could be adjusted to accord with accumulating research suggesting *interactive knowledge exchange* strategies are substantially more likely to stimulate action (Levin, 2013). Specifically, efforts to increase educators' and research producers' interactions—e.g., social media engagement, a discussion/forum space on his website, invited subscriber contributions/reactions or descriptions of how they applied various ideas, and/or occasional videos or technology-facilitated connection opportunities with featured researchers—would likely enhance engagement with Memo material and increase its use. As currently structured, much of the interactive sharing is likely occurring within schools and organizations; this is good, but it may be better if sharing routinely crossed organizational boundaries (Daly, 2010) and connected knowledge producers and frontline practitioners. Related, multi-pronged research engagement interventions featuring the Marshall Memo as a key resource, while also addressing other factors (see Brown & Malin, 2017) could be designed and tested.

Ultimately, we conclude, the Memo's value for readers hinges on Marshall's perceived credibility and trustworthiness to fulfill this role. Readers must ultimately trust his eye for selecting what is important and good, and his ability to maintain accuracy through the translation process. Survey-responding subscribers frequently conveyed trust in his capacities and/or reinforced his selections' relevance. Much of Marshall's credibility stems from his shared professional background; as Willingham (2012) summarized, we tend to trust people who are like us. A person with deep practical experience could indeed be best positioned to judge the practical value of wide-ranging material. An experienced school administrator and now also an active educational consultant, Mr. Marshall also likely well understands the 'culture of practice'—including subtle communication patterns/norms pertinent to translation (Hammersley, 2014) and frequently-held philosophies that affect the likelihood that ideas will be accepted

(Schneider, 2014). He tailors the credibility signals on his website, highlighting his experiences in the trenches while omitting other impressive aspects (e.g., his Ivy league pedigree).

We conclude by offering a few observations and reflections. First, we noted the Memo does not exclusively address empirical research or systematic research reviews, instead drawing from varied material and emphasizing varied sources of knowledge (The Marshall Memo addresses all three main knowledge types identified by Ward [2016]). Some might perceive this design feature as a flaw and, indeed, his mixing of empirical, theoretical, experiential, and advocacy-based material with no clear demarcation of boundaries or indications of the relative firmness of their research bases might in some cases mislead. Trust that is placed in Marshall due to his shared background perhaps heightens this risk. As Willingham (2012) notes, when we place special trust in a messenger (based on background, affiliation, etc.) we are relying on "peripheral features of the message (in contrast to facts and logic, which would be the central features" (pp. 42-43). Considering all of this, we suggest a labelling structure for summarized material could help readers better weigh their relative merits.

Related, empirical research is sometimes placed at the top of the 'knowledge hierarchy,' and accordingly one may may question the helpfulness of a product that runs the knowledge gamut. We do not take this position. As Levin notes, research is incapable of providing "recipes that can be blindly applied to practice. In many areas, there is simply not enough clear research knowledge to guide practice" (2013, p. 16). Furthermore, even educational leadership (an applied field, and the one in which Marshall is most firmly entrenched) scholars tend to draw from various sources; Wang and Bowers (2016) found that these scholars drew from numerous disciplines and primarily (54.1%) cited non-peer reviewed sources. In the field, there is an underlying tension between openness to, versus empirical scrutiny of, new ideas (Wang &

Bowers); Mr. Marshall's work may be viewed as an attempt to balance this tension. It includes at least some empirical research, much of which the subscribers likely would not have otherwise encountered, and subscribers' comments suggest the mixture is well received.

Mr. Marshall's time-delimited (2 days/week) approach to active Memo work also necessitates efficiency and, accordingly, he applies shortcuts. For example, he assumes the design and methods of peer-reviewed studies are sound and therefore focuses primarily on the practical implications of findings. The quality even of peer-reviewed published research varies, though, so he might sometimes be deceived. It is protective to limit one's search to top-tier journals, but this approach means potentially missing meaningful work published elsewhere. Mr. Marshall's generalized focus places him in a particularly challenging position. As Willingham (2012, p. 20) notes, evaluating a study requires both an understanding of general research design principles and uses of statistics, and "knowing the relevant *scientific content*." Willingham clarifies, however, a person could become a sophisticated research consumer without also being a professional researcher. Notwithstanding, given obvious challenges facing Mr. Marshall, his practices of sending summaries of his translated material to researchers, and bi-annually surveying subscribers, are commendable and provide some quality control.

Finally, for PK-12 educators, we hope this article highlights the important function of individuals and groups residing in education's mediation context and ultimately aiming to enhance practice in some way. We encourage educators to seek them out vigorously but cautiously, evaluating their work and considering their motivations. The 4-step process outlined in Willingham's *When Can You Trust the Experts?* (2012) may be particularly helpful for making these appraisals.

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Appendix 1. Summary of Ward's 2016 Knowledge Mobilization Framework, By Question

Why is knowledge being mobilized?

- Develop solutions to practical problems
- Develop policies/programs or recommendations
- Implement defined policies and practices
- Change practices and behaviors
- Produce useful research/scientific knowledge

Whose knowledge is being mobilized?

- Professional knowledge producers
- Frontline practitioners
- Members of the public/service users
- Decision makers
- Product/program developers

What type of knowledge is being mobilized?

- Scientific/factual knowledge
- Technical knowledge/skills
- Practical wisdom

How is knowledge being mobilized?

- Making connections/brokering relationships
- Disseminating and synthesizing knowledge
- Interactive learning and co-production

Appendix 2. Example of Article Fitting into Each Category

Conceptual/Theoretical/Advocacy (61.2%): 'Graduating and looking for your passion? Just be patient' – Angela Duckworth, *The New York Times*, June 4, 2016

Description of Practice (9.5%): The techy teacher / Five tips for avoiding technology overload – Catlin Tucker, *Educational Leadership*, May 2016

Empirical (9.5%): 'Classroom composition and measured teacher performance: What do teacher observation scores really measure? – Matthew P. Steinberg, Rachel Garrett, *Educational Evaluation and Policy Analysis*, June 2016

Journalism/Reporting (6.9%): 'What teens resent: Classrooms controlled by students rather than teachers' – Maureen Downey, *The Atlanta Journal-Constitution*, June 2, 2016

Review of Literature (5.2%): 'Ask the cognitive scientist: Grit is trendy, but can it be taught?' – Daniel T. Willingham, *American Educator*, Summer 2016

Derivative (3.4%): 'High school coursework seen falling short: Report finds few graduates ready for colleges, careers' **–** Catherine Gewertz, *Education Week*, April 13, 2013

Academic Critique of Article or Response to Critique (1.7%): 'Risks and consequences of oversimplifying educational inequities: A response to Morgan et al. (2015)' – Russell J. Skiba, Alfredo J. Artiles, Elizabeth B. Kozleski, Daniel J. Losen, & Elizabeth G. Harry, *Educational Researcher*, April 2016

Crowdsourced Ideas from Practice (0.9%): '17 Ways to help students with ADHD Concentrate' – Youki Terada, *Edutopia*, August 14, 2015