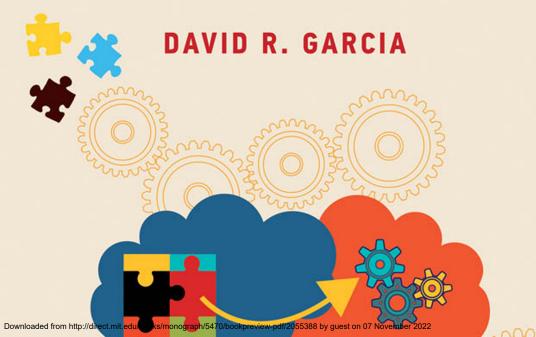
TEACH TRUTH TO POWER

How to Engage in Education Policy



TEACH TRUTH TO POWER



TEACH TRUTH TO POWER

HOW TO ENGAGE IN EDUCATION POLICY

DAVID R. GARCIA

THE MIT PRESS CAMBRIDGE, MASSACHUSETTS LONDON, ENGLAND

© 2021 Massachusetts Institute of Technology All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher. The MIT Press would like to thank the anonymous peer reviewers who provided comments on drafts of this book. The generous work of academic experts is essential for establishing the authority and quality of our publications. We acknowledge with gratitude the contributions of these otherwise uncredited readers. This book was set in Stone Serif and Avenir by Westchester Publishing Services. ISBN: 978-0-262-54322-4





CONTENTS

ACKNOWLEDGMENTS ix

- 1 SETTING THE CONTEXT 1
- I THE SHIFT 25
 - 2 WHO SETS POLICY? 27
 - 3 POLITICIANS AND KNOWLEDGE 45
 - 4 PROBLEMS WITH RESEARCH 71
 - 5 RESEARCH USE IN POLICYMAKING 97
 - 6 ASKED, BROUGHT, INSIDE, OUTSIDE 117
- II LEARNING THE CRAFT 141
 - 7 BUILD RELATIONSHIPS WITH POLITICIANS BEFORE THEY ARE POLITICIANS 143
 - 8 THE INFLUENCE OF UNEXPECTED ALLIES 151
 - 9 LEVERAGING THE RESEARCH TO PREDICT POLICY OUTCOMES 159
 - 10 FROM PRACTICAL PROBLEMS TO THE ASK 167
 - 11 THE RESEARCH ONE-PAGER 179
 - 12 ANSWERS, ADVOCACY, ACTIVISM, AND FRAMEWORKS 187
 - 13 TEACH TO CHAMPION 203
 - 14 A RENEWED ROLE FOR ACADEMICS 209

REFERENCES 217 INDEX 233



ACKNOWLEDGMENTS

Thank you to my students over the years who trusted in me as I developed and tested the lessons for the book in my course on "Translating Research for Educational Change" at Arizona State University. Thanks, Anabel for being my Zuko. Dick Foreman, I listened and learned from your insight along with my students during the class discussions. Ian Danley, thank you for inspiring me to take the political journey that brings a unique perspective to my scholarship. Alex Molnar, I appreciate your guidance on how to be a public scholar. Kris Gutierrez, thank you for providing me a space at the American Educational Research Association (AERA) annual conference years ago to seed these ideas. I am also grateful to have received a National Education Association/Spencer Post-Doctoral Fellowship and for the national experiences that reinforced for me the importance of research utilization. Emily Ackman and Stacey Long-Genovese for their early work on this topic. I appreciate the feedback from Gustavo Fischman, Keon McGuire, and George Diaz. And always, Lori.



1

SETTING THE CONTEXT

Aaron Wildavsky wrote *Speaking Truth to Power: The Art and Craft of Policy Analysis* in 1979—over thirty-five years before this book was written. It is not only an inspirational title; it remains the oft-cited rallying cry of academics searching for a higher purpose for their scholarship. Yet, if one reviews the state of affairs on research utilization in education policy, it becomes clear that the book's insightful lessons and productive orientation toward the role of evidence in policymaking remain largely unfulfilled. Academics may be "speaking truth to power," but few are listening.

Why? Because Wildavsky's perspective on policy analysis is applicable to those who have access to the policy process, but very few academics have such access. It is most applicable when you are at the table or within earshot, close enough to policymakers so that there is a chance that someone in power will listen. Wildavsky's book describes how to make the most of the opportunity to "speak truth to power"—once you get in the room.

Academics, however, are *not* in the room. They stand on the outside of the policy process—by design. Education research and education policy happen in very different places and are undertaken by very different actors. Being on the outside is not the same as being on the margins, though. Academics and academic research are, or at least should be, necessary parts of the policymaking process. Academics can be extremely influential as outsiders who engage in education policy—if they shift

their perspectives and learn how to function best from that position, outside the legislative process, in what is a highly productive and influential space.

To learn to engage in education policy effectively, academics and researchers must shift the way we think about the nexus of research, policy, and politics. Like other professional staff who work with politicians from inside government and legislative circles, Wildavisky's insights are largely applicable to those tasked with carrying out policy, but whose ability to influence policy creation is constrained (chapter 2). Academics and researchers, on the other hand, can provide the frameworks to help set education policy when research has been conducted with an eye to the future, it is brought into the policy process with an awareness of the pressures facing politicians, and it is translated to a policy context (chapter 6).

Teach Truth to Power: How to Engage in Education Policy is written for academics and researchers who are ready to engage in the policy process to influence education policy. You have research that you believe is important. You believe that your research should be heard by policymakers and that it should be considered in making future education policy decisions. You may have conducted original research, or you may have conducted a literature review to inform a policy change that you believe is important. Now, you are ready to "speak truth to power" and want to learn how to engage in policy most effectively.

You may be under the impression that your research is either of high quality, politically "neutral," or so compelling that it can transcend politics. You think that if it can only it could get a fair hearing, both sides will certainly agree with your evidence. In your mind, the quality of your research is beyond reproach. You are convinced that your research is important and can make a difference (hopefully for the better) for the communities that you value. At the end of this book, you will be politically astute enough to know that your research, regardless of its merits, enters a policy context where the political lines have been drawn before you walked in the door. But when you walk in the door, where many voices and other ways of knowing also clamor for attention from busy politicians in a pressure-packed environment (chapter 5), you will be armed with a strategy to translate your research to a policy context so that politicians can take action.

Here, I begin our departure from much of the existing literature on research utilization. First, there is no causal relationship or generalized theory of either the policymaking process or research utilization that you can follow methodically. *Engaging in education policy is not a science—it is a craft*. It is a combination of acquired knowledge and intuition, and similar to learning other crafts, it can be practiced and learned. This book will guide you in developing a strategy to hone your craft to engage effectively in your local policy context.

Second, engaging in education policy is an interpersonal process that cannot be accomplished from the safe confines of your educational setting, even in the social media era (Goodwin 2013). *Engaging in education policy means getting face to face with politicians*. Yes, politicians. This is an uneasy proposition for many academics who want their research to speak for itself without direct political engagement. As Weiss (1977, 531) astutely observed about academics, "They want their work to be so cogent and intellectually compelling that it cannot fail to affect the outcome of policy. Herein lies much of the lure of the policy research enterprise. But hereto arise many of its frustrations." Rest assured, however, as academics we do not have to compromise our strengths, lose the objectivity of our research, or "get political" to be heard.

Third, academics should understand the dynamics of research utilization from a politician's perspective. Most politicians have professional skill-sets that are very different from those of academics. Politicians also have requisite electoral demands, and multiple policy actors, including academics, seek to influence their decisions with information. Also, politicians must face the public, by name, to explain and defend their policy positions, while academics remain relatively anonymous. The sweet spot for you to "teach truth to power" involves understanding the political realities and interpersonal dynamics facing politicians, as well as how you, as an academic, are best positioned in a policy context to leverage your expertise to influence policy.

Lastly, academics should set realistic expectations about their involvement in the policymaking process. Academics should not expect to "make" policy (Gluckman 2014). The process of making policy, meaning writing specific legislative provisions or the text of a motion that is considered by a school district governing board, is an intense and detailed

process left to professional staff who work close enough to politicians to keep pace with the up-to-the-minute maneuvering that occurs in the process. Academics should expect to influence policy through research. But academics should not expect politicians to adopt their policy recommendations wholesale. Politicians are most likely to adopt as much and as many policy recommendations at any one time as they can support and "champion" on their own to *their* people.

WHAT IS THE RESEARCH AND POLICY GAP AND WHY IS IT IMPORTANT TO BRIDGE IT?

The gap between research production and policy implementation is a perplexing and ongoing quandary facing nearly all scholarly research in the field of education. The problem is that not enough education research is used in the formation of education policy, despite the commonly held belief among academics that research should be used to inform policy.

Almost every academic book or journal in education counts policymakers among its intended audience, and academic journal articles routinely close with policy implications or recommendations for policymakers. Too often, however, these thoughtful suggestions remain hidden from the very policymakers they are intended to reach. While academics criticize education policies, lamenting the fact that too few policymakers use research evidence to guide their decisions, policymakers complain that education research is neither relevant enough nor timely enough to suit their purposes. The copious number of books and journal articles on education that should inform education policy decisions go unread by those who make those decisions.

This is not to say that policymakers do not value research. There is an abundance of knowledge that is worthy of sharing and could be helpful in the formation of sound education policy, if presented in a way that politicians can use it to take action. Today's education issues have historical roots, meaning that there is an accumulation of knowledge available in *the* research literature to inform policy solutions (chapter 9). By and large, education stakeholders expect politicians to be consistent and hold that education is better served when the policies that influence students' lives

and school conditions are made on the best available evidence. Where, then, does the disconnect between research and policy lie?

Scholars of research utilization have identified four points along the progression between research production and its utilization in a policy context where the disconnects occur: in research production itself; in the dissemination of research; in the "soft tissue" or space where research is available for use by policymakers (Hess 2008); and in its utilization in a policy context.

Those scholars who focus on research production argue that academics may not be producing research that is accessible or helpful to policymaking. Academics may not be asking the "right" questions, as viewed from politicians' perspectives, or the research products may be difficult to read or understand—as in academic articles that are overly theoretical, written in abstruse language, or conducted via highly technical research methods that require advanced training to interpret the results. Academics have suggested remedies such as "use-inspired" research that is better connected to the real-world challenges facing policymakers and research articles written in language that is accessible to lay audiences.

Research dissemination, also referred to as "knowledge mobilization," is concerned with how research is made available to nonacademic audiences. Some academics have taken a critical view of traditional means of knowledge sharing, such as publishing in academic journals that require paid subscriptions. Knowledge mobilization research looks at how individuals and institutions can expand opportunities for sharing academic knowledge with broader communities in nontraditional ways and how institutional incentives either reward or restrict efforts to communicate research evidence (Fischman et al. 2018). From a knowledge mobilization lens, strategies to close the research and policy gap include open-access journals, more sophisticated uses of social media (e.g., podcasts, and blogs), direct interactions with practitioners, and organizational commitments through the creation of knowledge mobilization centers or institutes.

The space between research production and its use in the policy process, where research is available and policy decisions are being made based on ways of knowing that may (or may not) include academic research, is the "soft tissue" of research utilization (Hess 2008). It is at this point

that other intermediaries enter the policy space in addition to academics to provide politicians with information, including research. Organizations from think tanks to advocacy organizations package and present research to facilitate use by politicians and to influence policy toward their preferred goals. Philanthropic organizations provide funding for the dissemination of research that meets their strategic objectives. Lobbyists, who are often overlooked as intermediaries, provide individual politicians with localized information on the politician's specific constituents. Constituents bring their own evidence and stories to persuade politicians. Professional staff, such as legislative aides and agency heads, engage with the research literature in their role as gatekeepers, who search for, screen, synthesize, and present information to politicians.

The last point of connection is the use of research in the policymaking process. What does it mean to "use" research in a policy context? One can think about research utilization along a continuum from instrumental to conceptual. The most concrete use is instrumental, which can be understood as "the direct impact of research on policy and practice decisions. It identifies the influence of a specific piece of research in making a specific decision or in defining the solution to a specific problem" (Nutley, Walter, and Davies 2007, 36). Instrumental uses include cases where specific research products have been applied in a specific policy decision, directly influenced practice in the field, or have had an impact that can be shown through measurable outcomes. By contrast, conceptual uses introduce a "more wide-ranging definition of research use, comprising the complex and often indirect ways in which research can have an impact on the knowledge, understanding, and attitudes of policymakers" (Nutley, Walter, and Davies 2007, 36). In these cases, research is regarded as "creeping" into and "enlightening" the policymaking process over time (Weiss 1977; 1980).

The consumption side of research utilization also places a spotlight on politicians themselves. Politicians are criticized for either ignoring the research evidence or using it for political purposes. Politicians are faulted for a lack of training in research methods and the inability to discern quality research from shoddy research. Here, some academics have called for more politicians to educate themselves in research or for more collaborations between academics and politicians to co-create educational policies (Ball 2012; Edelstein 2016).

Nearly all the literature in the field of research utilization contributes to an understanding of the research and policy gap but offers little insight on how to bridge it for those who aspire to engage in policy (Oliver and Cairney 2019). This book is filling a prominent void in the existing literature by contributing concrete strategies that academics can use to engage in education policy effectively.

WHY HASN'T A "HOW-TO" BOOK LIKE THIS BEEN WRITTEN YET?

Many have pointed to the idea that research and policy reside in separate "worlds" or communities as the reason why the research and policy gap persists. "Authors who hold this view attempt to explain the nonutilization in terms of the relationship between the researcher and the research system and the policymaker and the policymaking system. They argue that social scientists and policymakers live in separate worlds, with different and often conflicting values, reward systems, and languages. The social scientist is often concerned with "pure" science and esoteric issues. By contrast, politicians are action-oriented and practical, concerned with immediate issues" (Caplan 1979, 459). More recently, Bogenschneider and Corbett (2010, 15) advanced the "community dissonance theory" to argue that knowledge producers and knowledge consumers function "within a discrete number of disparate communities that find it difficult to communicate with each other."

The two worlds/communities metaphors mean that academics and policymakers hold very different perspectives on which characteristics of social science research they find most valuable, their modes of inquiry for accessing and processing information, how they characterize policy problems, the organizational constraints and structures under which they operate, and the ways in which research should be communicated (Dunn 1980).

The concept of two worlds or communities is also the primary reason why a book like *Teach Truth to Power* has not been written to date. Due to the gulf between research and policy, there are very few academics who have worked extensively in both worlds. There are even fewer who have been trained, or have trained themselves, in both worlds. Repeated experiences and concerted inquiry in both worlds are essential if one is going to teach others how to engage in education policy.

By and large, those who study education and education policy are content experts. For the bulk of their career, they have been academics with a focus on advancing the theory and knowledge base of a particular topic or academic discipline, and most of their professional interactions have occurred in academic settings with other content experts or students who are invested in learning. These highly educated and well-meaning experts, either willingly, or often unwillingly, find themselves in the position of working with politicians. They are confronted with people who do not have the same expertise and, probably most difficult for academics to fathom, they neither share the same respect for research nor value the acquired knowledge of experts. What grates academics further is that "policymakers," while having little to no experience in education or education research, are in positions of influence to make important decisions that dictate resource allocations and school conditions.

For the junior academic, it can be career suicide to engage in education policy during the pressure-packed years as an assistant professor. During this time the professional pressures to "publish or perish" require one to focus almost exclusively on publication in academic journals and developing a reputation among other academics. There are few or no incentives in the first years of an academic career to engage in policy. In fact, such activity could be considered as counterproductive, insofar as influencing education policy does not count in traditional metrics of tenure and promotion. In addition, academics who work directly with politicians who hold power and the purse strings risk becoming too political (Henig 2009; Cairney and Oliver 2017) and could jeopardize public funding for their home institutions.

The disincentives to engage in education policy continue throughout one's academic career. For one thing, academics must invest time and energy into learning how to engage in policy (Weible et al. 2012), and many academics choose not to incur the transaction costs of acquiring the skills and knowledge to engage with politicians (Landry, Amara, and Lamari 2001). This decision is reasonable because promotion in academia remains based largely on scholarly production, which is itself based on professional interactions with other content experts and not concerned with influencing policy. Those with content expertise who could inform education policy, therefore, are encouraged to "stay in their lane" within

established academic confines for the bulk of their career, communicating their research largely with academic audiences. Even in universities with expressed institutional goals to disseminate research to broader nonacademic audiences, academics still value traditional forms of dissemination, such as publishing in journals and presenting at professional conferences, over engagement activities that bring them face to face with communities outside the university environment (Zuiker et al. 2019).

In many cases, academics wait until later in their careers to engage in policy. While these career academics may have done extensive scholarly work on education or education policy, they would not consider themselves as experts in *engaging in* education policy, and many have little to no experience working with politicians directly. In a policy context, they are novices who often engage under one of two conditions. First, they may have developed a substantial research record and their scholarship has risen to politicians' attention. These entries into the world of education policy are generally viewed as success stories because academics are receiving attention for their research. But when bridging the two "worlds" directly, many academics are faced with frustrations:

Professors are not necessarily naive, but neither are they prepared for precisely how politicized the political process can be, and how far it can stray from public interests. Academics hoping to promote social welfare can frequently be frustrated by the petty personal concerns and partisan agendas that stand in the way. Those steeped in the pursuit of knowledge also may be insufficiently sensitive to the limits of their usefulness in policy arenas: their data may not be definite, uncontested, or able to resolve complex value trade-offs. And academics who are hoping for power, status, and recognition can be discomfited by the low esteem and inadequate influence that their advice commands among politicians. (Rhode 2006, 128)

Or, as Weiss (1977, 534) noted, "If they come into the game expecting that research will have an obvious and immediate impact and nothing happens—nothing to the naked eye—they may prematurely give up on the whole business. They have been known to go home and write scathing diatribes for professional journals criticizing bureaucrats and politicians for their neglect of important research evidence."

Second, when academics assume administrative positions, as deans, for example, their elevated public profiles pull them out of their university offices into the broader community and in front of politicians.

Administrative positions, however, can be highly constrained. A dean, for one, represents the university and does not necessarily speak with the full voice of their acquired academic expertise. University administrators have many obligations, including to funders, faculty, and community groups. Thus, like many other policy actors, university administrators, particularly public university administrators, must remain agreeable to diverse groups so they are at the table to represent the university.

Overall, one gets the impression that policy engagement is not the academic's preference. They describe their entry as being "pulled" or "forced into" doing policy, and policy engagement is treated like a sacrifice that is carried out for the greater good. After a public stint in policy, most professors return back to their research and may not clamor to return back to working with politicians directly. Most academics would rather be left to conduct their research and teach, the reasons for which they became academics in the first place.

Often, when professors write about their policy experiences, they tell of blunt confrontations with dimwitted politicians, being in the room as the deal went down, or dueling with reporters, all narrated with the kind of wounded glory that one would associate with war stories. To audiences of wide-eyed graduate students, they tell of how their research was disregarded offhand by a politician or junior legislative aide, while showing off the battle scars with a martyr's pride for having engaged in the front lines of policymaking. To the junior scholar, or the student who wants to learn from their experiences, these accounts serve as cautionary tales that discourage similar behavior. No, don't go there, don't do that. Yet, "doing something" or "making a difference" is a primary motivation for many who toil in education research.

Very few academics write about their policy experiences as part of a sustained research agenda. While some of the "how-to" advice for academics to engage in policy is located in the "grey" literature (blogs, editorials, commentaries, and the like), the practical knowledge base for individuals to learn how to engage in education policy is thin (Oliver and Cairney 2019). There is scant advice on what to expect or what one should do when engaging in a policy context. And, the how-to advice that does exist is incomplete, vague, safe, or naive to the realities of the policymaking process (Cairney and Oliver 2020).

I can't help myself. I will also recount my own war stories throughout the book for context and color. In these sections, I will present personal stories and conversational perspectives of the research literature beginning with the first seeds of this book. In 2008, I was selected as a National Academy of Education/ Spencer Foundation postdoctoral fellow, a prestigious honor that included networking opportunities in Washington, DC, with some of the most influential scholars in education. Prior to my leaving for DC, the chairman of the Arizona State Senate Education Committee forwarded me a bill with a request to let him know my impressions of it. During the trip, I received a flood of emails from lobbyists, many of whom I knew from my time at the legislature. I learned that the chairman's decision to bring the bill to committee (or not) was based on my input. The policy implications were substantial. The bill shifted the training of all school principals from the state colleges of education to business schools.

One of the NAE/Spencer sessions was on making an impact in policy. The panel members, most of them influential senior scholars, were relating their personal war stories about the times that they testified before legislative committees with a mix of martyrdom and pride, all the while warning the room full of junior scholars to keep our heads down and write for tenure. I mentioned that testifying before committees rarely impact policy. The votes are counted before the hearings start. One senior scholar called my view "pessimistic." I pulled out the bill, explained to the senior scholar the policy implications riding on my input, and mentioned that the "work" of influencing policy is interpersonal, decidedly low-profile, and certainly would not "count" on my tenure application.

Why? Because most academics, while being content experts, are policy novices who learn "on the job" how to engage in a policy context (chapter 3). In general, they write about their policy work as singular experiences based on their particular personalities, scholarship, and the policy actors that they encountered at the moment. When academics present the actors, policy issues, and interactions in a manner that is not easily generalizable, their experiences come across as idiosyncratic events that impede a collective understanding from one policy context to another. Certainly, not all policy contexts are alike, but there is still much that can be learned and applied across policy contexts (Bogenschneider and Corbett 2010). Academics who dabble in policy, however, do not have the expertise to compare their experiences against others and, most important, to predict future circumstances for the educational benefit of others.

A few academics are trained well enough to forge a career in both the research and policy worlds. Their real-world experiences shine through in their research, writing, and continued engagement in the policy process. Academics who have worked in both worlds are coveted in policy context, not only for their content expertise but precisely because they know how to communicate with politicians. Manna and Petrilli (2008, 74) analyzed those who contributed to No Child Left Behind as witnesses in formal hearings. They found that 17.4 percent of all witnesses came from the research profession. Notably, researchers who testified most frequently in legislative hearings also had prior experience working in federal government either in the executive or legislative branches (they included, for example, Maris Vinovskis, Chester Finn, and Diane Ravitch). These researchers were selected because of their familiarity with Washington, DC and their relationships with members of Congress and staff, and because they have the ability to communicate with politicians effectively. Researchers from think tanks (such as the Heritage Foundation) or professional research firms (such as Mathematica or SRI International) were also popular because they were able to identify trends in the research and communicate them in jargon-free language. Unlike academics who work in narrow niches and speak in limited scholarly circles, those who work with think tanks are expected to translate research in a manner that eases the cognitive challenges and time constraints that confront politicians.

LET'S GET POLITICS OUT OF THE WAY

This book is about politicians but not politics, per se. The book is not concerned with how politicians learn about or engage in political activities related to campaigning, winning elections, influencing voter behavior, or the horse trading that is characteristic of the policymaking process.

The book is centered on how politicians learn about education, education research, and education policy and takes a broad view of the knowledge and actors that politicians utilize to inform themselves and make policy decisions.

The entire process is political, including gathering and evaluating evidence (Parkhurst 2017). But as a content expert, you will not be expected to engage in the political part. Nearly all of the overtly political activity

(fundraising, campaign events, and so on) occurs away from the policy process. You will stay close to your strengths and connected to the research evidence. The policymaking process is filled with predefined roles, and the content expert is one such role. This book will help you operate effectively as a content expert. You will encounter politics, which is ever-present, but you should not let politics deter you from engaging in policy.

You can expect that politicians will look at your contributions with a political or ideological eye (Miller and Fredericks 2000). The omnipresent pressure of getting elected means that it may be more difficult to engage with those politicians who are making policy decisions with electoral consequences, rather than research evidence, in mind. Or, you will encounter dogmatic politicians, those who are almost completely devoted to party ideology when making policy decisions. Is it a waste of time for academics to engage with "hyper-political" or dogmatic politicians? No. Lobbyists, an important informational source for the book, would counsel academics to prepare their best presentation and bring it to whoever will listen, and you may be surprised who is willing to listen if your presentation is tailored to policymaking. This book is about how to create the best presentation possible and to bring it to politicians as effectively as possible so that it gets heard.

ABOUT ME

This is the point in the book where I convince you that I am one of those rare academics with sufficient experience in and understanding of both worlds to teach others how to engage in education policy. My experience stems from being trained to engaging in policy, forging a successful academic career, and jumping into politics myself. Unlike many of my academic colleagues, I became a professor and earned tenure after working in the highest levels of state education policy. I was the lead analyst for the Arizona State Senate Education Committee and served as the Associate Superintendent of Public Instruction for the state of Arizona while completing my dissertation at the now defunct graduate school of education at the University of Chicago. After co-founding a state-based research and policy think tank and working as a peer consultant for the US Department of Education during the early implementation stages of No Child Left Behind, I got the

opportunity to fulfill my professional dream and join the faculty at the College of Education at Arizona State University.

As an academic in the field of education policy, I have published in the areas of school choice and accountability. I have also engaged in public scholarship during my entire academic career, even during the pressure-packed years as an assistant professor, when I was writing for tenure. I maintained a public profile outside of academia to remain connected to Arizona education policy. I released reports for public audiences, directed a research and policy center that contributed to education policy from the city to the state level, presented frequently to community groups in an effort to engage with politicians *before* they become politicians, and remained a media contact for education-related stories. I have authored two book chapters on closing the research and policy gap; these introduce the ideas that will be unpacked thoroughly in the book (Garcia 2018a; Garcia 2018b).

I went to the "dark side," running for state office twice and losing both times. In 2014, I ran for Arizona State Superintendent of Public Instruction, losing by less than half a percentage point. In 2018, as the Democratic gubernatorial candidate for the state of Arizona, I became only the second Latino candidate in Arizona history to win the gubernatorial nomination of a major party. My experience as "the candidate" is the lynchpin that connects the two worlds of research and policy for this book. Through my political experiences, I realized that academics must go through politicians to influence policy, a perspective that is largely missing in the academic literature on the research and policy gap.

These formative experiences forged this book. At the Arizona state senate, I learned quickly that in order to interject research evidence into policymaking, I had to become astute at translating research into frameworks that could be digested quickly and easily by those who were veteran politicians but education research and policy novices. I remember my first committee hearing and being tasked with providing on overview of the status of education in Arizona. I stood before the committee with my back to a room full of lobbyists, educators, and everyday citizens, and proceeded to speak from a set of colorful slides that I had created for the presentation. In the opening sentences, I indicated that I had "triangulated" multiple sources of data. One outspoken senator, raised her hand

and asked me, "What's triangulated?" I offered my best off the cuff definition after which she said, "Mr. Garcia I don't get it, and I ask that you not use big words like that before the committee." I was dumbfounded. All of my graduate training had been cut off at the knees. I finished—doing my best not to use any more "big words."

Working with the Arizona state legislature, I learned that engaging in policy is a local, personal, and (more or less) predictable process that can be learned (and taught). In fact, every year, in state houses across the country and at the federal level, legislative interns and staffers learn about the policymaking process. I will pass these essential lessons on to you as they relate to research utilization in policymaking starting with the recognition that bridging the research and policy gap is accomplished through people. Academics must leave the familiar confines of university offices to engage with politicians directly. Blogging from a distance is insufficient to engage effectively. Yes, technology has changed how information is exchanged in policy contexts, but those who are paid to understand and influence policy, namely lobbyists, know that the real work still gets done face to face.

I served as the director of research and policy under Superintendent Lisa Graham Keegan, a highly visible school choice advocate and controversial political figure (Maranto et al. 1999), and as associate superintendent for standards and accountability under Jaime Molera, who was appointed after Keegan resigned to accept a post in Washington, DC. During this time, I turned around a troubled state assessment system and developed Arizona's first school accountability system. While these were certainly high-profile public positions, I was only one of several public officials who were communicating with the public through the media, large gatherings, and face-to-face meetings. To maximize my potential to communicate with the public, I had to teach others, most of whom were not well versed in assessment or statistical methods, to communicate complex ideas to their people in applied settings. I communicated in words and phrases that others could use verbatim as their own. Most importantly, I focused on frameworks, rather than on minute details and research methods, to help others understand the education landscape around them and to predict future policy outcomes. In this book, these experiences are transformed into shifting academic's perspectives from

teaching politicians to understand a given body of research to coach politicians in their role as policy champions, enabled and empowered to bring the research forward themselves to the people and networks of their choosing—without the academic in the room.

My appointment as an assistant professor was the ideal moment to leave the applied policy work behind me. But I couldn't. My professional experiences in state policy had shaped me. Even during the hours toiling over academic publications as a junior professor, I knew that writing in a journal or presenting to other academics did not influence education policy. I understood that the larger policy world was functionally detached from our scholarship. So, during my years as an assistant professor, I remained engaged in policy, despite the fact that these applied experiences would not "count" for the purpose of getting tenure and could have counted against me at times. During this period, I worked to educate my academic colleagues about how to engage in education policy. Thank you, Kris Gutierrez, who during her tenure as president of the Annual Education Research Association (AERA) gave me the professional space to explore these ideas through a session at the annual conference entitled, "Interacting with Policy Makers: A Strategic Approach." Kris understood that we, the academic and research community, must take the lead to leverage our collective expertise and experiences to educate our colleagues on how to "teach truth to power" most effectively.

Beginning in 2014, my experiences as the candidate exposed a completely different aspect of the connection between research and policy—the grinding reality of politics. I ran for office because I came to the conclusion that the most direct way for me to influence policy through research was to become a politician myself. It was a sobering realization that the path to use my academic expertise to influence policy went through politics. Like other academics, I was apprehensive about "getting political" for professional and personal reasons. The process of getting political itself, however, was surprisingly easy: it started humbly with gathering a few friends around my kitchen table and announcing that I was running for office. In big picture terms, being the candidate and working with so many passionate people made for an amazing experience. The day-to-day activities of campaigning, however, were soul-crushingly monotonous.

As an academic engaged in two statewide campaigns and working with many other candidates and politicians in Arizona and in settings across the country, I was struck that research was (almost) never mentioned in the formative period when, as candidates, politicians establish the agendas that will guide their policy ideas once elected, or re-elected. One example from the campaign trail illustrates how much work lies ahead of academics to influence policy through research and serves as my motivation to improve research utilization. The term "segregation," a common topic in the academic literature, yields 2.15 million hits in 0.04 seconds using Google Scholar (April 11, 2019, 10:11 a.m.). By contrast, in over four years of either preparing for or running for statewide office—the formative time for developing a policy agenda for me and many other candidates—segregation was brought up once. Just once.

Lastly, my political experience erased any mystique that I held about politicians. I learned that politicians are essentially members of the public who are brave (some would say crazy) enough to run for office (and win).

WHAT TO EXPECT FROM THIS BOOK

Teach Truth to Power: How to Engage in Education Policy is unlike any other book, report, or academic article on research and policy gap: this book will teach you how to engage in education policy rather than fall into a familiar academic tendency of taking an overly analytical approach that leaves readers stranded to apply the findings on their own (Nathan 1985). After making the case for reconceptualizing the relationship between research and policy, the book includes concrete strategies that you can use to develop your own plan of action to engage in education policy. The book is an ambitious effort to make explicit the hidden curriculum of engaging in education policy, and it has broader applicability to other social science fields.

This book is for educators, researchers, graduate students, classroom teachers, and university professors (I will collectively refer to this group as academics), who aspire to "do something" with what they have learned in education to make a difference in education, but who remain frustrated that education programs fail to teach "how" to take what they know and make a difference in education policy.

At its core, the book is a how-to manual with straightforward advice that readers can apply to influence education policy in their local context. In this way, it can be used to design and deliver a course on engaging in education policy. In addition, the chapters include a detailed treatment of the literature on the research and policy gap and thus contribute to the fields of research utilization, knowledge mobilization, and public scholarship. Finally, this book is a resource that you can turn to for guidance when you are ready to "teach truth to power."

The book is organized into two parts. Part I, "The Shift," challenges many of the fundamental findings in the literature on the research and policy gap to orient the reader toward thinking about engaging in education policy as a localized and interpersonal endeavor that involves politicians, specifically. Part II, "Learning the Craft," teaches specific strategies that will help you engage in education policy.

PART I: THE SHIFT

Part I prepares the reader to engage in education policy by clarifying the actors who engage in the policymaking process, challenging long-held assumptions in the academic literature about how research is used in a policymaking context, and rethinking the very nature of research itself as a source of policyrelevant information. The shift toward thinking about research utilization as direct engagement in a local policy context is based on the tools available to the education policy analyst: a critical review of the academic literature combined with personal experiences in education policy.

Chapter 2: Who Sets Policy?—Politicians, consisting of elected officials and their appointees, set policy, and professional staff establish the options to carry out policy. Politicians and professional staff have disparate background knowledge and carry out very distinct roles in the policymaking process. Academics should approach politicians and professional staff differently. Using Kingdon (2003) as a frame, I reexamine the academic literature and conclude that much of what we know about the use of research in policy derives from studies involving professional staff who carry out policy rather than the politicians who set it. The confusion comes from the misapplied and overused term "policymaker" in the academic literature in a way that does

not discriminate between different policy actors, regardless of their role. I also discuss other influential policy actors, including prospective politicians; laypersons who are involved in their local communities and who are among those whom politicians are likely to appoint to positions of authority in education policy or who may become politicians themselves; individuals and organizations who package and present their own research to politicians; lobbyists whose job of influencing politics includes providing information to politicians; and politicians themselves who act as intermediaries when they champion a policy issue and bring research into the policymaking process to persuade their colleagues.

Chapter 3: Politicians and Knowledge—Politicians are education research and policy novices—by design—and become generalists, at best. They function with half-knowledge, intentionally filtering out surplus information, so that they can take action. Not only do academics possess more knowledge about education than politicians, but they also recall information, apply knowledge, and approach problems very differently than politicians. To guide academics in how to interact with politicians, who are likely education policy novices or generalists or something in between, I apply literature on skill acquisition borrowed from the field of nursing (Benner 1982). I also introduce the theory of "half-knowledge," which refers to how politicians are aware of policy problems but screen out surplus information, seeking and using research that helps them fulfill a specific purpose—to take action.

Chapter 4: Problems with Research—There is sufficient research available at any time to inform any policy idea brought forth by politicians. But of the formal products used in a policy context (audits, analyses, evaluations, and research), research is the only product with no direct application in a local policy context. Context is king in the use of research to influence policy. Among the formal products used in the policymaking process, however, research is the least context-specific. Yet, it has the longest shelf life and is the most useful information source to influence policy over time. In this chapter, I examine the criticisms leveled against academic research and conclude that, despite its many shortcomings, the research enterprise itself does not have to undergo a dramatic overhaul to be relevant to politicians. Why? Because, there are very few entirely "new" problems in education. So, there is sufficient research on any topic to address any policy issue at

any time. The research may be hard to find. It may be difficult to understand. And it certainly requires translation to a local policy context to be applicable—but it's available.

Chapter 5: Research Use in Policymaking—Research evidence is one of many ways of knowing in policymaking. Academics are one of many types of actors in the policymaking process. And neither research nor academics hold a privileged position. In this chapter, I review Weiss's models of research utilization and side with the interactive model, which recognizes many sources of information—ranging from informal sources, such as social media, to formal sources, such as academic research, and many actors, most of whom are not experts—as being influential in the policymaking process. Given the interactive nature of policymaking, the most effective method to influence policy is to engage directly with politicians despite the fact that the policy context is foreign to most academics. In addition, since there are many ways of knowing that influence policy decisions, ranging from concrete to abstract, I suggest how to recognize when politicians rely on a specific way of knowing and the implications of each way of knowing for academics who are engaging in policy.

Chapter 6: Asked, Brought, Inside, Outside—Politicians have the least control over and least inherent trust in unsolicited research that is brought to them by outsiders. Academics are outsiders who bring unsolicited research to politicians. I introduce the asked/brought/inside/outside (ABIO) framework to help academics understand their position relative to politicians and other actors in a policy context. The matrix reveals the dynamics associated with research from the politician's perspective. The major implication for academics is that politicians have the least amount of inherent trust in unsolicited research and no control over how it is framed and released publicly.

PART II: LEARNING THE CRAFT

The second part of the book teaches the reader the craft of engaging in education policy in their local context.

Chapter 7: Building Relationships with Politicians before They Are Politicians— The most opportune time to build trusted relationships with politicians is before they get elected, not after. The quiet time before politicians begin electoral campaigns, when they are forming their policy agendas, is when they are

most inclined to listen to diverse perspectives on education issues. Readers will learn how to identify the places where they can connect with prospective politicians to build trusted relationships to put themselves in influential positions over time.

Chapter 8: The Influence of Unexpected Allies—Your research is likely to stand out if brought to politicians by unexpected allies. The common advice in the research utilization literature is to leverage issue networks or advocacy coalitions to bring research to politicians. From one legislative session to the next, however, issue networks repeatedly tout the same types of evidence (particularly those that put their policy issues in the best light), creating a repetitive message that mutes the influence of individual research products because hearing about research from the usual suspects is exactly what politicians expect. To disrupt the political dynamics, academics should enlist unexpected allies, people or organizations outside the expected issue networks or advocacy organizations, who are willing to bring your research to others, including politicians. The enlistment of unexpected allies is also a stringent test of public interest in your research. If your research is of public interest, then you should be able to convince someone who is not one of the usual suspects or in academia to bring your research to their people.

Chapter 9: Leveraging the Research to Predict Policy Outcomes—Academics can distinguish themselves from other lay voices in a policy context by leveraging the research to predict future policy outcomes. Academics can be most relevant in a policy context by serving as intermediaries of the research, defined as the cumulation of evidence available in the academic literature. With a mastery of the research, academics can serve as education policy experts who are able to predict future policy outcomes, distinguishing themselves from lay voices in a policy context who do not possess the expertise to provide this coveted perspective.

Chapter 10: From Practical Problems to the Ask—To engage with politicians most effectively, academics must translate research to a local policy context by restructuring how they present their research in order to make the most compelling case for its applicability to policymaking. When presenting research to politicians, academics should begin with a practical problem to capture the politician's attention, present the key policy-relevant elements of their research, and end with the ask to the politician. The ask is a direct

and specific request for politicians to take action. Those who are uncomfortable with the ask will be both relieved and empowered to learn that an "ask" is not only common in a policy context—it's commonplace.

Chapter 11: The Research One-Pager—Academics must translate research to a policy context in a manner that communicates the key policy-relevant details required for politicians to take action. All in 20 seconds. Academics recognize that research should be communicated to politicians in accessible language and abbreviated formats. There is a lack of guidance, however, on exactly how succinctly and directly academics should write for politicians. This chapter introduces the research one-pager, which is modeled on the legislative one-pager that is ubiquitous in policy contexts and is a different product written specifically for politicians to understand how they can take action. The research one-pager connects politicians to research through the practical problem, gleans those findings that are most applicable to specific policies, tells politicians exactly what they can do to take action, and does it all in twenty seconds. Yes, twenty seconds.

Chapter 12: Answers, Advocacy, Activism, and Frameworks—When asked to contribute in a policymaking context, academics can answer questions, advocate for a policy change, engage in activism, or present a framework. Frameworks are best. Readers will learn the advantages and disadvantages of the four basic ways to respond to politicians in a policy context. They will learn to scaffold their answers to politicians from practical responses to complex concepts. The utility of advocacy as a response is diminished over time because advocates respond predictably and become marginalized sources of new information. Also, activists tend to get to the table through political pressure, not expertise, and may be excluded from participation in controversial or emerging issues. Frameworks are the most effective because they help novice politicians make sense of new conditions and guide future policy decisions based on research. Fortunately, academics are experienced at developing and communicating frameworks given their work with simplifying complex ideas for students.

Chapter 13: Teach to Champion—Teaching to champion entails enabling and empowering politicians to bring research forward themselves to the people and networks that they choose—without the academic in the room. I introduce the crucial role of politicians as champions of policy change who expend political capital to achieve desired policy outcomes, on their own accord.

Why go through the hassle of engaging in education policy? It is time consuming, fraught with pitfalls, and the institutional rewards are few. You should engage in education policy because it's immensely rewarding. In danger of sounding overly idealistic, you can make a tangible difference. You will experience education research in a way that is more interactive and captivating than any academic presentation because, to me, policy engagement completes the study of education policy. Policy engagement animates education research. You will learn that policy actors have names, faces, personalities, and vulnerabilities. You will recognize that individual policies have a backstory; how they emerge from the context in which they were drafted, with many factors—big, small, intended, and unforeseen—affecting the course that policies take. You will realize that policies are not unalterable and understand what it takes to change their trajectories. When you engage, you will learn firsthand that there is a vital purpose for a research perspective at the table to teach "truth to power."

Political champions bring information, including research evidence, to others, including their colleagues and influential external networks, to generate support for their preferred policy outcomes. In this role, politicians are intermediaries. The academic's role in this process is to not to teach politicians to understand research, but to enable and empower politicians to bring research evidence to others on their own.

Chapter 14: A Renewed Role for Academics—Academics are optimally positioned to influence education policy. Thus, a well-rounded faculty of education should include a professor of impact whose job requirements include translating research to influence policy. Teach Truth to Power culminates in two sweeping implications that bookend the research utilization process. First, because academics' skillsets include predicting policy outcomes in an ever-changing education landscape and are thus tailor-made to influence policy. In order to bridge the research and policy gap, the academic field of studying education policy should be reimagined so as to value influencing education policy. Thus, the well-rounded education faculty should include a dedicated professor of impact, who is compensated and professionally recognized for advancement accordingly.



REFERENCES

Albaek, Erik. 1995. "Between Knowledge and Power: Utilization of Social Science in Public Policy Making." *Policy Sciences* 28 (1): 79–100. https://www.jstor.org/stable/4532339?origin=JSTOR-pdf&seq=1.

American Educational Research Association. N.d. "What Is Education Research?" Accessed August 21, 2019. http://www.aera.net/About-AERA/What-is-Education -Research.

American Society for Quality. N.d. "What Is Auditing?" Accessed July 9, 2019. https://asq.org/quality-resources/auditing.

Anderson, Sharon, Elliott Medrich, and Donna Fowler. 2007. "Which Achievement Gap?" *Phi Delta Kappan* 88 (7): 547–550. https://doi.org/10.1177/003172170708800716.

Ansary, Tamim. 2007. "Education at Risk: Fallout from a Flawed Report." *Edutopia*. Accessed March 9. https://www.edutopia.org/landmark-education-report-nation-risk.

Apollonio, Dorie E., and Lisa A. Bero. 2017. "Interpretation and Use of Evidence in State Policymaking: A Qualitative Analysis." *BMJ Open* 7 (2). https://doi.org/10.1136/bmjopen-2016-012738.

Arifon, Olivier, and Nicolas Vanderbiest. 2016. "Integrating Social Networks in a Lobbying Campaign: The Case Study of Intermarché, a Supermarket Chain." *Telematics and Informatics* 33 (4): 1105–1118. https://doi.org/10.1016/j.tele.2016.03.007.

Ball, Arnetha F. 2012. "To Know Is Not Enough." Educational Researcher 41 (8): 283-293. https://doi.org/10.3102/0013189X12465334.

Barnes, Carol A., Margaret E. Goertz, and Diane Massell. 2014. "How State Education Agencies Acquire and Use Research Knowledge for School Improvement." In *Using*

Research Evidence in Education: From the Schoolhouse Door to Capitol Hill, edited by Kara S. Finnigan and Alan J. Daly, 99–116. Cham, Switzerland: Springer International.

Benner, Patricia. 1982. "From Novice to Expert." *American Journal of Nursing* 82 (3): 402–407. https://doi.org/10.2307/3462928.

Berliner, David C., and Bruce J. Biddle. 1995. *The Manufactured Crisis: Myths, Fraud, and the Attack on America's Public Schools*. Cambridge, MA: Perseus Books.

Besag, Frank. 1986. "Reality and Research: Problem Statement and Philosophy." *American Behavioral Scientist* 30 (1): 6–14. https://doi.org/10.1177/000276486030001002.

Boehnke, Klaus, and Maor Shani. 2017. "Activism." In *The SAGE Encyclopedia of Political Behavior*, edited by Fathali M. Moghaddam, 1–52. Thousand Oaks, CA: SAGE Publications, Inc. https://sk.sagepub.com/reference/the-sage-encyclopedia-of-political-behavior.

Bogenschneider, Karen. 2006. Family Policy Matters: How Policymaking Affects Families and What Professionals Can Do, 2nd ed. Mahwah, NJ: Lawrence Erlbaum.

Bogenschneider, Karen, and Thomas J. Corbett. 2010. Evidence-Based Policymaking: Insights from Policy-Minded Researchers and Research-Minded Policymakers. New York: Taylor & Francis Group.

Bogenschneider, Karen, Elizabeth Day, and Emily Parrott. 2019. "Revisiting Theory on Research Use: Turning to Policymakers for Fresh Insights." *American Psychologist* 74 (7): 778–793. https://doi.org/10.1037/amp0000460.

Bogenschneider, Karen, Olivia M. Little, and Kristen Johnson. 2013. "Policymakers' Use of Social Science Research: Looking within and across Policy Actors." *Journal of Marriage and Family* 75 (2): 263–275. https://doi.org/10.1111/jomf.12009.

Booth, Wayne C., Gregory G. Colomb, Joseph M. Williams, Joseph Bizup, and William T. Fitzgerald. 2016. *The Craft of Research*, 4th ed. Chicago: University of Chicago Press.

Bornmann, Lutz, and Mutz Rüdiger. 2015. "Growth Rates of Modern Science: A Bibliometric Analysis Based on the Number of Publications and Cited References." *Journal of the Association for Information Science and Technology* 66 (11): 2215–2222. https://doi.org/10.1002/asi.23329.

Bracey, G. W. 2004. "Serious Questions about the TVAAS." *Phi Delta Kappan* 85 (9): 716–17.

Brandl, John E. 1985. "Distilling Frenzy from Academic Scribbling: How Economics Influences Politicians." *Journal of Policy Analysis and Management* 4 (3): 344–353. https://doi.org/10.2307/3324189.

Caird, Jenny, Katy Sutcliffe, Irene Kwan, Kelly Dickson, and James Thomas. 2015. "Mediating Policy-Relevant Evidence at Speed: Are Systematic Reviews of Systematic Reviews a Useful Approach?" *Evidence and Policy* 11 (1): 81–97. https://doi.org/10.1332 /174426514X13988609036850.

Cairney, Paul, and Richard Kwiatkowski. 2017. "How to Communicate Effectively with Policymakers: Combine Insights from Psychology and Policy Studies." *Palgrave Communications* 3 (1). https://doi.org/10.1057/s41599-017-0046-8.

Cairney, Paul, and Kathryn Oliver. 2017. "Evidence-Based Policymaking is Not Like Evidence-Based Medicine, So How Far Should You Go to Bridge the Divide between Evidence and Policy?" *Health Research Policy and Systems* 15 (35): 1–11. https://doi.org/10.1186/s12961-017-0192-x.

Cairney, Paul, and Kathryn Oliver. 2020. "How Should Academics Engage in Policymaking to Achieve Impact?" *Political Studies Review* 18 (2): 228–244. https://doi.org/10.1177/1478929918807714.

Callahan, Raymond E. 1962. *Education and the Cult of Efficiency*. Chicago: University of Chicago Press.

Caplan, Nathan. 1979. "The Two-Communities Theory and Knowledge Utilization." *American Behavioral Scientist* 22 (3): 459–470.

Carnoy, Martin, Rebecca Jacobsen, Lawrence Mishel, and Richard Rothstein. 2005. *The Charter School Dust-Up: Examining the Evidence on Enrollment and Achievement.* New York, NY: Teachers College Press & Economic Policy Institute.

Carson, C. C., R. M. Huelskamp, and T. D. Woodall. 1993. "Perspectives on Education in America: An Annotated Briefing." *Journal of Educational Research* 86 (5): 259–265, 267–291, 293–297, 299–307, 309–310. https://doi.org/10.1080/00220671 .1993.9941211.

Centers for Disease Control. N.d. "Overview of Policy Evaluation." Atlanta, GA. Accessed July 9, 2019. https://www.cdc.gov/injury/pdfs/policy/brief%201-a.pdf.

Coburn, Cynthia E., Meredith I. Honig, and Mary K. Stein. 2009. "What's the Evidence on Districts' Use of Evidence?" In *The Role of Research in Educational Improvement*, edited by John D. Bransford, Deborah J. Stipek, Nancy J. Vye, Louis M. Gomez, and Diana Lam, 67–87. Cambridge, MA: Harvard Education Press.

Coburn, Cynthia E., and Joan E. Talbert. 2006. "Conceptions of Evidence Use in School Districts: Mapping the Terrain." *American Journal of Education* 112 (4): 469–495. https://doi.org/10.1086/505056.

Community Tool Box. N.d. "Developing a Framework or Model of Change." Accessed July 21, 2020. https://ctb.ku.edu/en/4-developing-framework-or-model-change.

Cotton, Christopher S., and Cheng Li. 2018. "Clueless Politicians: On Policymaker Incentives for Information Acquisition in a Model of Lobbying." *Journal of Law, Economics, and Organization* 34 (3): 425–456. https://doi.org/10.1093/jleo/ewy009.

Cramm, Heidi, Janet Breimer, Lydia Lee, Julie Burch, Valerie Ashford, and Mike Schaub. 2017. "Best Practices for Writing Effective Lay Summaries." *Journal of Military, Veteran and Family Health* 3 (1): 7–20. https://doi.org/10.3138/jmvfh.3.1.004.

Crow, Deserai, and Michael Jones. 2018. "Narratives as Tools for Influencing Policy Change." *Policy and Politics* 46 (2): 217–234. https://doi.org/10.1332/030557318X152 30061022899.

Daley, Barbara J. 1999. "Novice to Expert: An Exploration of How Professionals Learn." *Adult Education Quarterly* 49 (4): 133–147. https://doi.org/10.1177/07417 1369904900401.

Davidson, Brett. 2017. "Storytelling and Evidence-Based Policy: Lessons from the Grey Literature." *Palgrave Communications* 3 (1). https://doi.org/10.1057/palcomms .2017.93.

Davies, Huw T. O., and Sandra M. Nutley. 2008. "Learning More about How Research-Based Knowledge Gets Used: Guidance in the Development of New Empirical Research." New York: William T. Grant Foundation. https://wtgrantfoundation.org/library/uploads/2015/10/Guidance-in-the-Development-of-New-Empirical-Research .pdf.

Davies, Philip. 2000. "The Relevance of Systematic Reviews to Educational Policy and Practice." *Oxford Review of Education* 26 (3): 365–378. https://doi.org/10.1080/3054980020001882.

Dombrowksi, Eileen, Lena Rotenberg, and Mimi Beck. 2013. *Theory of Knowledge*, 2nd ed. Oxford: Oxford University Press.

Dreyfus, Stuart E., and Hubert L. Dreyfus. 1980. "A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition Operations & Research." Berkeley, CA: University of California, Berkeley. https://apps.dtic.mil/dtic/tr/fulltext/u2/a084551.pdf.

Duckworth, Angela. 2016. *Grit: The Power of Passion and Perseverance*. New York: Scribner.

Dumas, Michael J., and Gary Anderson. 2014. "Qualitative Research as Policy Knowledge: Framing Policy Problems and Transforming Education from the Ground Up." *Education Policy Archives*, special issue, "Qualitative Inquiry" 22 (11). https://doi.org/10.14507/epaa.v22n11.2014.

Dunn, William N. 1980. "The Two-Communities Metaphor and Models of Knowledge Use: An Exploratory Case Survey." *Science Communication* 1 (4): 515–536. https://doi.org/10.1177/107554708000100403.

Eagly, Alice H. 2016. "When Passionate Advocates Meet Research on Diversity, Does the Honest Broker Stand a Chance?" *Journal of Social Issues* 72 (1): 199–222. https://doi.org/10.1111/josi.12163.

Edelman, Murray. 1979. *Political Language: Words That Succeed and Policies That Fail.* New York: Academic Press.

Edelstein, Hilary. 2016. "Collaborative Research Partnerships for Knowledge Mobilisation." *Evidence & Policy: A Journal of Research, Debate and Practice* 12 (2): 199–216. http://dx.doi.org/10.1332/174426415X14399903490979

Epstein, Richard L. 2011. *The Pocket Guide to Critical Thinking*, 4th ed. Socorro, NM: Advanced Reasoning Forum.

Evans, Julie. 2013. "How Arts and Humanities Can Influence Public Policy." *Huffpost*, April 20. https://www.huffingtonpost.co.uk/jules-evans/arts-humanities-influence-public-policy_b_2709614.html.

Farmer, Rick. 2010. "How to Influence Government Policy with Your Research: Tips from Practicing Political Scientists in Government." *PS—Political Science and Politics* 43 (4): 717–19. https://doi.org/10.1017/S1049096510001368.

Felgenhauer, Mike. 2013. "Informational and Monetary Lobbying: Expert Politicians, Good Decisions?" *Journal of Public Economic Theory* 15 (1): 125–155.

Figenschou, Tine Ustad, and Nanna Alida Fredheim. 2020. "Interest Groups on Social Media: Four Forms of Networked Advocacy." *Journal of Public Affairs* 20 (2): 1–8. https://doi.org/10.1002/pa.2012.

Fischman, Gustavo E., Kate T. Anderson, Adai A. Tefera, and Steven J. Zuiker. 2018. "If Mobilizing Educational Research Is the Answer, Who Can Afford to Ask the Question? An Analysis of Faculty Perspectives on Knowledge Mobilization for Scholarship in Education." *AERA Open* 4 (1): 1–17.

Flake, Jeff. 2016. "Twenty Questions: Government Studies That Will Leave You Scratching Your Head." Washington, DC.

Forte, Ellen. 2010. "Examining the Assumptions Underlying the NCLB Federal Accountability Policy on School Improvement." *Educational Psychologist* 45 (2): 76–88. https://doi.org/10.1080/00461521003704738.

Fuller, Bruce, Joseph Wright, Kathryn Gesicki, and Erin Kang. 2007. "Gauging Growth: How to Judge No Child Left Behind?" *Educational Researcher* 36 (5): 268–278. https://doi.org/10.3102/0013189x07306556.

Gallagher, Deborah Rigling. 2009. "Advocates for Environmental Justice: The Role of the Champion in Public Participation Implementation." *Local Environment* 14 (10): 905–916. https://doi.org/10.1080/13549830903244417.

Gamoran, Adam. 2018. "Evidence-Based Policy in the Real World: A Cautionary View." *Annals of the American Academy of Political and Social Science* 678 (1): 180–191. https://doi.org/10.1177/0002716218770138.

Gandara, Denisa, and James C Hearn. 2019. "College Completion, the Texas Way: An Examination of the Development of College Completion Policy in a Distinctive Political Culture." *Teachers College Record* 121 (1): 1–40.

Garcia, David R. 2012. "Protecting the Choice to Stay: 'Education Savings Accounts' and Legislative Priorities." *Teachers College Record*, December 7. ID Number: 16962.

Garcia, David R. 2013. "Traditional Public School Is a Legitimate Choice, Too." *Arizona Republic*, January 28.

Garcia, David R. 2017. "Ed. Scholars Are Talking Past the Public." *Education Week*, January 11.

Garcia, David R. 2018a. "An Engaged Approach to Public Scholarship: Shaping the Policy Agenda through Research Evidence." In *Moving Forward: Policies, Planning and Promoting Access of Hispanic College Students*, edited by Alfredo G. De los Santos Jr., Laura I. Rendon, Gary Francisco Keller, Alberto Acereda, Estela Mara Bensimon, and Richard J. Tannenbaum, 37–54. Tempe, AZ: Bilingual Press.

Garcia, David R. 2018b. "Bridging the Research and Policy Gap to Set the Policy Agenda." In *Wiley-Blackwell Handbook on Education Policy*, edited by Rosemary Papa and Shadow W.J. Armfield, 73–96. Medford, MA: Wiley & Sons.

Gardner, William E. 1984. "A Nation at Risk: Some Critical Comments." *Journal of Teacher Education* 35 (1): 13–15. https://doi.org/10.1177/002248718403500104.

Gigerenzer, Gerd. 2001. "The Adaptive Toolbox." In *Bounded Rationality: The Adaptive Toolbox*, edited by Gerd Gigerenzer and Reinhard Seltan, 37–50. Cambridge, MA: MIT Press.

Gluckman, P. 2014. "Policy: The Art of Science Advice to Government." *Nature*, 2014. https://www.nature.com/news/policy-the-art-of-science-advice-to-government-1.14838.

Gobet, Fernand, and Philippe Chassy. 2009. "Expertise and Intuition: A Tale of Three Theories." *Minds and Machines* 19 (2): 151–180. https://doi.org/10.1007/s11023-008-9131-5.

Goldhaber, Dan D., and Dominic J. Brewer. 2008. "What Gets Studied and Why: Examining the Incentives That Drive Education Research." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 197–208. Cambridge, MA: Harvard Education Press.

Goodwin, M. 2013. "How Academics Can Engage with Policy: 10 Tips for a Better Conversation." *The Guardian*, March 25. https://www.theguardian.com/higher-education-network/blog/2013/mar/25/academics-policy-engagement-ten-tips.

Greenhalgh, Trisha, Robert Glenn, Paul Bate, Olympia Kyriakidou, Fraser Macfarlane, and Richard Peacock. 2003. "A Systematic Review of the Literature on Diffusion, Dissemination and Sustainability of Innovations in Health Service Delivery and Organisation." London: National Co-ordinating Center for NHS Service Delivery and Organisation R & D. https://doi.org/10.1111/j.0887-378X.2004.00325.x.

Gu, Xin, and Karen L. Blackmore. 2016. "Recent Trends in Academic Journal Growth." *Scientometrics* 108: 693–716. https://doi.org/10.1007/s11192-016-1985-3.

Hammersley, Martyn. 2002. *Educational Research and Policymaking in Practice*. London: Paul Chapman Publishing.

Hammersley, Martyn. 2005. "The Myth of Research-Based Practice: The Critical Case of Educational Inquiry." *International Journal of Social Science Research Methodology* 8 (4): 317–330.

Hammersley, Martyn. 2014. "Translating Research Findings into Educational Policy and Practice: The Virtues and Vices of a Metaphor." *Nouveaux Cahiers de la Recherche en Éducation* 17 (1): 54–74. https://doi.org/10.7202/1027321ar.

Hart-Tervalon, Donna, and David R. Garcia. 2014. "Educational Systems Change at the State Level." In *Ability, Equity, and Culture: Sustaining Inclusive Urban Education Reform,* edited by Elizabeth B. Kozleski and Kathleen K. Thorius, 199–216. New York: Teachers College Press.

Helco, Hugh. 1978. "Issue Networks and the Executive Establishment." In *The New American Political System*, edited by Anthony King, 87–124. Washington, DC: American Enterprise Institute for Public Policy Research.

Henig, Jeffrey R. 2008a. *Spin Cycle: How Research Is Used in Policy Debates: The Case of Charter Schools*. New York: Russell Sage Foundation.

Henig, Jeffrey R. 2008b. "The Evolving Relationship Between Researchers and Public Policy." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 41–62. Cambridge, MA: Harvard Education Press.

Henig, Jeffrey R. 2009. "Politicization of Evidence: Lessons for an Informed Democracy." *Educational Policy* 23 (1): 137–160. https://doi.org/10.1177/0895904808328525.

Hess, Frederick M. 2008. "When Research Matters: How Scholarship Influences Education Policy." *Society* 45: 534–539. https://doi.org/10.1007/s12115-008-9142-0.

Hess, Frederick M. 2017. "Why Ed. Scholarship Could Soon Be Sidelined." *Education Week*, January 11, 2017.

Hess, Frederick M., and Olivia Meeks. 2010. "Governance in the Accountability Era." Washington, DC: National School Boards Association, The Thomas B. Fordham Institute, and the Iowa School Boards Association.

Hetrick, Beverly, and Carl E. van Horn. 1988. "Educational Research Information: Meeting the Needs of State Policymakers." *Theory into Practice* 27 (2): 106–110. http://www.jstor.org/stable/1476465.

Hill, Paul T. 1996. "Education." In *Reality and Research: Social Science and U.S. Urban Policy Since 1960*, edited by George C. Galster, 131–156. Washington, DC: Urban Institute Press.

Hird, John A. 2009. "The Study and Use of Policy Research in State Legislatures." *International Regional Science Review* 32 (4): 523–535. https://doi.org/10.1177/0160017609341401.

Honig, Meredith I., and Cynthia Coburn. 2008. "Evidence-Based Decision Making in School District Central Offices." *Educational Policy* 22 (4): 578–608. https://doi.org/10.1177/0895904807307067.

Howell, Jane M., and Christopher A. Higgins. 1990. "Champions of Change: Identifying, Understanding, and Supporting Champions of Technological Innovations." *Organizational Dynamics* 19 (1): 40–55. https://doi.org/10.1016/0090-2616(90)90047-S.

Howell, William G., Paul E. Peterson, and Martin R. West. 2004. "Dog Eats AFT Homework." Wall Street Journal, August 18, 2004.

Howell, William G. 2008. "Education Policy, Academic Research and Public Opinion." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 135–144. Cambridge, MA: Harvard Education Press.

Huang, Gary, Mindy Reiser, Albert Parker, Judith Muniec, and Sameena Salvucci. 2003. "Institute of Education Sciences Findings from Interviews with Education Policymakers." Arlington, VA: Synetics.

Huelskamp, Robert M. 1993. "Perspectives on Education in America: An Annotated Briefing." *Phi Delta Kappan* 74 (9): 718–721. https://doi.org/10.1080/00220671.1993 9941211

Huelskamp, Robert M. 2015. "The Sandia Report on Education: A Perfect Lesson in Censorship." Project Censored, July 7. https://www.projectcensored.org/3-the-sandia-report-on-education-a-perfect-lesson-in-censorship/.

Ingersoll, Richard M. 1995. "Teacher Supply, Teacher Qualifications and Teacher Turnover." Washington, DC: National Center for Education Statistics.

Ingersoll, Richard M. 1996. "Out-of-Field Teaching and Educational Equality." Washington, D.C: National Center for Education Statistics.

Ingersoll, Richard M. 2008. "Researcher Meets the Policy Realm: A Personal Account." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 113–34. Cambridge, MA: Harvard Education Press.

Institute of Education Sciences. 2019. "Welcome to the What Works Clearinghouse." https://ies.ed.gov/ncee/wwc/FWW.

International Centre for Policy Advocacy. N.d. "Defining Policy Advocacy: Making Research Evidence Matter: A Guide to Policy Advocacy in Transition Countries." Accessed July 22, 2020. https://advocacyguide.icpolicyadvocacy.org/21-defining-policy-advocacy.

Jerrim, John, and Robert De Vries. 2017. "The Limitations of Quantitative Social Science for Informing Public Policy." *Evidence and Policy* 13 (1): 117–133. https://doi.org/10.1332/174426415X14431000856662.

Kaestle, Carl F. 1993. "Research News and Comment: The Awful Reputation of Education Research." *Educational Researcher* 22 (1): 23–31. https://doi.org/10.3102/001 3189X022001023.

Kamenetz, Anya. 2014. "It's 2014. All Children Are Supposed to Be Proficient. What Happened?" National Public Radio, October 11. https://www.npr.org/sections/ed/2014/10/11/354931351/it-s-2014-all-children-are-supposed-to-be-proficient-under-federal-law.

Kingdon, John. 2003. *Agendas, Alternatives and Public Policies*, 2nd ed. Boston, MA: Addison-Wesley Educational Publishers.

Kirst, Michael W. 2000. "Bridging Education Research and Education Policymaking." *Oxford Review of Education* 26 (3/4): 379–391. https://doi.org/10.1080/30549800 20001891.

Ladson-Billings, Gloria. 2006. "From the Achievement Gap to the Education Debt: Understanding Achievement in U.S. Schools." *Educational Researcher* 35 (7): 3–12. https://doi.org/10.3102/0013189x035007003.

Landry, Rejean, Nabil Amara, and Moktar Lamari. 2001. "Climbing the Ladder of Research Utilization: Evidence from Social Science Research." *Science Communication* 22 (4): 396–422. https://doi.org/10.1177/1075547001022004003.

Lavis, John N., Dave Robertson, Jennifer M. Woodside, Christopher B. McLeod, and Julia Abelson. 2003. "How Can Research Organizations More Effectively Transfer Research Knowledge to Decision-Makers?" *Milbank Quarterly* 81 (2): 221–48. https://doi.org/10.1111/1468-0009.t01-1-00052.

Lemann, Nicholas. "The Reading Wars." *The Atlantic*, November 1997. https://www.theatlantic.com/magazine/archive/1997/11/the-reading-wars/376990/.

Lindblom, Charles E, and David K Cohen. 1979. *Usable Knowledge: Social Science and Social Problem Solving*. New Haven, CT: Yale University Press.

Lintle, Christian A. 2009. "Student's Corner: Communicating Your Language in Lay Language." *IEEE Engineering in Medicine and Biology Magazine*, May 2009.

Lubienski, Christopher L, Janelle Scott, and Elizabeth DeBray. 2014. "The Politics of Research Production, Promotion, and Utilization in Educational Policy." *Educational Policy* 28 (1): 131–144. https://doi.org/10.1177/0895904813515329.

Manna, Paul, and Michael J. Petrilli. 2008. "Double Standard? 'Scientifically Based Research' and the No Child Left Behind Act." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 63–88. Cambridge, MA: Harvard Education Press.

Maranto, Robert, Scott Milliman, Frederick M. Hess, and April Gresham, eds. 1999. School Choice in the Real World: Lessons from Arizona Charter Schools. New York: Routledge.

Marin, Bernd. 1981. "What Is 'Half-Knowledge' Sufficient for and When?: Theoretical Comment on Policymakers' Uses of Social Science." *Science Communication* 3 (1): 43–60. https://doi.org/10.1177/107554708100300103.

Marland, Alex, and Anna Lennox Esselment. 2018. "Negotiating with Gatekeepers to Get Interviews with Politicians: Qualitative Research Recruitment in a Digital Media Environment." *Qualitative Research* 19 (6): 685–702. https://doi.org/10.1177/1468794118803022.

Marshall, Catherine, Douglas E Mitchell, and Frederick Wirt. 1985. "Assumptive Worlds of Education Policymakers." *Peabody Journal of Education* 62 (4): 90–115. https://www.jstor.org/stable/1492672?origin=JSTOR-pdf&seq=1.

Mattozzi, Andrea, and Antonio Merlo. 2015. "Mediocracy." *Journal of Public Economics* 130: 32–44. https://doi.org/10.1016/j.jpubeco.2015.07.001.

McDonnell, Lorraine M. 1988. "Can Education Research Speak to State Policy?" *Theory into Practice* 27 (2): 91–97. https://www.jstor.org/stable/1476463?origin=JSTOR-pdf &seq=1.

McDonnell, Lorraine M. 2009. "Repositioning Politics in Education's Circle of Knowledge." *Educational Researcher* 38 (6): 417–427. https://doi.org/10.3102/0013189x09342584.

McDonnell, Lorraine M., and Stephen M. Weatherford. 2013. "Evidence Use and the Common Core State Standards Movement: From Problem Definition to Policy Adoption." *American Journal of Education* 120 (1): 1–25. https://doi.org/10.4324/9781 315408545-3.

McGann, James G. 2016. *The Fifth Estate: Think Tanks, Public Policy, and Governance.* Washington, DC: The Brookings Institution.

McGrady, Michael. 2017. "Arizona Approves Minor Changes to Common Core Standards." The Heartland Institute. https://www.heartland.org/news-opinion/news/arizona-approves-minor-changes-to-common-core-standards?source=policybot.

Miller, Steven I., and Marcel Fredericks. 2000. "Social Science Research Findings and Educational Policy Dilemmas: Some Additional Distinctions." *Education Policy Analysis Archives* 8 (3). https://epaa.asu.edu/ojs/article/view/394.

Monahan, Torin, and Jill A. Fisher. 2015. "Strategies for Obtaining Access to Secretive or Guarded Organizations." *Journal of Contemporary Ethnography* 44 (6): 709–736. https://doi.org/10.1177/0891241614549834.

Naidoo, Navindhra. 2011. "What Is Research? A Conceptual Understanding." *African Journal of Emergency Medicine* 1 (1). https://www.researchgate.net/publication/265704878_What_is_research_A_conceptual_understanding.

Nathan, Richard P. 1985. "Research Lessons from the Great Society." *Journal of Policy Analysis and Management* 4 (3): 422–426. https://doi.org/10.2307/3324196.

National Center for Education Statistics. N.d. "About Us." Accessed May 15, 2019. https://nces.ed.gov/about/.

National Commission on Excellence in Education. 1983. "A Nation at Risk: The Imperative for Educational Reform." Washington, DC: The National Commission on Excellence in Education.

National Conference of State Legislatures. 2020. "How States Define Lobbying and Lobbyist." September 8. https://www.ncsl.org/research/ethics/50-state-chart-lobby-definitions.aspx.

National Council of State Legislatures. 2017. "Full- and Part-Time Legislatures." Washington, DC, June 4. http://www.ncsl.org/research/about-state-legislatures/full-and-part-time-legislatures.aspx.

Nelson, Stephen R., James C. Leffler, and Barbara A. Hansen. 2009. "Toward a Research Agenda for Understanding and Improving the Use of Research Evidence." Portland, OR: Northwest Regional Educational Laboratory. http://educationnorthwest.org/sites/default/files/toward-a-research-agenda.pdf.

Ness, Erik C, and Denisa Gándara. 2014. "Ideological Think Tanks in the States: An Inventory of Their Prevalence, Networks, and Higher Education Policy Activity." *Educational Policy* 28 (2): 258–280. https://doi.org/10.1177/0895904813515328.

Newman, Joshua, Adrian Cherney, and Brian W. Head. 2016. "Do Policy Makers Use Academic Research? Reexamining the 'Two Communities' Theory of Research Utilization." *Public Administration Review* 76 (1): 24–32. https://doi.org/10.1111/puar .12464.

Nichols, Sharon L., and David C. Berliner. 2007. *Collateral Damage: How High-Stakes Testing Corrupts America's Schools*. Cambridge, MA: Harvard Education Press.

Nutley, Sandra M., Isabel Walter, and Huw T. O. Davies. 2007. *Using Evidence: How Research Can Inform Public Services*. Bristol, UK: Policy Press.

Oliver, Kathryn, and Paul Cairney. 2019. "The Dos and Don'ts of Influencing Policy: A Systematic Review of Advice to Academics." *Palgrave Communications* 5 (1): 1–11. https://doi.org/10.1057/s41599-019-0232-y.

Oliver, Kathryn, Simon Innvar, Theo Lorenc, Jenny Woodman, and James Thomas. 2014. "A Systematic Review of Barriers to and Facilitators of the Use of Evidence by Policymakers." *BMC Health Services Research* 14 (2). https://doi.org/10.1186/1472 -6963-14-2.

Online Publishers. 2021. "The Role of Social Media in Online Lobbying." 2021. https://www.theonlinepublishers.com/blog/the-role-of-social-media-in-online-lobbying#:~:text=But%2C.

Ostrander, Susan A. 1993. "'Surely You're Not in This Just to Be Helpful': Access, Rapport, and Interviews in Three Studies of Elites." *Journal of Contemporary Ethnography* 22 (1): 7–27.

Parkhurst, Justin. 2017. *The Politics of Evidence: From Evidence-Based Policy to the Good Governance of Evidence*. New York: Routledge.

Petes, Laura E., and Marc D. Meyer. 2018. "An Ecologist's Guide to Careers in Science Policy Advising." *Frontiers in Ecology and the Environment* 16 (1): 53–54. https://doi.org/10.1002/fee.1761.

Petkovic, Jennifer, Vivian Welch, and Peter Tugwell. 2015. "Do Evidence Summaries Increase Policy-Makers' Use of Evidence from Systematic Reviews: A Systematic Review Protocol." *Systematic Reviews*, September 28. https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-015-0116-1.

Pielke, Roger A. Jr. 2007. *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge: Cambridge University Press.

Pinker, Steven. 2014. The Sense of Style: The Thinking Person's Guide to Writing in the 21st Century. New York, NY: Penguin Books.

"Policy Analysis." N.d. Britannica Academic. Accessed August 8, 2019.

Public Law 107-110. 2002. No Child Left Behind Act of 2001.

Pugliese Associates. N.d. "Social Media Killed the Lobbying Star?" Accessed January 12, 2021. https://puglieseassociates.com/social-media-killed-the-lobbying-star/.

Rako, Susan. 2018. "The Power of Naming: Ethnic Cleansing; Chain Immigration: Numbing Phrases." *Psychology Today*, February 23. https://www.psychologytoday.com/us/blog/more-light/201802/the-power-naming?amp=.

Rankin, Jenny G. 2019. Sharing Your Education Expertise with the World: Make Research Resonate and Widen Your Impact. New York: Routledge.

Rankin, Jenny G. 2020. *Increasing the Impact of Your Research: A Practical Guide to Sharing Your Findings and Widening Your Reach.* New York: Routledge.

Regoniel, Patrick. 2015. "Conceptual Framework: A Step by Step Guide on How to Make One." January 5. https://simplyeducate.me/2015/01/05/conceptual-framework-guide.

Rhode, Deborah L. 2006. *In Pursuit of Knowledge: Scholars, Status, and Academic Culture*. Stanford, CA: Stanford University Press.

Rich, Andrew. 2005. "War of Ideas." Stanford Social Innovation Review 3 (1): 18-25.

Sabatier, Paul A. 1988. "An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning." *Policy Sciences* 21 (2/3): 129–168. https://www.jstor.org/stable/4532139?seq=1.

Sallee, Margaret W., and Julee T. Flood. 2012. "Using Qualitative Research to Bridge Research, Policy, and Practice." *Theory into Practice* 51 (2): 137–144. https://doi.org/http://dx.doi.org/10.1080/00405841.2012.662873.

Sanders, William L., and Sandra P. Horn. 1998. "Research Findings from the Tennessee Value-Added Assessment System (TVAAS) Database: Implications for Educational Evaluation and Research." *Journal of Personnel Evaluation in Education* 12 (3): 247–256. https://doi.org/10.1023/A:1008067210518.

Schemo, Diana J. 2004. "Nation's Charter Schools Lagging Behind, U.S. Test Scores Reveal." *New York Times*, August 17.

Schon, Donald. 1963. "Champions for Radical New Inventions." *Harvard Business Review* 41 (2): 77–86.

Scott, Janelle, and Huriya Jabbar. 2014. "The Hub and the Spokes: Foundations, Intermediary Organizations, Incentivist Reforms, and the Politics of Research Evidence." *Educational Policy* 28 (2): 233–257. https://doi.org/10.1177/0895904813515327.

Scott, Janelle, Christopher L. Lubienski, and Elizabeth DeBray. 2009. "The Politics of Advocacy in Education." *Educational Policy* 23 (1): 3–14. https://doi.org/10.1177/0895904808328530.

Scott, Janelle, Christopher L. Lubienski, Elizabeth DeBray, and Huriya Jabbar. 2014. "The Intermediary Function in Evidence Production, Promotion, and Utilization: The Case of Educational Incentives." In *Using Research Evidence in Education: From the Schoolhouse Door to Capitol Hill*, edited by Kara S. Finnigan and Alan J. Daly, 69–89. New York: Springer.

Seashore Louis, Karen. 2005. "Knowledge Producers and Policymakers: Kissing Kin or Squabbling Siblings?" In *International Handbook of Educational Policy*, edited by Nina Bascia, Alister Cumming, Amanda Datnow, Keith Leithwood, and David Livingstone, 219–38. New York: Springer. https://www.springer.com/gp/book/9781402031892.

Seashore Louis, Karen, and Lisa M. Jones. 2002. "Dissemination with Impact: What Research Suggests for Practice in Career and Technical Education." St. Paul, MN: National Research Center for Career and Technical Education.

Shonkoff, Jack P. 2000. "Science, Policy, and Practice: Three Cultures in Search of a Shared Mission." *Child Development* 71 (1): 181–187. https://doi.org/10.1111/1467-8624.00132.

Snow, C. P. 1959. *The Two Cultures and the Scientific Revolution*. Cambridge: Cambridge University Press.

Staff. 2016. "State Board Votes to Replace Common Core Standards." *Eastern Arizona Courier*, December 27. https://www.eacourier.com/news/state-board-votes-to-replace-common-core-standards/article_d291898c-c965-11e6-8a9f-6351e655992a.html.

Staff. 2019. "A Year after the Teacher Walkout, a Timeline of Arizona's 'RedforED Movement.'" *Arizona Republic*, April 11. https://www.azcentral.com/story/news/local/arizona-education/2019/04/11/arizona-teacher-walkout-timeline-red-for-ed/3337757002/.

Stedman, Lawrence C. 1994. "The Sandia Report and U.S. Achievement: An Assessment." *Journal of Educational Research* 87 (3): 133–146. https://www.jstor.org/stable/27541911.

Steele, Colin. 2008. "Scholarly Monograph Publishing in the 21st Century: The Future More than Ever Should Be an Open Book." *Journal of Electronic Publishing* 11 (2). https://doi.org/http://dx.doi.org/10.3998/3336451.0011.201.

Stone, Deborah. 2012. Policy Paradox: The Art of Political Decision Making, 3rd ed. New York: Norton.

Sundquist, James L. 1978. "Research Brokerage: The Weak Link." In *Knowledge and Policy: The Uncertain Connection*, edited by Laurence E. Lynn, 191. Washington, DC: National Academies Press. https://www.nap.edu/catalog/19941/knowledge-and-policy-the-uncertain-connection.

Task Force on American Innovation. 2009. "Basic Research: Tackling America's 21st Century Challenges." Washington, DC: National Academy of Sciences.

Thompson, Genevieve N., Carole A. Estabrooks, and Lesley F. Degner. 2006. "Clarifying the Concepts in Knowledge Transfer: A Literature Review." *Journal of Advanced Nursing* 53 (6): 691–701. https://doi.org/10.1111/j.1365-2648.2006.03775.x.

Tseng, Vivian. 2012. "The Uses of Research in Policy and Practice." *Social Policy Report* 26 (2): 1–24.

Utah State Legislature. N.d. "Office of the Legislative Auditor General." Accessed on July 9, 2019. https://olag.utah.gov/olag-web/.

Walgrave, Stefaan, and Yves Dejaeghere. 2017. "Surviving Information Overload: How Elite Politicians Select Information." *Governance* 30 (2): 229–244. https://doi.org/10.1111/gove.12209.

Weber, James R., and Charlotte S. Word. 2009. "The Communication Process as Evaluative Context: What Do Nonscientists Hear When Scientists Speak?" *BioScience* 51 (6): 487–495.

Weible, Christopher M. 2008. "Expert-Based Information and Policy Subsystems: A Review and Synthesis." *Policy Studies Journal* 36 (4): 615–635. https://doi.org/10.1111/j.1541-0072.2008.00287.x.

Weible, Christopher M., Tanya Heikkila, Peter deLeon, and Paul A. Sabatier. 2012. "Understanding and Influencing the Policy Process." *Policy Sciences* 45 (1): 1–21. https://doi.org/10.1007/s11077-011-9143-5.

Weible, Christopher M., and Paul A. Sabatier, eds. 2018. *Theories of the Policy Process*, 4th ed. New York: Routledge.

Weick, Karl E. 1976. "Educational Organizations as Loosely Coupled Systems." *Administrative Science Quarterly* 21 (1): 1–19. https://doi.org/10.2307/2391875.

Weiss, Carol H. 1972. Evaluating Action Programs: Readings in Social Action and Education. Boston, MA: Prentice Hall.

Weiss, Carol H. 1976. "Symposium on 'The Research Utilization Quandry': Introduction by the Symposium Co-Editors." *Policy Studies Journal* 4 (3): 221–224.

Weiss, Carol H. 1977. "Research for Policy's Sake: The Enlightenment Function of Social Research." *Policy Analysis* 43 (4): 531–545.

Weiss, Carol H. 1979. "The Many Meanings of Research Utilization." *Public Administration Review* 39 (5): 426–431. https://doi.org/10.2307/3109916.

Weiss, Carol H. 1980. "Knowledge Creep and Decision Accretion." *Science Communication* 1 (3): 381–404.

Weiss, Carol H. 1989. "Congressional Committees as Users of Analysis." *Journal of Policy Analysis and Management* 8 (3): 411–431. https://doi.org/10.2307/3324932.

Weiss, Carol H, and Michael J. Bucuvalas. 1977. "The Challenges of Social Science Research to Decision Making." In *Using Social Research in Public Policy Making*, edited by Carol H. Weiss and Michael J. Bucuvalas, 213–224. Lexington, MA: Lexington Books.

Wherry, John H. 2004. "The Influence of Home on School Success." *Principal*, September–October. https://www.naesp.org/sites/default/files/resources/2/Principal/2004/S-Op6.pdf.

Whitty, Geoff. 2006. "Education(al) Research and Education Policy Making: Is Conflict Inevitable?" *British Educational Research Journal* 32 (2): 159–176. https://doi.org/10.1080/01411920600568919.

Wildavsky, Aaron. 1979. Speaking Truth to Power: The Art and Craft of Policy Analysis. Toronto, Canada: Brown and Company.

William T. Grant Foundation. 2019. "Research Grants on Improving the Use of Research Evidence." http://wtgrantfoundation.org/grants/research-grants-improving -use-research-evidence.

Wilson, James Q. 1981. "'Policy Intellectuals' and Public Policy." *Public Interest* 64 (Summer): 31–46.

Wirt, Frederick M., and Douglas E. Mitchell. 1982. "Social Science and Educational Reform: The Political Uses of Social Research." *Educational Administration Quarterly* 18 (4): 1–16.

Wiseman, Alexander W. 2010. "Chapter 1: The Uses of Evidence for Educational Policymaking: Global Contexts and International Trends." *Review of Research in Education* 34 (1): 1–24. https://doi.org/10.3102/0091732X09350472.

Wong, Kenneth K. 2008. "Considering the Politics in the Research Policymaking Nexus." In *When Research Matters: How Scholarship Influences Education Policy*, edited by Frederick M. Hess, 219–237. Cambridge, MA: Harvard Education Press.

Wye, Lesley, Emer Brangan, Ailsa Cameron, John Gabbay, Jonathan H. Klein, and Catherine Pope. 2015. "Evidence Based Policy Making and the 'Art' of Commissioning—How English Healthcare Commissioners Access and Use Information and Academic Research in 'Real Life' Decision-Making: An Empirical Qualitative Study." *BMC Health Services Research* 15 (1): 1–13. https://doi.org/10.1186/s12913-015-1091-x.

Yorkshire Medical Marketing. N.d. "How to Use Social Media Effectively When Lobbying." Accessed March 12, 2019. https://yorkshiremedicalmarketing.com/2019/03/12/how-to-use-social-media-awareness-days-in-your-healthcare-marketing/.

Zuiker, Steven J, Neils Piepgrass, Adai Tefera, Kate T Anderson, Kevin Winn, and Gustavo Fischman. 2019. "Advancing Knowledge Mobilization in Colleges of Education." *International Journal of Education Policy and Leadership* 15 (1): 1–19. https://journals.sfu.ca/ijepl/index.php/ijepl/article/view/808.

