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The Role of Evidence-Based Research in the Decision-Making Process as Perceived by Local Board of Education Policymakers in West Virginia

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THE ROLE OF EVIDENCE-BASED RESEARCH IN THE DECISION-MAKING PROCESS AS PERCEIVED BY LOCAL BOARD OF EDUCATION POLICYMAKERS IN WEST VIRGINIA

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by
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Approved by
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SIGNATURE PAGE

I hereby affirm that the following project meets the high academic standards for original scholarship and creative work established by my discipline, college, and the Graduate College of Marshall University. With my signature, I approve the manuscript for publication.

Project Title: The Role of Evidence - Based Research in the Decision - Making Process as Perceived by Local Board of Education Policymakers in West Virginia

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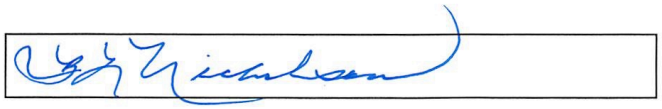

Committee Chairperson

03/13/2017

Date

DEDICATION

To Billy – always be as strong-willed as you have been since the day you were born. You are brave and true to yourself. Don't ever change. I'm proud and honored to be your mom. You bring me great joy.

To Mom & Dad – I won the parent lottery. You two have been instrumental in my achievements. You have always provided me with gentle guidance and unconditional love beginning with my first steps in Germany. I'm forever grateful.

To the memories of Granny & Paw-Paw – who sacrificed so much to provide for others. By giving up your own education, you enabled the rest of us to further ours. By fighting for my freedom, you gave up a little of your own. I could never repay you in a thousand lifetimes.

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No man is an island. I could not have accomplished this terminal degree alone.

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Most importantly, The Lord has given me strength. I'm nothing without Him.
It might have taken four-and-a-half years, 13 vacations, and two schools, but I did it.

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ABSTRACT

This non-experimental, descriptive study explored the perceptions of PK-12 policymakers in West Virginia regarding the sources of information they use in the decision-making process; whether and how evidence-based research is relied upon; whether evidence-based research is considered credible and usable; and what barriers, facilitators, and demographic data may play roles in the decision-making process. Data were collected from a 15-question researcher-created survey administered to nearly 200 county board of education members. Results indicated that while policymakers think evidence-based research is important, they nonetheless use it less than other types of information. Consumers consider research reports too lengthy. Respondents indicated they strongly agreed that evidence-based research is vital to decision-making; however, professional journals, a widely accepted source for disseminating evidence-based research, were among the least consulted information sources by respondents. Intermediaries, in the form of trusted individuals such as the superintendent, were among the most frequently consulted, most heavily relied upon, and found to be among the most credible and most useful information sources by survey respondents. Therefore, research must get into the hands of intermediaries, preferably in the form of brief, non-ambiguous summaries, so the work of researchers can be passed along to policymakers and used to guide decisions.

CHAPTER ONE

INTRODUCTION, REVIEW, AND PROBLEM STATEMENT

Background

The call to improve public education can be heard across the nation, and demands to increase student achievement in order to compete globally are escalating. The 1983 release of *A Nation at Risk* by the U.S. Department of Education appears to have been the catalyst for decades of roller-coaster legislation such as Improving America's Schools in 1994, No Child Left Behind in 2001, Race to the Top in 2009, and Every Student Succeeds in 2015. Despite the turmoil often associated with public education, there is still widespread devotion from policymakers, researchers, educators, and even the media. The nationwide commitment to educating children comes primarily in the form of financial support. The average annual cost per public school student was $12,401 in 2011-12 (U.S. Department of Education, National Center for Education Statistics [NCES], 2015).

Despite ongoing financial support, concern (if not alarm) about the quality of public education is expressed through newspapers and magazines and on television, radio, and the Internet at a constant rate, therefore making it a popular topic of public interest. When considering this widespread interest, a logical impulse, at least for educators, is to examine the research, or lack thereof, on which it is based. Analyzing the role of research in improving the quality of instruction in America's schools is critical, specifically as it relates to policymakers and their use of research in decision-making.

A convergence of economic developments, predominantly related to extraction industries, has increased pressure on policymakers in West Virginia who are struggling to

replace revenues formerly provided by taxes from a robust coal industry and fairly high prices in natural gas. State and local boards of education have been forced to make cuts and overcome deficits while continuing to provide leadership to public schools consistent with their responsibility to "provide for a thorough and efficient system of free schools" (W.V. Const. art. XII, § 1).

According to the West Virginia State Code, each county school district operates under the control of a county board of education. County board members are required to have at least a high school diploma or general educational development (GED) diploma, and board members may not assume duties unless they have first attended and completed a course of orientation before taking office. Local board members must also obtain seven hours of annual training relating to boardsmanship, governance effectiveness, and school performance issues approved by the state board and conducted by the West Virginia School Board Association (WVSBA) (W.V. Code §18.5.1).

Federal and state policies increasingly require "evidence" to be used to ground educational improvement efforts (Honig & Coburn, 2008). The use of student performance data in the decision-making process stems from legislation such as the No Child Left Behind Act (NCLB), which required the use of "scientifically based research" (2002). While research shows that policymakers use many types of *information* in decision-making, there is little apparent use of research *evidence* (Honig & Coburn, 2008; Nelson, Leffler, & Hansen, 2009). Evidence-based research is defined, consistent with the definition in the Education Sciences Reform Act of 2002, as research that 1) uses rigorous, systematic, and explicitly stated methods to obtain reliable and valid knowledge relevant to education activities, programs, or practices; 2) presents findings and/or makes claims that are supported by the methods that have been utilized;

and 3) is accepted by and published in a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

The challenging role held by policymakers in West Virginia in relation to the law they are required to uphold causes a need for further inquiry into the way research is utilized. The overall goal is to increase the quality of the education system in West Virginia, and using evidence-based research in the decision-making process may play a part.

This non-experimental, descriptive study focused on decision-making among school board members in West Virginia's 55 school districts and the role that evidence-based research plays in the decision-making process. A researcher-developed survey was used to collect and analyze data from county Boards of Education members in the state of West Virginia in order to better understand the kinds of information that influence the decision-making process.

Statement of the Problem

There appears to be a lack of substantial use of evidence-based research by educational policymakers. A review of relevant literature suggests that policymakers rely little on evidence-based research, do not clearly understand, and may even misuse research in general in the decision-making process (Asen, Gurke, Conners, Solomon, & Gumm, 2013; Honig & Coburn, 2008; Nelson et al., 2009; Tseng & Nutley, 2014). Increasing the effective implementation of evidence-based research in schools could play a critical role in genuinely improving education. Researchers need to better understand what drives decision-making among policymakers (i.e., what kinds of information are used, how sources are selected, preferences in format/presentation, etc.) so their work can better guide educational policy.

A small study on the subject by Nelson, Leffler, and Hansen (2009) included both K-12 policymakers and education practitioners in a three-pronged research study ($N = 65$). The

researchers sought to 1) establish how and when research evidence is being used; 2) reveal other sources of information being relied upon by individual policymakers; and 3) determine the barriers or facilitators to using research evidence. Additional research conducted by Treadway (2015) sought to understand how higher education policymakers in particular acquire, use, and interpret research. "Inspired by the work of Nelson et al., and guided by their recommendations for future research . . . the purpose of this study was to build connections between information producers (researchers) and information consumers (policymakers)" (Treadway, 2015, p. 96).

This study sought to build on the findings of Nelson et al. (2009) and Treadway (2015), thus contributing to what is known about the effect(s) of evidence-based research on policymaking. Further analysis of the perceptions of local-level, K-12 policymakers regarding the sources of information they use in the decision-making process; whether and how evidence-based research is relied upon; whether evidence-based research is considered credible and usable; and what barriers, facilitators, and demographic data may play roles in the decision to use evidence-based research in the decision-making process was conducted.

Research Questions

1. What sources of information are used by local board of education policymakers in the decision-making process?
2. To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?
3. What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?
4. What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?

5. What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?
6. What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?
7. What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?
8. Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

Operational Definitions

Barriers: circumstances, influences, or individuals that interfere with or inhibit the use of evidence-based research in the policymaking process.

Credibility: the extent to which research consumers accept the evidence it produces as believable, true, or honest.

Educational media: non-peer-reviewed print and Internet-based magazines or newspapers marketed to educators and academic administrators.

Evidence-based research: For purposes of this study, evidence-based research is defined, consistent with the definition in the Education Sciences Reform Act of 2002, as research that 1) uses rigorous, systematic, and explicitly stated methods to obtain reliable and valid knowledge relevant to education activities, programs, or practices; 2) presents findings and/or makes claims that are supported by the methods that have been utilized; and 3) is accepted by and published in a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

Facilitators: circumstances, influences or individuals that contribute to the application of evidence-based research in the policymaking process.

Intermediary: an individual or organization that transfers information between producers and consumers (e.g. professional or membership organizations, universities or individual researchers, nonprofit and for-profit organizations or government agencies, trusted individuals).

Local popular media: media vehicles such as newspapers, radio stations, television stations, and cable stations that function primarily to serve the communications needs of the communities or metropolitan areas in which they are located.

Peer-reviewed academic journal: a professional journal that publishes only articles that have been subjected to a systematic and rigorous review by members of the author's/authors' academic discipline.

Policymaker: an individual with the responsibility and authority to make decisions and to develop, implement and/or modify policies that affect public education (e.g. district or state level school board member, legislator, superintendent).

Professional organization: a body of persons engaged in the same occupational field formed usually to control entry into the field, maintain standards, and represent the field in discussions with other bodies. Examples include the National Association of State Legislatures, the National School Boards Association, or the American Federation of Teachers.

Usefulness: the quality of having utility and practical worth or applicability in the decision-making process.

Summary of Methods

This non-experimental, descriptive study focused on members of the 55 county Boards of Education in the state of West Virginia ($N = 275$). A survey was be designed to collect multiple

choice and Likert-type responses from all surveyed participants during the 2016 West Virginia School Board Association Fall Conference. The data were analyzed via the SPSS platform to provide descriptive and comparative results from survey responses.

The survey questions were devised to determine what sources of information local board of education policymakers use in the decision-making process; whether and how evidence-based research is relied upon; whether evidence-based research is considered credible and usable; and what barriers, facilitators, and demographic data play roles in using evidence-based research in the decision-making process. In an effort to narrow the widely perceived gap between policy and practice (Tseng, 2012), the use of evidence-based research in the decision-making process by members of the local boards of education in West Virginia was analyzed.

Survey data from multiple choice and Likert-type responses were entered into and analyzed using the most current version of SPSS software. A subsequent analysis of responses from open-ended survey questions followed the steps outlined by Creswell (2003), including organizing and preparing the data, exploring and coding the data, and developing descriptions and themes. The development of descriptions and themes may have included ordinary, unexpected, or layered or connected themes.

Limitations and Assumptions of Study

The limitations of this study were primarily those common to survey research. The findings were limited to the perceptions of local board of members in West Virginia who responded to the survey rather than being generalizable to their larger population. Those who responded may have done so out of a particular bias, either positive or negative about/receptive or non-receptive toward evidence-based research in the decision-making process. While the researcher's academic experience and employment in the field of education could have

constituted a source of empathy and provide an experiential background to be effective in eliciting and understanding respondent's perceptions, it could also have been viewed as a limitation in that it is a potential source of bias.

The study was also limited by the validity of the survey instrument, which was field tested with a representative population of policymakers or practitioners in West Virginia but was in its initial use nonetheless. Assumptions are made that participants responded to the survey items truthfully, although it is acknowledged that individual biases of respondents may affect the objectivity of their responses to the questionnaire. While the items on the survey instrument are based on congruence with the reviewed literature, there may be other issues of importance to policymakers and practitioners, which were not included.

Significance of Study

The acquisition and implementation of evidence-based research among policymakers is a critical issue for researchers (Nelson et al., 2009). There is a need to further understand if, when, and how evidence-based research is being used in the decision-making process. Local boards of education are faced with political and organizational pressures from the communities in which they live and work. A close examination of recent research reveals a need to survey local boards of education members in order to answer research questions posed from a review of relevant literature.

Studies by Asen, Gurke, Conners, Solomon, and Gumm (2013) involving board of education members from three districts in Wisconsin ($N = 21$) and Nelson et al. (2009) including district school board trustees ($N = 12$) were small. While each study resulted in findings relevant to the issue, there were limited numbers of board members interviewed as part of a larger population.

"Boards of education are the official vehicle for citizen participation" (Mann, 1976, p. 61). Researchers need to better understand what sources of information policymakers use in the decision-making process and to what extent evidence-based research is relied upon in order to strengthen both the supply and demand of research and practice (Tseng, 2012). Board members have been overlooked in many studies, despite the obvious role they play in the decision-making process of the local education agency. This study focuses on local policymakers, and the results from the study may be beneficial to universities, professional organizations, state policymakers, local boards of education, and the media.

CHAPTER TWO

REVIEW OF LITERATURE

A 2009 study entitled "Toward a Research Agenda for Understanding and Improving the Use of Research Evidence," by Nelson, Leffler, and Hansen included a small number of K-12 policymakers and education practitioners in a three-pronged research study ($N = 65$). The researchers sought to 1) establish how and when research evidence is being used; 2) reveal sources of information other than research being relied upon by individual policymakers; and 3) determine barriers or facilitators to using research evidence. Using the preliminary work of Nelson et al. (2009), additional research conducted by Treadway (2015) also sought to understand how policymakers acquire, use, and interpret research, but focused on the higher education environment. Among the questions for further study emanating from that research were recommendations that further analysis of the practices of local policymakers and their perceptions of the usefulness of evidence-based research in the decision-making process be conducted. This study sought to build on the findings of Nelson et al. (2009) and Treadway (2015), thus contributing to what is known about the effect(s) of evidence-based research on policymaking.

This literature review provides an overview of existing literature related to evidence in the decision-making process. It identifies types of evidence used by policymakers and explores methods of using research. The literature review also covers factors that impede and facilitate the use of evidence-based research by policymakers and consumers of research, including intermediaries and local boards of education.

Decision-Making Styles

Dale Mann (1976) analyzed three representational styles of decision-making. The "trustee representative" makes decisions based on personal judgment and professional experience with issues. This style of representative believes that he has been chosen for the office precisely to make decisions for, or instead of, the people he represents. Trustee decision-making is dominated by what he thinks is best for the children, community, and constituents.

A second decision-making style is "delegate representative" (Mann, 1976). The delegate representative balances her own ideas against those of her community and constituents. Delegates embrace the concept of representing accurately; they neither attempt to interpret nor replace ideas. Solitary and autonomous decisions, even if supported by training and experience, do not supersede lay interests. "Delegates believe that the trustee style of representing their constituents mocks the idea of representation" (Mann, 1976, p. 25).

The third type of representative is the "politico representative." This person responds to representational issues on some occasions as a delegate and on other occasions as a trustee. Politico representatives are dominated by the issues to be resolved or by the context of the decision. A politico is not being indecisive; he is enacting a conscious, patterned choice based on constituent relations (Mann, 1976, p. 29).

The trustee orientation is "predominant among public officials" (Mann, 1976, p. 38). Trustee representatives maintain the trappings of citizen involvement, but it occurs on a surface level. There is often manipulation involved, such as small, appointed committees (i.e., special interest budget committee, calendar committee, etc.). The committee may be handpicked supporters of the trustee's regime, and as a result find the trustee's decisions unobjectionable.

One trustee representative offered a surprising analogy about his position by saying, "A chief of surgery doesn't allow the patients to vote about their operations, does he?" (Mann, 1976, p. 17).

Regardless of their decision-making style of representation, policymakers do not have a simple task, considering that "science is a skimpy shield against the intrusion of politics" (Mann, 1976, p. 5). Educational policymakers are constantly presented with problems of a political nature and are often faced with competing demands, such as putting in new windows or repairing heating and cooling systems, which are visible to the public and easier to justify than purchasing a new research-based curriculum (Fusarelli, 2008). Local policymakers are charged with implementing policy while serving as elected officials in the communities in which they live. Therefore it is important to understand who or what influences the decision-making process.

Evidence-Based Decision-Making

Although school performance data vary among states and districts, the burden of proof required to validate student progress is on school systems to produce convincing data. "Contemporary federal and state policies increasingly demand that school district central offices use 'evidence' – variously defined – to ground their educational improvement efforts" (Honig & Coburn, 2008, p. 578).

School improvement is a focus for many stakeholder groups and has been for decades. As long ago as 1983 the U.S. Department of Education released the arguably alarmist *A Nation at Risk*, which alleged that "the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (1983, para. 1). That document included recommendations to improve education in America. The report suggested administering standardized tests of achievement and using those tests as part of a system of diagnostic procedures to evaluate student progress. It also stated that policymakers

play a crucial role in the reform effort of the educational system (U.S. Department of Education, 1983). Terminology such as data, statistics, and research were interwoven among the recommendations.

Another largely influencing shift in decision-making based on evidence came with language used in the No Child Left Behind Act, which required the use of "scientifically based research" (NCLB Act, 2002). "The No Child Left Behind Act (2002), for example, included more than 100 references to 'scientifically based research' and required that school districts use research in their decisions about curricula, instructional programs, and professional development" (Tseng, 2012, p. 5).

The prevalence of the term "evidence-based decision-making" by researchers, policymakers, and practitioners as an umbrella covers data-driven, research-based decisions and suggests that information used to make decisions should come from such evidence (Honig & Coburn, 2008). While research shows that policymakers use many types of information in decision-making, there is little apparent use of research evidence (Honig & Coburn, 2008; Nelson et al., 2009). Evidence-based research involves policymakers forming decisions based on claims, findings, or field-related information with sound methods and utilization, published in a peer-reviewed journal or subjected to a comparable scientific review.

Types of Evidence Used by Policymakers

There is abundant research indicating that policymakers use evidence in their work (Asen et al., 2013; Goertz, Barnes, & Massell, 2013; Honig & Coburn, 2008). There is, however, some disparity regarding the types of evidence used by policymakers.

In 2009, when Nelson et al. asked focus group participants to talk about the types of evidence they used in decision-making, the term "evidence" was used in a broad sense,

encompassing a vast expanse of sources including terms such as "local research, local data, personal experience, information from personal communications, gut instinct or intuition, and the experience of others, in addition to research evidence" (p. ii). The study participants did not "draw a distinction between research evidence and general evidence derived from these other sources" (p. ii).

Rather than use a research source, many policymakers seek the advice of others, confer with colleagues, or go to trusted peers for assistance in identifying effective programs (Nelson et al., 2009). Practice wisdom was heavily relied upon, according to study participants, and there was a strong desire to make personal connections to practical and real-life experiences rather than to use empirical findings. Experience and opinions of colleagues or peers were strong factors in educational decision-making.

Local research and local data were used when possible, and a variety of sources including newspapers, media reports, constituent feedback, and personal experiences were used interchangeably (Nelson et al., 2009). While there exists a connection between research and educational decision-making, the strongest theme that emerged was that research must be viewed in relation to the local context. "Evidence never directly informs decisions directly but influences working knowledge which may shape decision making" (Honig & Coburn, 2008, p. 592).

A 2013 study by Asen et al. identified six specific types of evidence used at local school board meetings, including research, experience, testimony, data, example, and law/policy. Of the types identified, example was the most frequently used type of evidence, and research was used relatively infrequently at board meetings, compared to other types of evidence (Asen et al., 2013). In fact, a 1982 study by Weiss suggested that even when policymakers use research in

decision-making, it often percolates through their prior knowledge, judgments, firsthand experiences, and outside sources.

The Value of Research in Decision-Making

The significance of research is sometimes simply its *status as research* (Asen et al., 2013, emphasis in original). Credibility may be gained by citing research because is suggests the authority and nonpartisanship of the speaker who has "reflected on an issue, sought out additional information, and developed relevant competencies" (Asen et al., 2013, p. 43).

Asen et al. (2013) separated categories of research references into general or specific. A reference is the way in which the speaker uses the research, either giving a general statement regarding "research" (such as "research supports the use of . . . ") or stating specific information about published research such as the population, sample, study conclusions, or research design. The distinguishing feature between general and specific research references is vagueness. Both categories of references serve persuasive functions, depending on the audience; however, specific references typically have more explanatory power in illuminating an issue. The value of having that kind of support can be immeasurable in establishing both a speaker's knowledgeability and credibility.

Barriers to the Use of Evidence-Based Research

Policymakers often believe "there is a gulf between research design and real-world practice, and that research findings have limited applicability to their local contexts" (Nelson et al., 2009, p. 19). MacColl and White (1998) suggest that among the barriers between research and practice are accessibility, readability, and technical issues. Peer-reviewed research is not easy to attain without access to expensive academic journals or university connections; and when it is found, the readability of the findings is complicated, the findings are usually hidden in

conclusions, and the technical terminology is not easy to understand for non-educators. There are also limitations with reporting what does not work as opposed to simply what works within a study. Finally, there are often technical weaknesses including design constraints, lack of findings, lack of guidance for improving practices, and policy statements disguised as objective research.

According to Oliver, Innvar, Lorenc, Woodman, and Thomas (2014), there are five frequently reported barriers to using evidence-based research including availability, reliability, timing, accessibility, and costs. The meta-analysis by Oliver et al. (2014) included studies from a variety of disciplines such as education, healthcare, and criminal justice ($N = 145$), and revealed availability as the number one barrier to using evidence-based research. Depending on the target audience, researchers may need to disseminate their work beyond exclusive publication in peer-reviewed journals in order to reach policymakers. Even if researchers make their work more accessible to the public and policymakers, however, it must be clear and concise in order to be understood by laymen. Policymakers find researchers' language nuanced, filled with jargon, and delivered in ways that are not user-friendly (Oliver et al., 2014).

The relevance or reliability of research findings is another frequently reported barrier to the use of research. Criticisms of research resonate from studies on research itself (Nelson et al., 2009). Those studies have found that research 1) is complex and contradictory and seldom provides clear direction or implications for action; 2) is neither easily accessible nor timely; and 3) is subject to advocacy, politics, and marketing bias (p. 24). Research itself creates obstacles to cooperation between researchers and policymakers, and cultural differences increase problems between the communities. "A growing body of work reveals the mistrust practitioners and local policymakers have of research evidence purveyors" (Tseng & Nutley, 2014, p. 168).

Facilitators to the Use of Evidence-Based Research

The effective communication of findings to policymakers facilitates the use of research. Presenting research in brief summaries with links to complete reports; using plain, non-technical language and minimal statistics; weaving in examples to help users relate findings to their experiences; providing guidance for practical decision-making; and disseminating the findings through a variety formats facilitates the use of research (Nelson et al., 2009). MacColl and White (1998) also recommend using plain language, presenting key concepts at the beginning, and making research more available to the general public by mass consumption, such as the Internet.

Likewise, Oliver et al. (2014) revealed facilitators to the use of evidence-based research including availability/improved dissemination, collaboration, reliability of findings, relationships with policymakers, and relationships with researchers. "Contact, collaboration, and relationships are major facilitators of evidence use, reported in over two-thirds of all studies" (Oliver et al., 2014, para. 23).

A recurring theme facilitating the use of research was relationships, with a few studies examining specifically how to enhance the use of evidence-based research and how to improve the relationships among policymakers, practitioners, (Nelson et al., 2009; Tseng, 2012; Tseng & Nutley, 2014). Establishing a network of trusted research individuals including local practitioners, state professionals, and external partners may accomplish the goal of improving the use of research. Intermediaries, individuals or organizations that transfer information between and among producers and consumers, can serve as a link between the research and decision-making worlds. Many policymakers turn to their existing networks of academics or affiliations with education organizations to access research and new ideas (Goertz et al., 2013).

Ways to Use Research

Research must be sorted, sifted, and interpreted before being put into practice (Tseng, 2012). After it is processed, research consumers determine various ways of using the results. According to Nutley, Walter, and Davies (as cited in Tseng, 2012), there are many ways of using research, including instrumental, political, conceptual, and imposed.

The instrumental use of research involves the direct influence of the research on a policy or practice decision. When a decision-maker has a question or issue and uses research to address the question or issue in a linear and direct way, it is an instrumental use of research. Unfortunately, "it is true that cases of immediate and direct influence of research findings on specific policy decisions are not frequent" (Weiss, 1982, p. 620).

A second use of research is political. This commonly discussed use involves using research as justification for a position that has already been staked. In many cases, policymakers have already decided whether to support certain reform efforts or oppose certain legislation. Research then is used simply to validate what has already been determined. The political use of research is sometimes referred to as tactical or symbolic use. Advocates of evidence-based research often bemoan the use of politics in policy and look more favorably on the instrumental use of research. Yet rather than viewing politics as a nuisance to be set aside, one consideration is for researchers themselves to work with policymakers to use politics advantageously to further policy agendas grounded in research findings (Tseng, 2012).

The conceptual use of research influences how policymakers think about issues, problems, or potential solutions. Thinking differently is not the same as acting differently, but according to Weiss (1982) shifts in policy require thinking, processing, and then acting. Disentangling research from policymakers' "whole configuration of knowledge" is challenging,

as they tend to not catalog it separately; therefore it affects what they think and do (Weiss, 1982, p. 623).

Imposed use of research may refer to any initiative (e.g., federal or state government, foundation, etc.) that ties funding to the adoption of programs that require evaluation through evidence-based research. Federal officials, for example, sometimes "expect research to justify at least some of their claims – that large numbers of people are in need of their services, that programs do some good, and that constituents like the attention and want services to continue" (Weiss, 1982, p. 631). Most funding agencies use research findings to buttress justification for reauthorization.

Consumers of Evidence-Based Research

The plea to increase the relevance of educational research is widespread but challenging: relevant to whom and for what? There are not clearly defined criteria by which to measure relevance (Tseng & Nutley, 2014). Education research has many stakeholders. The long list of research-users includes policymakers, teachers, administrators, other practitioners, volunteer organizations, community, professional associations, parents, general public, and the researchers. "We need a clear focus on key research users and the functions research serves for their work" (Tseng & Nutley, 2014, p. 163).

The Role of Intermediaries

A critical group of research consumers is intermediaries. "Because research does not speak for itself, policymakers and practitioners must always interpret its meaning and implications for their particular problems and circumstances" (Tseng, 2012, p. 1). When confronted with challenging issues, policymakers often rely on trusted intermediaries who act as

bridges between researchers and policymakers, and these intermediaries can play a significant role in shaping policy.

In 2009, Nelson et al. did not originally focus on intermediaries in their study on how research is used in decision-making; however, "focus groups and interviews suggest that intermediaries are central to the research utilization process" (Nelson et al., 2009, p. 46). Intermediaries transfer information between producers and consumers. Some examples of types of intermediaries in the field of education include professional or membership organizations, universities, individual researchers, nonprofit and for-profit organizations, foundations and government agencies, trusted individuals, and advocacy groups.

Professional or membership organizations "exert a powerful influence on policymaking and practice by shaping the beliefs and assumptions of their members" (Nelson et al., 2009, p. 47). Organizations dominate the education periodical market, producing material for their members on topics of interest. Another powerful role of professional or membership organizations is their connection to government. They play an important role in determining which policy ideas gain ground, which reform efforts fail, and how money gets appropriated. State and local agencies lacking the capacity to draw on research frequently rely on professional associations (Tseng, 2012).

Another influential group of intermediaries is advocacy organizations. Because they focus on topics of special interest, they often view as their role the dissemination of research findings and promotion of their issues through lobbying and the media. The credibility of these groups comes into question since a certain position is being advocated. Nonprofit organizations are more often considered more unbiased and frequently serve on task forces or testify at congressional hearings.

"Getting the research 'right' and communicating it clearly can only get us part-way down the road to research use" (Tseng, 2012). Interpretation and translation are both key components in the effective use of evidence-based research, but those must come together for decision-making to take place. Several overall strategies for improving the functions of intermediaries have been suggested, including converting research into simplified, user-friendly reports; increasing accessibility through a variety of online mechanisms; helping manage the overwhelming amount of information; strengthening the capacity to anticipate emerging issues; building capacity for states, districts, and schools to do their own data collection, analysis, interpretation, and research; and helping to reframe policy issues to better use available research (Nelson et al., 2009, p. 48).

Suggestions for improving the functions of intermediaries are similar to facilitating the use of research. The needs of policymakers interviewed by Nelson et al. (2009) were clearly spoken in several ways: minimize the overwhelming amount of material; provide short, brief reports; and afford easier access to the research. In addition to access to research, a recurring theme is relationships.

Policymakers often have a small group of trusted individuals with whom they establish a relationship of trust for decision-making in the research process – acquiring, interpreting, and applying (Nelson et al., 2009, p. 49). Decision-makers go to their trusted individuals to learn about the research quickly in order to get foundational information on the topic. The next stage is interpreting research, which means understanding enough to make a decision. Policymakers may rely heavily on an intermediary's knowledge of the topic if he is unfamiliar with it himself. Finally comes the application stage of research. When it is time to be on one side or the other of a particular policy, a policymaker uses information from trusted individuals if he has not gained

enough knowledge himself. Even in legislatures, the "quintessential locus" of decision-making, legislators rely on committee staffs to assist in processing, interpreting, and making decisions (Weiss, 1982).

The Local Board of Education

Local board members face challenges unique unto themselves as policymakers. They are residents within their own communities, therefore serving as citizens and policymakers simultaneously. Second, while they may have relationships with intermediaries, they do not have access to staffs, interns, or agencies such as state or federal policymakers. Finally, the rigid structure of school board meetings shapes decision-making framework.

Sometimes policymakers themselves introduce issues to the public and serve in multiple capacities. The local school board member is often an employee within the community, a parent in the district, and a part-time politician without the fringe benefits.

> Unlike federal and state policy makers, who relocate to national or state capitals when legislatures are in session, school board members make policy in their communities. Moreover, without a professional staff to rely on, they must 'discover' the concerns of their constituents as they decide district policy. School board members thus serve as 'citizen-policy makers.' (Asen et al., 2013, p. 37)

The structure of local school board meetings shapes the context of decision-making. The formality of the meetings determine who talks, what topics can be addressed, what input can be given, and for how long people may speak. "School board perceptions of the community as audience – importantly, whether the board perceives the audience as cooperative or adversarial – may influence the use of research evidence" (Asen et al, 2013, p. 51).

To counter the challenges facing local boards of education, and in an effort to support student achievement, the West Virginia School Board Association (WVSBA) Executive Board developed Standards for High-Functioning County Boards. "These standards will set forth guiding principles for increasing local governance effectiveness based on evidence-based research and will enhance the public's understanding of the responsibilities of local boards of education" (WVSBA, 2012, p.1). The Standards are also used as a basis for the seven hours of training that is an annual requirement for county board members. According to the WVSBA, the five Standards for High-functioning County Boards are focused around service to students, and they include leadership and advocacy, relationships, accountability, quality improvement, and board operations.

Summary

"Research is not the next silver bullet for education . . . research helps us understand problems and think about potential solutions" (Tseng & Nutley, 2014, p. 173). Moving forward will involve critical reflection of what research itself says about the role of researchers relative to policymakers in the decision-making process. Research can have a ripple effect on policymaking (Weiss, 1982). Researchers who want to influence policy may need to further analyze the practices of local school policymakers and their perceptions of the usefulness of evidence-based research in the decision-making process.

This literature review establishes a framework for a study, inspired by the work of Nelson et al. (2009) and Treadway (2015), which will investigate the role that evidence-based research plays in the policymaking process in county school districts in West Virginia. A thorough review of the published literature found an abundance of information on the production, evaluation, distribution, and application of research in fields including healthcare, public

policymaking, and criminology. There was also a wealth of information regarding research and policymaking in the field of public PK-12 education. Local board of education members, however, have been overlooked in many studies, despite the obvious role they play in the decision-making process of the local education agency. This study addresses those oversights.

CHAPTER THREE

RESEARCH METHODS

This non-experimental, descriptive study focused on the elected members of boards of education in the 55 counties in the state of West Virginia ($N = 275$). A survey was designed to collect multiple-choice and Likert-type responses from participants at the 2016 West Virginia School Board Association Fall Conference. The data was analyzed via SPSS version 23 to provide descriptive and comparative results from survey responses. Open-ended questions from the survey were analyzed following the steps outlined by Creswell (2003), including organizing and preparing the data, exploring and coding the data, and developing descriptions and themes. The development of descriptions and themes may have included ordinary, unexpected, or layered or connected themes.

Research Questions

1. What sources of information are used by local board of education policymakers in the decision-making process?
2. To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?
3. What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?
4. What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?
5. What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?

6. What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?
7. What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?
8. Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

Population and Sample

The population in this study included all members of the district boards of education of the 55 counties in the state of West Virginia. The population sample was limited to 2016 West Virginia School Board Association Fall Conference participants. Because of the small population size, all participants of the 2016 WVSBA Fall Conference were invited to participate in the survey, in an attempt to ensure that sufficient data were obtained for analysis.

Instrumentation

The primary survey instrument was designed to determine the extent to which local board of education members in West Virginia rely upon evidence-based research when making major policy decisions, as well as their perceptions regarding the credibility and usefulness of such evidence, perceived facilitators and barriers to the use of evidence, and the role of intermediaries. The researcher-created survey instrument was adapted from a survey created by Treadway (2015) and used with higher education policymakers in West Virginia.

The first section of the survey included a list of potential information sources for participants to review. They were asked to indicate all of the information sources consulted when making school-board-related decisions. Participants were then asked to rate each information source, using a Likert-type scale, based upon the following criteria: 1) the extent to

which each source is consulted when making major policy decisions in general; 2) the extent to which each source was used during the respondent's last major decision, and 3) the respondent's perception of the credibility and usefulness of each information source. Respondents were asked to review the list of information sources and select the single source that played the most significant role in their major policy decisions.

Respondents were asked to rate the extent to which they agree or disagree with several statements and sources regarding evidence-based research, the purpose of which was to identify potential barriers and facilitators to using evidence-based research. The last section of the survey was designed to obtain demographic data from the survey participants in order to determine the role, if any, of selected demographics in the decision-making process among local board of education policymakers.

A field test of the survey instrument, using a small sample of policymakers and practitioners (e.g., district or state level administrators, principals, and university professors), was conducted to ensure the survey used with the larger population allowed the research questions to be answered and that the questions were phrased without bias or confusion. The survey instrument was administered at the 2016 WVSBA Fall Conference. The survey took approximately 10 to 15 minutes to complete. Great care was taken, both in the design of the survey instrument and in the collection and analysis of results, to maintain the anonymity of respondents to the extent possible.

Data Analysis

Data from the survey were entered into and analyzed using the current version of SPSS to produce descriptive and comparative statistics from survey responses. A subsequent analysis of

responses from open-ended survey questions followed the steps outlined by Creswell (2003), including organizing and preparing the data, exploring and coding the data, and developing descriptions and themes. The development of descriptions and themes may have included ordinary, unexpected, or layered or connected themes.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Data for this research study were collected using a researcher-created, paper survey. The instrument (Appendix C) was designed to address the following research questions regarding the perceptions of local-level, PK-12 policymakers regarding the sources of information they use in the decision-making process; whether and how evidence-based research is relied upon; whether evidence-based research is considered credible and usable; and what barriers, facilitators, and demographic data may play roles in the decision to use evidence-based research in the decision-making process:

1. What sources of information are used by local board of education policymakers in the decision-making process?
2. To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?
3. What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?
4. What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?
5. What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?
6. What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?
7. What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?

8. Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

This study was primarily quantitative in nature, therefore a majority of the findings discussed in this chapter relate to descriptive and comparative analyses of quantitative survey data. The qualitative component of this study was intentionally limited in scope and designed to elicit policymakers' insights related to specific research questions. Relevant qualitative findings are discussed along with quantitative findings within the context of specific research questions in the sections that follow. A list of verbatim open-ended responses appears in Appendix D.

Population and Sample

The population in this research study included all members of the county boards of education of the 55 counties in the state of West Virginia ($N = 275$) and the sample was limited to participants at the 2016 West Virginia School Board Association (WVSBA) Fall Conference ($n = 204$). All attendees of the 2016 WVSBA Fall Conference were invited to participate in the survey in an attempt to ensure that sufficient data were obtained for analysis. A total of 158 usable surveys were collected. It is relevant to note that of the 46 registered conference participants who did not complete the survey, many may not have been present during the session at which the survey was distributed and collected. Therefore, the return rate of 77% is a low valuation.

Conference attendees were asked to complete a researcher-created, paper survey containing 15 multiple-choice, Likert-type, and open-ended response questions, and time was provided for completion of the survey during the WVSBA Fall Conference. The data in Table 1 represent a composition of the sample population. The sample consisted of 91 males, 57

females, and 10 individuals who chose not to identify their sex. Thirty-nine percent of survey respondents were currently serving in their first term as a board of education member.

Table 1

Survey Population

Primary Role	*N*	Percent
Board of Education member	136	86%
Superintendent	15	9%
Other*	7	4%
Level of Education	***N***	**Percent**
High school diploma	9	6%
Some college	14	9%
Associate degree	9	6%
Bachelor degree	19	12%
Some graduate education	11	7%
Graduate degree	87	55%
Prefer not to answer	9	6%
Age	***N***	**Percent**
25 or younger	2	1%
26-35	7	4%
36-45	18	11%
46-55	33	21%
56-65	45	28%
66-75	34	22%
76 or older	9	6%
Prefer not to answer	10	6%

*Totals from three survey categories (Board Office-personnel, Other [Please specify.], and participants who did not answer the question) were grouped together for the purpose of this analysis.

Findings

RQ1: What sources of information are used by local board of education policymakers in the decision-making process?

The initial research question sought to discover the sources of information most consulted and least consulted by local board of education policymakers in the decision-making process. Survey participants were asked to review a list of 12 information sources and choose all consulted when making school-board-related decisions. The sources of information were listed in no particular order and there was an open-ended response option for participants to specify a source not otherwise listed, if so desired.

The data cited in Table 2 reveal the frequency of information sources consulted. Frequency refers explicitly to the number of participants who consult the information source when making school-board-related decisions. Participants were asked to indicate as many sources as used when answering this question; therefore, frequency does not indicate the number of occurrences one source was considered above all others in the list.

Table 2

Sources of Information Consulted (in general)

Source of Information	Frequency*
Superintendent	134
School-based personnel	103
Personal experience	97
Board Office personnel	91
Professional experience	86
Members of the general public	78
Members of professional organizations	59
Intuition or instinct	46
Professional journals	25
Printed popular media	22
Social media	13
Broadcast media	13

*Frequency refers to the number of occurrences each information source was selected by respondents. Survey directions indicated to choose as many as applied.

According to the data in Table 2, the most frequently consulted source was the superintendent, while other personnel, both school-based and board office, emerged within the top four sources of information consulted. Personal experience was the third most frequently consulted source of information when making school-board-related decisions in general. The data in Table 2 reveal that the least consulted sources of information included social media (e.g., Facebook, Twitter, etc.) and broadcast media (e.g., television, radio), which received equally low numbers of consultations by participants. Printed popular media (e.g., newspapers, magazines, websites, etc.) and professional journals, which included a research journal among the examples provided, were also among the least frequently consulted sources by participants.

Respondents were asked to think about the last major school-board-related decision made and to use a one-to-four Likert-type scale to determine the extent to which each item in a list of

information sources was relied upon. The same 12 information sources were listed with "one" indicating that the participant did not use the source at all and "four" indicating that the participant heavily used the information source when thinking back to the last major school-board-related decision made. There was also an option for participants to specify a source not otherwise listed, as well as to indicate via a one-to-four scale the extent to which the open-response source was relied upon.

Table 3 represents the degree to which respondents relied on each of the sources of information when thinking back to the last major school-board-related decision made. The superintendent was most heavily relied upon, which was consistent with the source cited by respondents as most frequently used when making school-board-related decisions in general. Personal experience was similarly relied upon, being within the top three sources of information used heavily among respondents. Percentage values were based upon the number of respondents who rated each information source with a score of four indicating "used heavily."

Table 3

Most Heavily Relied Upon Sources of Information (last major school-board-related decision)

Source of Information	Percent of "4" Used heavily
Superintendent	61%
Professional experience	34%
Personal experience	32%
School-based personnel	28%

The data in Table 4 indicate the least relied upon sources of information for the last major school-board-related decision made by participants. These same four information sources

were both the least relied upon and the least frequently consulted by local board of education members, according to survey results.

Table 4

Least Heavily Relied Upon Sources of Information (last major school-board-related decision)

Source of Information	Percent of "1" Did not use
Social media	72%
Broadcast media	69%
Professional journals	60%
Printed popular media	60%

Finally, participants were provided the same list of 12 information sources as identified in Table 2 and asked to choose the single most influential source when making a major school-board-related policy decision. "Superintendent" was the number one source chosen among respondents, which proves consistent with the responses given regarding both the most frequently consulted sources as well as the most heavily used sources. Sixty-one percent of respondents indicated the superintendent as the single most influential source relative to decision-making. Not surprisingly, "school-based personnel" was the source chosen as the single most influential one by 19% of respondents; however, the third most influential source when faced with a major school-board-related decision was members of the general public. Of the survey respondents, 11% chose members of the general public as the single most influential source of influence.

RQ2: To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?

The purpose of the second research question was to explore the role that evidence-based research plays in the policymaking process, specifically by local board of education members. Survey respondents were asked to rate, using a one-to-four Likert-type scale, their reliance on information obtained from professional journals. The question was posed to respondents regarding both the decision-making process in general and more specifically the last major school-board-related decision made, and respondents reported in both instances that they relied very little on professional journals in the decision-making process.

The data in Table 5 indicate the extent to which survey respondents used evidence-based research, in the form of professional journals, in the decision-making process. Only 2% of respondents reported heavy use of professional journals.

Table 5

Reliance on Evidence-Based Research in the Decision-Making Process

Professional Journals	Percent
1 Did not use	60%
2	24%
3	13%
4 Used heavily	2%

While there was little use of evidence-based research reported by survey respondents, a correlational analysis uncovered a strong positive relationship between number of terms served as board of education member and use of evidence-based research in the form of professional journals. Policymakers with an increased number of terms of service were somewhat more likely to rely on evidence-based research in the decision-making process. These data are arrayed in Table 6.

Table 6

Bivariate Correlation Between Number of Terms Served as County Board Member and Reliance on Evidence-Based Research

	Reliance on Evidence-Based Research	Number of Terms Served as County Board Member
Reliance on Evidence-Based Research	--	.343**
Number of Terms Served as County Board Member	.343**	--

**Correlation is significant at the $p < 0.01$ level (two-tailed).

RQ3: What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?

The third research question related to the perceived credibility of evidence-based research. Credibility was defined for the purposes of this study as the extent to which information sources were considered by survey respondents to be believable, generally accepted as true, or honest. Respondents were asked to rate, using a one-to-four Likert-type scale, each of 12 information sources with regard to credibility. A rating of "one" was considered not at all credible and a rating of "four" was considered very credible. Evidence-based research, in the form of professional journals, was considered very credible by 10% of respondents and not at all credible by 13% of local-level, PK-12 West Virginia policymakers surveyed.

According to the data displayed in Table 7, respondents identified the most credible source of information as the superintendent, followed by professional experience. The third most credible source of information, according to survey respondents, was school-based personnel. Interestingly, the four most credible information sources were the same as the most heavily

relied upon information sources in the decision-making process when making major school-board-related decisions, according to respondents' answers to survey questions.

Table 7

Information Sources Identified as Most Credible

Source of Information	Percent of "4" Very credible
Superintendent	68%
Professional experience	45%
School-based personnel	40%
Personal experience	38%

On the basis of the data displayed in Table 8, the least credible sources of information identified by survey respondents included social media, broadcast media, printed popular media, and intuition or instinct. The three types of media listed among the sources of information were both consulted less frequently and used less heavily when making school-board-related decisions than the other sources, in addition to being identified as less credible.

Table 8

Information Sources Identified as Least Credible

Source of Information	Percent of "1" Not at all credible
Social media	71%
Broadcast media	39%
Printed popular media	23%
Intuition or instinct	14%

Further analysis of survey data revealed a strong positive relationship between the educational attainment of policymakers and the perception of professional experience as a credible information source. As Table 9 displays, the data demonstrate that policymakers in this sample with higher educational levels were more likely to consider professional experience a credible source in the decision-making process.

Table 9

Bivariate Correlation Between the Policymakers' Level of Education and their Perceptions of the Credibility of Professional Experience

	Highest Degree Earned	Perceptions of Credibility of Professional Experience
Highest Degree Earned	--	.411**
Perceptions of Credibility of Professional Experience	.411**	--

**Correlation is significant at the 0.01 level (two-tailed).

RQ4: What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?

The fourth research question related to the overall usefulness of evidence-based research. Respondents were asked to rate, using a one-to-four Likert-type scale, each of 12 information sources with regard to usefulness. A rating of "one" was considered not at all useful and a rating of "four" was considered very useful. Evidence-based research, in the form of professional journals, was reported as very useful by 15% of survey respondents while it was considered not

at all useful by 13% of respondents. The data displayed in Table 10 identify the information sources reported as most useful by respondents.

Respondents identified the superintendent as the most useful source of information, with 73% of survey respondents considering the superintendent "very useful." In addition, school-based personnel and board office personnel were among the top four useful information sources. Professional experience was the other information source considered most useful among survey respondents. Three of the top four of the same information sources were considered most useful, most credible (RQ3), and used most heavily (RQ1) when making school-board-related decisions.

Table 10

Information Sources Identified as Most Useful

Source of Information	Percent of "4" Very useful
Superintendent	73%
School-based personnel	49%
Professional experience	46%
Board office personnel	41%

On the basis of the data displayed in Table 11, the least useful sources of information identified by survey respondents included social media, broadcast media, printed popular media, and professional journals. The three types of media were also considered least credible (RQ3) and used less heavily (RQ1) when making school-board-related decisions than other information sources.

Table 11

Information Sources Identified as Least Useful

Source of Information	Percent of "1" Not at all useful
Social media	64%
Broadcast media	40%
Printed popular media	29%
Professional journals	13%

Although professional journals were identified among the least useful information sources, a strong positive relationship was observed between the reliance on and perceived usefulness of evidence-based research, as displayed in Table 12. In general, policymakers who relied more heavily on professional journals, including peer-reviewed academic journals, also considered them a more useful information source than survey participants who relied less on the source.

Table 12

Bivariate Correlation Between the Policymakers' Reliance on Evidence-Based Research and their Perceptions of Usefulness of Evidence-Based Research

	Reliance on Evidence-Based Research	Perceptions of Usefulness of Evidence-Based Research
Reliance on Evidence-Based Research	--	.878**
Perceptions of Usefulness of Evidence-Based Research	.878**	--

**Correlation is significant at the $p < 0.01$ level (two-tailed).

RQ5: What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?

The fifth research question addressed the issue of facilitators or factors with the potential to either encourage or enable the use of evidence-based research in the decision-making process. Respondents were asked to consider the level to which they agreed or disagreed, based on a one-to-four Likert-type scale, with a series of statements. Using a scale of "one" meaning the participant strongly disagreed and "four" meaning the participant strongly agreed, the respondents' perceptions were elicited for eight statements regarding factors that facilitate the use of evidence-based research. These data are provided in Table 13.

Table 13

Facilitators of the Use of Evidence-Based Research

	Percent of "4" Strongly Agree
I feel the use of evidence-based research is vital to decision-making.	52%
Technology makes it easier to access evidence-based research findings.	39%
I am comfortable reading and interpreting statistical data presented in research reports.	36%
Better decisions are made by using evidence-based research.	36%

The most strongly agreed with statement by respondents was "I feel the use of evidence-based research is vital to decision-making." More than half of the respondents indicated they strongly agreed with the statement; however, peer-reviewed journals, a widely accepted source for dissemination of evidence-based research, were among the least consulted information sources by respondents.

Technology was a strongly agreed upon facilitator of evidence-based research among survey participants, with 39% indicating that technology improves access to research findings. Another factor facilitating the use of evidence-based research in the decision-making process was respondents' comfort-level in reading and interpreting data and statistics. Thirty-six percent of respondents reported being comfortable with reading and interpreting evidence-based research results, such as data and statistics. Likewise, 36% of respondents reported a strong agreement with the statement regarding better decisions being made by using evidence-based research.

A strong positive relationship was observed between facilitators in the use of and reliance on evidence-based research, as displayed in Table 14. In general, policymakers who responded that evidence-based research is vital to decision-making were more likely to rely on evidence-based research in the decision-making process.

Table 14

Bivariate Correlation Between the Policymakers' Reliance on Evidence-Based Research and Facilitators to the Use of Evidence-Based Research

	Reliance on Evidence-Based Research	Perceptions of Evidence-Based Research as Vital to decision-making
Reliance on Evidence-Based Research	--	.737**
Perceptions of Evidence-Based Research as Vital to Decision-Making	.737**	--

**Correlation is significant at the $p < 0.01$ level (two-tailed).

RQ6: What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?

The sixth research question addressed the issue of barriers or circumstances, facts, or influences that interfere with or inhibit the use of evidence-based research in the policymaking process. Respondents were asked to review a list of seven statements and rate the extent to which they agreed or disagreed with each of the statements, based on a one-to-four Likert-type scale. Table 15 displays respondents' identification of barriers to the use of evidence-based research.

Table 15

Barriers to the Use of Evidence-Based Research

	Percent of "4" Strongly Agree
Research reports are often too lengthy.	35%
It is hard to find time to read research reports.	17%
The volume of research available to me is overwhelming.	11%
Research reports are presented in an unreadable format.	11%
Knowing where to look for evidence-based research online is confusing.	11%

The most significant barrier to the use of evidence-based research, as perceived by respondents, pertained to the lengthiness of research reports. Thirty-five percent of respondents strongly agreed with the statement "[r]esearch reports are often too lengthy." Another 45% of respondents agreed with the statement, while only 3% strongly disagreed that research reports are too lengthy. The second-most significant barrier to using evidence-based research is time. Of policymakers surveyed, 73% either agreed or strongly agreed that it is difficult to find time to read research reports.

A strong positive relationship exists between the barriers to the use of evidence-based research and perceived lengthiness of research reports, as is displayed in Table 16.

Table 16

Bivariate Correlation Between the Policymakers' Reliance on Evidence-Based Research and Barriers to the Use of Evidence-Based Research

	Reliance on Evidence-Based Research	Perceptions of Report Length
Reliance on Evidence-Based Research	--	.792**
Perceptions of Report Length	.792**	--

**Correlation is significant at the $p < 0.01$ level (two-tailed).

RQ7: What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?

The seventh research question sought to examine the role of intermediaries in the decision-making process. Intermediaries are individuals or organizations that transfer information between and among producers and consumers. Examples of types of intermediaries in the field of education include professional or membership organizations, universities or individual researchers, nonprofit and for-profit organizations or government agencies, and trusted individuals. The survey instrument listed 12 information sources consulted when making school-board-related decisions, and perceived intermediaries was extrapolated from the list to determine the role, if any, of intermediaries. The data in Table 17 indicate the potential role of intermediaries in the decision-making process.

According to the examples, intermediaries are often professional or membership organizations, an information source listed on the survey instrument. Additionally, trusted individuals are considered intermediaries and the sources – including superintendent, board

office personnel, and school-based personnel – fall into the category of trusted individuals. The categories including universities or individual researchers and nonprofit and for-profit organizations or government agencies were not included in the survey; however, of the nine open-ended responses collected from surveys, four listed an individual, organization, or agency, which could be considered an intermediary. A list of verbatim open-ended responses appears in Appendix D.

Table 17

The Role of Intermediaries

Source Consulted	Ranking out of 12
Superintendent	1
School-based Personnel	2
Board Office Personnel	4
Members of Prof Organizations	7

RQ8: Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

The final research question examined demographic factors, and survey respondents were asked to answer seven questions related to demographics in order to both provide depth to the analysis and to provide information on how researchers may tailor research reports to better meet the needs of consumers. Basic questions included primary role, highest level of education, county size, population density, age, sex, and number of terms served of board of education.

A modest relationship presented itself between the number of terms a board member has served and the perceived credibility of the superintendent, illustrated in Table 18. Policymakers

who had served an increased number of terms were somewhat more likely to view the superintendent as a credible source of information.

Table 18

Bivariate Correlation Between Number of Terms Served as County Board Member and Perception of Superintendent as an Information Source

	Number of Terms Served as County Board Member	Perceived Credibility of Superintendent
Number of Terms Served as County Board Member	--	.178*
Perceived Credibility of Superintendent	.178*	--

*Correlation is significant at the $p < 0.05$ level (two-tailed).

Further analysis of the demographic data also uncovered a positive relationship between the number(s) of terms of board members and their reliance on printed media during the last major school-board-related decision made. The higher the number of terms served by a board member, the more likely her reliance on printed popular media, such as newspapers, magazines, and websites. These data are arrayed in Table 19.

Table 19

Bivariate Correlation Between Number of Terms Served as County Board Member and Reliance on Printed Popular Media

	Number of Terms Served as County Board Member	Reliance on Printed Popular Media
Number of Terms Served as County Board Member	--	.183*
Reliance on Printed Popular Media	.183*	--

*Correlation is significant at the $p < 0.05$ level (two-tailed).

Summary

The purpose of this study was to explore the role that evidence-based research plays in the decision-making process by local board of education members in West Virginia. Using data obtained through a researcher-created questionnaire administered to and collected from attendees during the 2016 West Virginia School Board Association Fall Conference, the study revealed notable findings. These findings, along with conclusions, implications, and recommendations, will be discussed in the following chapter.

CHAPTER FIVE

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

A review of relevant literature suggests a lack of substantial use of evidence-based research by educational policymakers (Asen et al., 2013; Honig & Coburn, 2008; Nelson et al., 2009; Tseng & Nutley, 2014). Increasing the effective implementation of evidence-based research in schools could play a critical role in improving the quality of public education; moreover, researchers need to understand how their work can better help to shape decision-making among policymakers to ultimately encourage the development of better-informed educational policy.

Purpose

The purpose of this non-experimental, descriptive study was to examine the extent to which evidence-based research influences the decision-making processes as perceived by local board of education policymakers in West Virginia. An analysis was conducted on the perceptions of local-level, PK-12 policymakers regarding the sources of information they use in the decision-making process; whether and how evidence-based research is relied upon; whether evidence-based research is considered credible and usable; and what barriers, facilitators, and demographic data may play roles in the decision to use evidence-based research in the decision-making process. The following research questions were addressed:

1. What sources of information are used by local board of education policymakers in the decision-making process?
2. To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?

3. What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?
4. What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?
5. What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?
6. What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?
7. What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?
8. Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

Population and Sample

The population for this research study was designed to include all members of the county boards of education of the 55 counties in the state of West Virginia ($N = 275$). The sample, however, was limited to participants of the 2016 West Virginia School Board Association (WVSBA) Fall Conference ($n = 204$, for a survey return rate of 77%). All attendees at the 2016 WVSBA Fall Conference were invited to participate in the survey, in an attempt to ensure that sufficient data were obtained for analysis.

Methods

A researcher-developed, paper survey (Appendix C) was used to collect multiple choice, Likert-type, and open-ended responses from all attendees of the 2016 West Virginia School Board Association Fall Conference. The data were entered into and analyzed via SPSS Statistics

23 to provide descriptive and comparative results from survey responses. Results from the open-ended questions were examined through an emergent-category analysis to further elicit respondents' insights regarding the research questions. All findings are summarized in the sections that follow.

Summary of Findings

RQ1: What sources of information are used by local board of education policymakers in the decision-making process?

Local-level board of education members' most frequently consulted information sources included the superintendent, school-based personnel, board office personnel, and personal experience when making school-board-related decisions. The single most frequently consulted source was the superintendent, with 61% of respondents reporting the superintendent as a heavily used source of information when making major school-board-related decisions and 51% of respondents indicating the superintendent as the single most influential source relative to decision-making. Interestingly, even members of the general public were cited more frequently as trusted sources of information than professional journals, a form of evidence-based research, indicating a preference for direct, perhaps even face-to-face communication with local others in seeking information. Survey respondents consulted least frequently and relied least heavily on social media, broadcast media, printed popular media, and professional journals.

RQ2: To what extent, if any, do local board of education policymakers rely upon evidence-based research in the decision-making process?

Evidence-based research, in the form of professional journals, was neither heavily used nor frequently consulted in the decision-making process by local-level, PK-12 board of education members in West Virginia, which should be a matter of concern for researchers. Peer-

reviewed academic journals are widely accepted in higher education as the gold standard for the dissemination of credible research and are the primary outlets for academic researchers, whose work must be published in such journals to meet promotion and tenure expectations. With only 2% of survey respondents indicating they heavily used professional journals and an alarming 60% responding that they did not use them at all in decision-making, researchers may have to rethink how to best share their findings with these local-level, PK-12 policymakers. Along the same lines, professional journals were among the least frequently consulted information sources listed, with 13% of respondents indicating they found professional journals "not at all useful" when making school-board-related decisions.

RQ3: What perceptions do local board of education policymakers have related to the overall credibility of evidence-based research?

Credibility was defined for the purposes of this study as the extent to which information sources were considered by survey respondents to be believable, generally accepted as true, or honest. Evidence-based research, in the form of professional journals, was considered very credible by only 10% and not at all credible by 13% of those surveyed. The single most credible information source was the superintendent, with 68% reporting the source as very credible. Professional and personal experience and school-based personnel also emerged among the most credible sources reported by survey respondents, again suggesting (as was the case with responses to RQ1) that they have a preference for relying on their own experience and the experience of those whom they know and with whom they work most closely. The least credible information sources included social media, broadcast media, and printed popular media.

RQ4: What perceptions do local board of education policymakers have related to the overall usefulness of evidence-based research?

The overall usefulness (defined for the purpose of this study as the quality of having practical worth or applicability in the decision-making process) of evidence-based research was measured by respondents' perceptions of the utility of 12 information sources. Evidence-based research, in the form of professional journals, was reported to be very useful by 15% of survey respondents, but was again – consistent with the findings on credibility – considered not at all useful by 13% of respondents. Although more than a third of respondents reported being comfortable reading and interpreting data and statistics, it is apparent that their comfort level does not elevate evidence-based research to the top of the most-useful-information-sources list. Of the 12 information sources, the single most useful – as was the case with the most heavily consulted source of information and the most credible source – was the superintendent. Seventy-three percent of local-level policymakers reported the superintendent to be very useful as a source. Among the other most useful sources were school-based and board office personnel and professional experience.

RQ5: What factors facilitate the use of evidence-based research by local board of education policymakers in the decision-making process?

Technology was considered a moderate facilitator of evidence-based research among survey participants, with 39% indicating that technology improves access to research findings. Another factor facilitating the use of evidence-based research in the decision-making process was respondents' comfort-level in reading and interpreting data and statistics, with 36% reported being comfortable doing so. Likewise, 36% of respondents reported a strong agreement with a statement that better decisions can be made by using evidence-based research. Regardless of the fact that survey respondents reported a measurable level of comfort reading and interpreting data and statistics and adequate access to research findings through technology, however, evidence-

based research was nonetheless reportedly used very little in decision-making. Additionally, even though only one in ten respondents reported being more likely to trust research by someone they know, policymakers repeatedly cited consulting and relying on those whom they know and with whom they work closely, primarily the superintendent. This implies that researchers may have to reconsider how to best distribute their findings via those who seem to have the most credibility with local-level policymakers.

RQ6: What factors serve as barriers to the use of evidence-based research by local board of education policymakers in the decision-making process?

The most significant barrier to using evidence-based research, as perceived by survey respondents, pertained to the lengthiness of reports. Eight of ten respondents (80%) agreed or strongly agreed that research reports are too lengthy, and 73% agreed or strongly agreed that it is difficult to find time to read research reports. Considerations including the volume of research available, the unreadable format of research reports, and knowing where to look for research were also perceived as barriers, although not to same the degree as lengthiness and time. With hurdles including time constraints and perceived lengthiness of reports deterring policymakers from reading research, researchers may want to consider including executive summaries in their documents or reducing findings to a list rather than a narrative format in order to encourage these policymakers to consider their work.

RQ7: What role, if any, do intermediaries play in the decision-making process of local board of education policymakers?

Intermediaries are individuals or organizations that transfer information between and among producers and consumers. Examples of types of intermediaries in the field of education include professional or membership organizations, universities or individual researchers, nonprofit and for-profit organizations or government agencies, and trusted individuals (e.g. superintendent, school-based personnel, board office personnel, members of professional organizations, etc.). Intermediaries, extrapolated from the list of 12 sources of information on the survey, appeared among the most frequently consulted sources. The superintendent, considered a trusted individual who transfers information between and among research producers and board members, was the most frequently consulted source of information, in addition to being the most credible, most useful, and most heavily relied upon source of information when making school-board-related decisions. Other trusted individuals considered intermediaries (i.e., school-based personnel, board office personnel, and members of professional organizations) ranked second, fourth, and seventh most frequently consulted respectively. Clearly, as has been demonstrated above as well, policymakers prefer to ask others whom they trust for decision-making guidance; and while they would rather rely on intermediaries, when left to decipher evidence-based research on their own, the preferred format is a short, informative summary.

RQ8: Are there demographic factors that affect local board of education policymakers' use of evidence-based research?

The survey respondents consisted of 91 males, 57 females, and 10 individuals who chose not to identify their sex. Thirty-nine percent of survey respondents were currently serving in their first term as county board of education members. A sizeable number of respondents had obtained college degrees, with 55% indicating they had graduate degrees. Only two of the demographic variables were found to interact with any of the research questions, one of them a positive relationship between the number of terms served as a board member and perceived credibility of the superintendent. The second was a modest positive relationship between number of terms served as a board member and reliance on printed popular media. An increase in perceived credibility of the superintendent on the part of experienced board members is a logical development. A natural reaction for veteran policymakers, who themselves are elected public servants, would likely be to appreciate the counsel of the overseer of a school system.

Implications

"In a high-stakes world of 24-hour news cycles, a contentious political climate, rising costs, shrinking budgets, and increased competition for available resources, modern policymakers are faced with tremendous pressure to make timely, mindful, and well-informed decisions" (Treadway, 2015, p. 94). To the extent that credible, evidence-based research has (or should have) a role to play in the crafting of "well-informed decisions," understanding how policymakers use such research is vital – not only to the researchers who produce it, but to the entire education enterprise. Both students and the broader society deserve institutions that rely on the best available information to make decisions, and this study sought to elicit the perceptions of

PK-12 policymakers in West Virginia on the use of evidence-based research in their decision-making.

This particular group of policymakers has been overlooked in many studies, despite the obvious role they play in determining the various dimensions of an education system for millions of students. Researchers need to better understand what sources of information policymakers use in that work and to what extent evidence-based research can serve to strengthen both the supply and demand of research and practice (Tseng, 2012).

Catalyzed by Treadway's findings (2015) on the use of evidence-based research in higher education and particularly by the findings of Nelson et al. (2009) in a small study of PK-12 policymakers, this study is largely confirmatory; that is, the results were much the same. All three studies found that while policymakers report that they think evidence-based research important, they nonetheless use it less than other types of information. If we are, as Treadway (2015) suggests, to build connections between information producers (researchers) and information consumers (policymakers), heeding what practicing policymakers have told us through these three studies is important.

The following recommendations may be beneficial to individual researchers, universities, professional organizations, and other producers of information designed to inform education policymaking.

- Consumers, in this case local PK-12 policymakers representing West Virginia's 55 county boards of education, consider research reports too lengthy. Despite respondents' indicating a high level of comfort reading and interpreting statistical data, there was a consistent a lack of use of evidence-based research compared to other information

sources. Researchers need to consider preparing shorter, informative summaries in order to meet the needs of policymakers.

- Over 50% of respondents indicated they strongly agreed that evidence-based research is vital to decision-making; however, professional journals, a widely accepted source for disseminating evidence-based research, were among the least consulted information sources by respondents. In fact, only 2% of respondents indicated they heavily used professional journals when making school-board-related decisions. If journals are rarely consulted, researchers may need to consider alternative means of disseminating their work publicly (e.g., through newspaper articles, open seminars that are not held only on campuses, speaking in public forums such as board of education meetings or legislative committee meetings, etc.) in order to reach policymakers.
- Intermediaries, in the form of trusted individuals, were among the most frequently consulted, most heavily relied upon, and found to be among the most credible and most useful information sources by survey respondents. That being the case, research must get into the hands of these intermediaries, preferably in the form of brief, non-ambiguous summaries, so the work of researchers can be passed along to policymakers and used to guide decisions.
- The superintendent emerged as the most frequently relied upon information source, with respondents reporting they consult the superintendent five times more frequently than evidence-based resources when making school-board-related decisions. Research intended for PK-12, local-level policymakers, thus, must be presented to superintendents.

Recommendations for Future Research

This research study focused on the role of evidence-based research in the decision-making process among county board of education members in West Virginia. Findings from an extensive review of literature on the topic and an analysis of survey data revealed a number of opportunities for future research. These include the following.

1. This study was limited to local-level, PK-12 board of education policymakers in the state of West Virginia. Local board members are required to attend and complete a course of orientation before taking office. Board members in West Virginia must also obtain seven hours of annual training relating to boardsmanship, governance effectiveness, and school performance issues. Future research may involve replicating the study in a state with different demographics and organizational structures for PK-12 administration.
2. The superintendent emerged as the most frequently relied upon information source, with respondents reporting they consult the superintendent five times more frequently than other sources of evidence-based research when making school-board-related decisions. It may be beneficial for future study to explore superintendents' level of training in and experience with both the production and consumption of evidence-based research, their comfort levels with research design and analytical practices, the choices they make when deciding what information to share with board of education members, the formats they prefer, etc.
3. While survey respondents indicated evidence-based research as both vital to decision-making and directly related to better decisions, very little reliance on evidence-based research compared to other information sources emerged from data. It may be

beneficial to further study the reasons for this through a thorough qualitative examination of West Virginia policymakers' understandings of the term "evidence" to determine whether their interpretations conform to those discerned by Nelson et al. (2009).

4. The data from this study were limited to those collected from the researcher-created survey. Responses regarding barriers to the use of evidence-based research did not provide significant findings. Low percentages of respondents *strongly* agreed with statements from the survey, thereby suggesting the possibility of barriers being overlooked. Further research could involve a focus group of randomly selected registrants from a future WVSBA Fall Conference in an effort to further explore authentic barriers to the use of evidence-based research.

5. Finally, and perhaps most interesting, only 35% of the survey respondents agreed or strongly agreed that evidence-based research is required for the kinds of decisions they make. Studies by Treadway (2015) and Nelson et al. (2009) involving policymakers from a variety of educational institutions and levels likewise found none who reported relying heavily on evidence-based research in decision-making. A future the study on the role of evidence-based research specific to the kinds of decisions made by a sample population of state-level policymakers might prove beneficial, in an effort to assist researchers with a more widespread dissemination of their work.

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APPENDICES

Appendix A: Institutional Review Board Approval

Office of Research Integrity
Institutional Review Board
One John Marshall Drive
Huntington, WV 25755

FWA 00002704

IRB1 #00002205
IRB2 #00003206

September 9, 2016

Barbara Nicholson, PhD, MA, BA
Leadership Studies, MUGC

RE: IRBNet ID# 955476-1
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Nicholson:

Protocol Title:	[955476-1] The Role of Evidence-Based Research in the Decision-Making Process As Perceived by Local Board of Education Policymakers in West Virginia
Expiration Date:	September 9, 2017
Site Location:	MUGC
Submission Type:	New Project APPROVED
Review Type:	Exempt Review

In accordance with 45CFR46.101(b)(2), the above study and informed consent were granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Designee for the period of 12 months. The approval will expire September 9, 2017. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for student Elizabeth A. Hoylman.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, ThD, CIP at 304-696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

Appendix B: Consent to Participate in Study

Marshall University IRB	
Approved on:	9/9/16
Expires on:	9/9/17
Study number:	955476

The Role of Evidence-Based Research in the Decision-Making Process as Perceived by Local Board of Education Members in West Virginia

Thank you for your willingness to participate in this research study. We understand that your time is valuable, and we are most appreciative that you have agreed to contribute to this project.

Voluntary Consent to Participate in this Research Study

You are invited to participate in a research project called "The Role of Evidence-Based Research in the Decision-Making Process" designed to analyze the sources of information used by policymakers and to determine how researchers can make their work more useful to them. The participation of knowledgeable and experienced professionals like you is critical to the success of this effort.

This survey is comprised of 15 multiple-choice questions and should take approximately 10 minutes to complete. You may return your responses by depositing the completed survey in one of the drop-boxes located at the exits. Your replies will be anonymous, so do not enter your name or identifying information anywhere on the survey. Results will be reported only in aggregate form. There will be no reporting of individual responses. There are no known risks involved with this study. Participation is voluntary and there will be no penalty or loss of benefits if you choose not to participate.

Completing the survey indicates your consent for use of answers you supply. If you have any questions about the study you may contact Dr. Barbara Nicholson at (304) 746-2094 or bnicholson@marshall.edu or Ms. Hoylman at (304) 542-8522 or bethhoylman1@gmail.com. If you have any questions concerning your rights as a research participant, you may contact the MU Office of Research Integrity at (304) 696-4303. By completing this survey, you are confirming that you are 18 years of age or older and have consented to participate in the survey. You may keep this page for your records if you wish.

Appendix C: Survey Instrument

The Role of Evidence-Based Research in the Decision-Making Process

Evidence-Based Research: For purposes of this survey, "evidence-based research" is defined, consistent with the definition in the Education Sciences Reform Act of 2002, as research that 1) uses rigorous, systematic, and explicitly stated methods to obtain reliable and valid knowledge relevant to education activities, programs or practices; 2) presents findings and/or makes claims that are supported by the methods that have been utilized; and 3) is accepted by and published in a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

1. Which of the following sources do you consult when making school-board-related decisions? Please choose all that apply.

☐ Members of the general public
☐ Superintendent
☐ Board Office personnel
☐ School-based personnel (principals, teachers, custodians, etc.)
☐ Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)
☐ Professional organization journals (*American School Board Journal*, *Educational Leadership*, *American Educator*, *Education Week,* etc.)
☐ Printed popular media (newspapers, magazines, websites, etc.)
☐ Social media (Facebook, Twitter, etc.)
☐ Broadcast media (television, radio)
☐ Intuition or instinct
☐ Personal experience
☐ Professional experience
☐ Other (Please specify.) _____

2. Thinking about the last major school-board-related decision you made, to what extent did you rely on each of the following sources of information?

Use a scale of 1 to 4, with 1 meaning "I did not use this source at all," and 4 meaning "I heavily used this source."	1 Did not use.	2	3	4 Used heavily.
Members of the general public	☐	☐	☐	☐
Superintendent	☐	☐	☐	☐
Board Office personnel	☐	☐	☐	☐
School-based personnel (principals, teachers, custodians, etc.)	☐	☐	☐	☐
Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	☐	☐	☐	☐
Professional organization journals (*American School Board Journal*, *Educational Leadership*, *American Educator*, *Education Week,* etc.)	☐	☐	☐	☐
Printed popular media (newspapers, magazines, websites, etc.)	☐	☐	☐	☐
Social media (Facebook, Twitter, etc.)	☐	☐	☐	☐

Broadcast media (television, radio)	☐	☐	☐	☐
Intuition or instinct	☐	☐	☐	☐
Personal experience	☐	☐	☐	☐
Professional experience	☐	☐	☐	☐
Other (Please specify.) _____	☐	☐	☐	☐

3. How would you rate the credibility of each of the following information sources? For this survey, "credibility" is defined as believable, generally accepted as true, or honest.

Use a scale of 1 to 4, with 1 meaning "not at all credible," and 4 meaning "very credible."	1 Not at all credible	2	3	4 Very credible
Members of the general public	☐	☐	☐	☐
Superintendent	☐	☐	☐	☐
Board Office personnel	☐	☐	☐	☐
School-based personnel (principals, teachers, custodians, etc.)	☐	☐	☐	☐
Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	☐	☐	☐	☐
Professional organization journals (*American School Board Journal*, *Educational Leadership*, *American Educator*, *Education Week,* etc.)	☐	☐	☐	☐
Printed popular media (newspapers, magazines, websites, etc.)	☐	☐	☐	☐
Social media (Facebook, Twitter, etc.)	☐	☐	☐	☐
Broadcast media (television, radio)	☐	☐	☐	☐
Intuition or instinct	☐	☐	☐	☐
Personal experience	☐	☐	☐	☐
Professional experience	☐	☐	☐	☐
Other (Please specify.) _____	☐	☐	☐	☐

4. How would you rate the usefulness of information obtained from each of the following sources?

Use a scale of 1 to 4, with 1 meaning "not at all useful," and 4 meaning "very useful."	1 Not at all useful	2	3	4 Very useful
Members of the general public	☐	☐	☐	☐
Superintendent	☐	☐	☐	☐
Board Office personnel	☐	☐	☐	☐
School-based personnel (principals, teachers, custodians, etc.)	☐	☐	☐	☐
Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	☐	☐	☐	☐
Professional organization journals (*American School Board Journal*, *Educational Leadership*, *American Educator*, *Education Week,* etc.)	☐	☐	☐	☐
Printed popular media (newspapers, magazines, websites, etc.)	☐	☐	☐	☐

Social media (Facebook, Twitter, etc.)	☐	☐	☐	☐
Broadcast media (television, radio)	☐	☐	☐	☐
Intuition or instinct	☐	☐	☐	☐
Personal experience	☐	☐	☐	☐
Professional experience	☐	☐	☐	☐
Other (Please specify.) _____	☐	☐	☐	☐

5. Which of the following sources has the most influence when you are faced with a major school-board-related policy decision?

☐ Members of the general public
☐ Superintendent
☐ Board Office personnel
☐ School-based personnel (principals, teachers, custodians, etc.)
☐ Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)
☐ Professional organization journals (*American School Board Journal*, *Educational Leadership*, *American Educator*, *Education Week,* etc.)
☐ Printed popular media (newspapers, magazines, websites, etc.)
☐ Social media (Facebook, Twitter, etc.)
☐ Broadcast media (television or radio)
☐ Intuition or instinct
☐ Personal experience
☐ Professional experience
☐ Other (Please specify.) _____

6. How often do the Superintendent, other Board Office personnel, or school-based personnel share evidence-based research with board members?

	1	2	3	4
Use a scale of 1 to 4, with 1 meaning "rarely" and 4 meaning "very often."	Rarely			Very often
	☐	☐	☐	☐

7. How often do you agree or disagree with each of the following statements?

Use a scale of 1 to 4, with 1 meaning "strongly disagree" and 4 meaning "strongly agree."	1 Strongly Disagree	2	3	4 Strongly Agree
I feel the use of evidence-based research is vital to decision-making.	☐	☐	☐	☐
I'm comfortable reading and interpreting data and statistics.	☐	☐	☐	☐
I have ample time to read through research-based studies.	☐	☐	☐	☐
Technology makes it easier to access evidence-based research findings.	☐	☐	☐	☐
I rely more on local research than research from a national study.	☐	☐	☐	☐
I rely more on intuition and experience than on research.	☐	☐	☐	☐
I am more likely to trust research developed by someone I know.	☐	☐	☐	☐

Better decisions are made by using evidence-based research.	☐	☐	☐	☐

8. How strongly do you agree or disagree with each of the following statements?

Use a scale of 1 to 4, with 1 meaning "strongly disagree" and 4 meaning "strongly agree."	1 Strongly Disagree	2	3	4 Strongly Agree
Research-based reports are often too lengthy.	☐	☐	☐	☐
Research reports are presented in an unreadable format.	☐	☐	☐	☐
It is hard to find time to read research reports.	☐	☐	☐	☐
It is difficult to interpret the data and statistics in most evidence-based research studies.	☐	☐	☐	☐
The volume of research available to me is overwhelming.	☐	☐	☐	☐
Knowing where to look for evidence-based research online is confusing.	☐	☐	☐	☐
The kinds of decisions I make rarely require the use of evidence-based research.	☐	☐	☐	☐

Finally, please tell us about yourself. These questions are optional, but your responses will help us tailor research reports to better meet your needs.

9. Which best describes your primary role within your county?
☐ Board of Education member
☐ Superintendent
☐ Board Office-personnel
☐ Other (Please specify.) _____

10. Which best describes your county?
☐ Small (fewer than 2,500 students)
☐ Medium (2,500 to 5,000 students)
☐ Large (more than 5,000 students)

11. Which best describes your county?
☐ Mostly urban
☐ Mostly suburban
☐ Mostly rural

12. What is the number of terms you have served as a county board of education (BOE) member in WV, including this current term?

☐ First term – newly elected to BOE

☐ 2 – 4 terms
☐ 5 – 7 terms
☐ 8 – 10 terms
☐ 11 or more terms
☐ I am not currently a BOE member.

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13. What is your highest level of education?
☐ High school diploma
☐ Some college
☐ Associate degree
☐ Bachelor degree
☐ Some graduate education
☐ Graduate degree
☐ Prefer not to answer

14. What is your age?
☐ 25 or younger
☐ 26-35
☐ 36-45
☐ 46-55
☐ 56-65
☐ 66-75
☐ 76 or older
☐ Prefer not to answer

15. What is your sex?
☐ Male
☐ Female
☐ Prefer not to answer

Thank you again for your participation. We are hopeful that the results of this survey can help college and university researchers provide more useful information to you.

Appendix D: Open-ended Responses to Survey Questions

1. Which of the following sources do you consult when making school-board-related decisions?
    - WV Law Book
    - State Law
    - Public policy, Board policy, case law
    - School board members
    - County board member
    - BOE
    - Elected officials, parents, voters
    - Prayer
    - Research to specific topic
2. Thinking about the last major school-board-related decision you made, to what extent did you rely on each of the following sources of information?
    - WV Law Book (4)
    - Policy (3)
    - Policy, procedure (4)
    - Research/State Law (4)
    - Other BOE Members (4)
    - Opinion comment statements (*Note: no scale of use indicated*)
    - Christ, Church, Holy Spirit (4)
    - My education (3)
    - Have not been a member long enough to do this. (1)

3. How would you rate the credibility of each of the following information sources?
    - WV Law Book (4)
    - Legal procedure, case law, policy (4)
    - Church (4)
    - Elected officials (4)
4. How would you rate the usefulness of information obtained from each of the following sources?
    - Christ, Church (4)
    - Board members (3)
    - Elected officials (4)
    - Case law, grievances, policy (3)
5. Which of the following sources has the most influence when you are faced with a major school-board-related policy decision?
    - WV Law Book
    - Research/State Law
    - Current research or data
    - Board members
    - Other BOE members
    - Christ
    - Education level
    - Have not been a member long enough to do this.
6. Which best describes your primary role within your county?
    - CEO

- Retired teacher/counselor of 36 years *(Note: Board of Education Member was also indicated as response.)*

Other comments written on surveys:

"Please widely distribute the results of this survey to all stakeholders. Thanks."

Appendix E: Curriculum Vitae

Elizabeth A. Hoylman

Education

Marshall University Graduate College
Doctor of Education
Educational Leadership – Public School Administration
May 2017

Marshall University Graduate College
Principal/Administration Post Graduate Certificate
August 2008

Marshall University Graduate College
Reading Specialist
August 2000

University of Charleston
Elementary Education K-8 Multi-subject
December 1997

Related Employment

Kanawha County Schools
January 1998-Present

Elementary School Principal	2009-Present
Kindergarten Teacher	1998-1999, 2008-2009
Reading Interventionist Teacher	1999-2008

Research Studies, Leadership Experiences, and Post-Graduate Projects

Southeast Regional Council on Education Administration
Presentation: Success in an Unlikely Place
Co-Presented with Dr. Barbara Nicholson, Professor, Marshall University
October 2014

Independent Research Study with Dr. Barbara Nicholson & Dr. Michael Cunningham
McKinley Elementary: A Case Study
Spring 2014

Southeast Regional Council on Education Administration
Presentation: Investing in Teachers, Investing in the Future
Co-Presented with Dr. Thomas Hisiro, Professor, Marshall University
October 2013

Marshall University, Graduate Assistant Co-Teacher
LS 600: School Personnel Administration
Fall 2013

Kanawha County Schools Leadership Academy for Aspiring Administrators
Staff Member & Assistant Director
2012-Present

Service & Honors

KCAESP, Kanawha County Association of Elementary School Principals, President 2014-2015
NAESP, National Association of Elementary School Principals, Member 2009-Present
Alpha Delta Kappa, Altruistic Education Organization, Member 2006-Present
Sallie Mae First Class Teacher Award, West Virginia Award Recipient, 1998