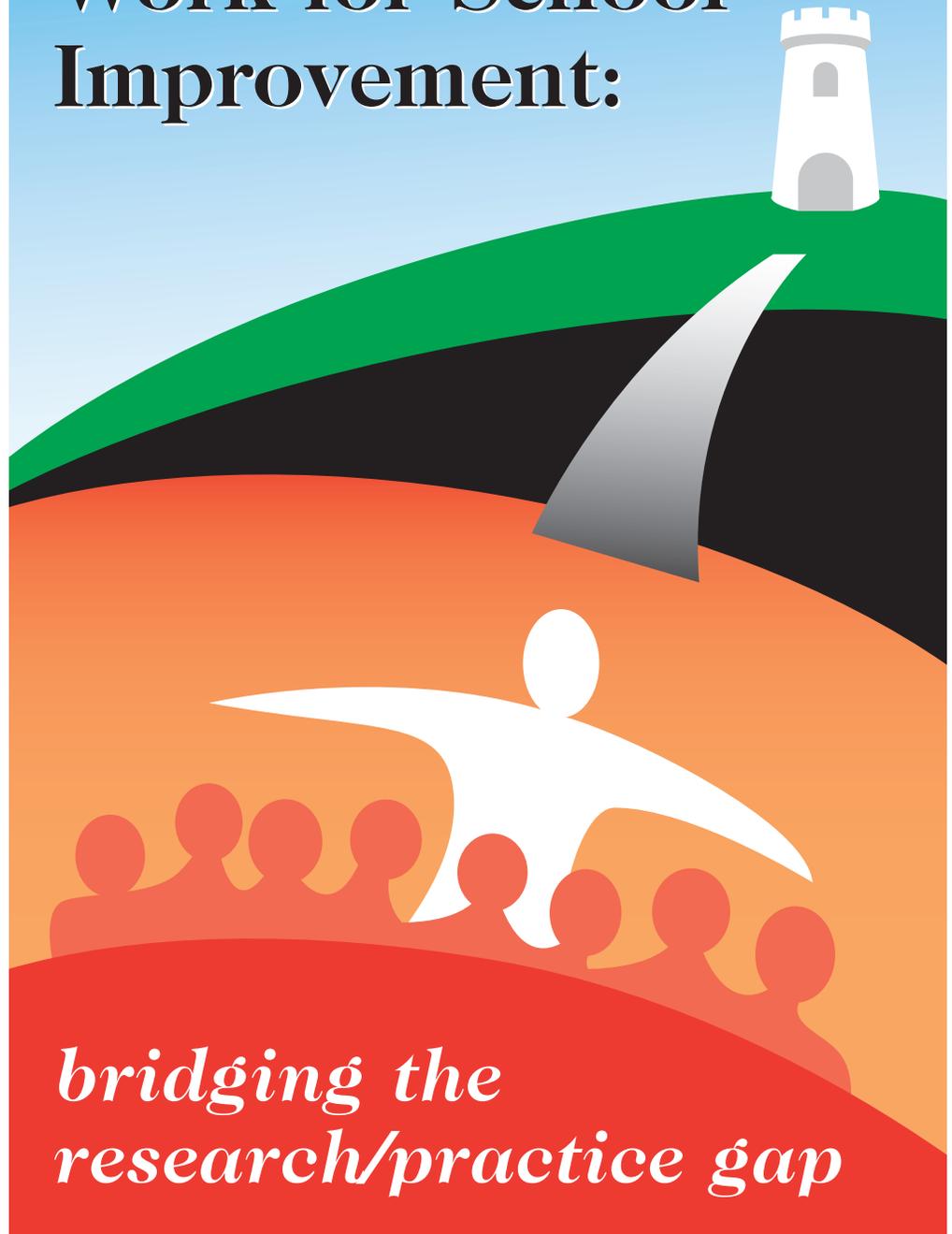


Making Research Work for School Improvement:



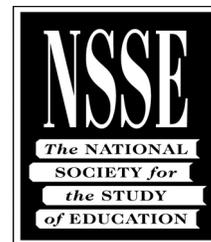
*bridging the
research/practice gap*

Report of a Working Forum

OCTOBER 8-9, 2004 • UNIVERSITY OF ILLINOIS AT CHICAGO

**Making Research Work for School
Improvement:
Bridging the Research-Practice Gap**

**Proceedings of a Working Forum Sponsored by the
National Society for the Study of Education**



**Chicago, Illinois
October 2004**

On October 8 and 9, 2004, a diverse group of educational stakeholders from the greater Chicagoland area gathered at the invitation of the National Society for the Study of Education (NSSE) to examine the research-practice relationship and how this relationship might be strengthened through discussion and collaborative activity. The letter to invitees stated:

Especially in the context of No Child Left Behind and other continuing calls for “scientifically-based” research and greater accountability, it becomes critical for diverse educational stakeholders—administrators, civic and business interests, researchers, funders, and especially practitioners—to come together to address the obstacles to closer and more useful linkages between what we *know* about teaching and learning and what we *do* in classrooms.

This report documents the issues, ideas, and recommendations generated by forum participants. It is not exhaustive of problems and perspectives concerning the relationship between research and practice. Rather, it reflects the contributions of those in attendance. It is meant to serve as a record of the occasion and a springboard for further discussion.

This forum occurred at a time when NSSE was beginning to explore different avenues for promoting stronger and more effective relationships among research, policy, and practice locally—in and around Chicago—and nationally (see www.nsse-chicago.org for information about these activities). The Society began to co-sponsor a series of regional public town hall meetings on the No Child Left Behind Act with the National Academy of Education, an association of U.S. and international scholars, and Kappa Delta Pi, a national education honors society. It increased presentations and discussions of its recent yearbooks at national and regional conferences of educational practitioner and educational research organizations. And it began to explore the possibilities of establishing a Chicago Education Forum that would provide ongoing opportunities for discourse, study, and debate among researchers, educators, policymakers, and members of the public on crucial issues in education and how to better think about and address these issues. The October 2004 forum was a test case, focusing on an area that, arguably, affects most if not all educational concerns—the research-practice relationship.

As this report indicates, the October forum forecast the contributions that such a series might make. It provided a sense of possibility, in that leaders of practice, policy, and research, along with representatives of business and civic organizations, foundations, and parents, can convene with a common purpose—the study and discussion of consequential education-related issues—and leave with new and perhaps more productive ways to think about and address these issues.

This report is divided into seven sections according to the general organization of the forum. The first section describes the purposes, participants, and activities of the forum. The second through sixth sections present the contributions of forum participants across the forum’s activities. The seventh section offers some concluding remarks. A list of forum participants is contained in an appendix to this report.

The report was compiled by Debra Miretzky, NSSE Program Director, and Mark A. Smylie, NSSE Secretary-Treasurer. NSSE gratefully acknowledges the ongoing support it received from the College of Education at the University of Illinois at Chicago, and in particular the support of the Dean, Dr. Victoria Chou. This support has been invaluable in all aspects of the Society's work.

I. Purposes, Participants, and Summary of Activities

Purposes

Even though the Chicago metropolitan area is home to the country's third largest public school system; numerous schools, colleges, and departments of education; philanthropic organizations with special interest in supporting educational research and educational improvement; educational reform and policy groups; and site-based school councils that provide parents and community members unprecedented opportunities to participate in the governance of local schools, Chicago does not have any established public forum for the discussion and debate of issues, dilemmas, and conflicts in educational policy and practice. Such public discussion in the Chicago area is an ad hoc affair, often organized in the context of a pressing educational crisis or around the release of a report by a local education research organization or the announcement of a particular policy initiative. There are few systematic efforts to bring together members of the research community with members of the educational practice community, the education policy community, and the public in joint discourse on the general problems of educating children and youth.

The October 2004 working forum was developed on the premise that without established avenues for discussion and debate, educational research, policy, and practice will remain disconnected, leading to practice that is less effective than it might be, research that is less useful than it could be, and policymaking that is less well informed than it ought to be.

We believe that it is important to bring together those educators who "live with" an identified problem as classroom teachers and administrators and the researchers who study educational problems with those who are in a position to listen and respond, whether through policymaking at the state or system level or through support of relevant initiatives. Convening these groups is a means to an end: the establishment of bridges among stakeholders that will inform and broaden problem definition and provide new understandings and recommendations and strategies for confronting critical educational problems through policy change, new practices, the realignment of support, and other change efforts.

This first forum, *Studying Educational Issues: Bridging the Research-Practice Gap*, centered on the research-practice gap in the classroom. Studies, anecdotal evidence, and our forum participants suggest that teachers have a belief system that can be resistant to thinking differently about their practice and that they may discount much educational research as unhelpful or inaccessible, as well. However, researchers can contribute to the disconnection when they do not pay sufficient attention to the needs of the schools and

the teachers they study, disregard school norms, speak and write in “researcher language,” or minimize input from teachers.

Examining these obstacles and others is critical for change in support of school improvement and student success. Examining these obstacles collectively, rather than in segmented groups, should lead to more comprehensive understandings and more effective interventions. In particular, teacher participation in any conversation about “what works and what doesn’t” lends credibility and validity to whatever conclusions and recommendations might be offered, which is why teachers’ participation was and will continue to be essential at forums.

It is worth noting that a significant portion of the discussions over the two days of the forum focused on literal researcher-teacher collaborations, given the makeup of those attending. This forum benefited from having so many teachers-as-researchers contributing. Consequently, many of the reflections offered throughout these proceedings resonated, as well, during discussions of the separate endeavors of teacher implementation of research or research design.

Participants

Following from these objectives, the forum brought together an array of participants representing different groups of actors who work across the research-practice relationship and who have different experiences with and perspectives on that relationship. They included:

- Teachers and school-level and central office administrators from the Chicago Public Schools and neighboring school districts.
- University-based teachers and researchers.
- Members of the Chicago philanthropic community.
- Representatives of intermediary organizations that support educational improvement through advocacy, professional support, and civic involvement.

In all, forty-two persons participated in the forum. Their names and contact information for each are contained in the appendix to this report.

Summary of Activities

The forum began in the afternoon of Friday, October 8, with an introductory “fishbowl” discussion of experiences and issues concerning the research-practice relationship. The fishbowl was moderated by Andy Hargreaves, the Thomas More Brennan Chair in Education in the Lynch School of Education at Boston College. Participants in the fishbowl represented different actors in the research-practice relationship:

- Renée Clift, professor, University of Illinois Champaign-Urbana
- Laura Cooper, assistant superintendent, Evanston Township High School
- Tamara Gathright, research associate, Center for Urban School Improvement, University of Chicago

- Don Moore, executive director, Designs for Change
- Saungktakhu Richey, high school teacher and principal intern, Chicago Public Schools
- Mark Rigdon, senior program officer, Chicago Community Trust
- Yolanda Rodríguez Pacheco, elementary school teacher, Chicago Public Schools

Following the fishbowl discussion and dinner, Hargreaves delivered a keynote speech, *Understanding What Teaching Is: Evidence-Based Practice*. In his comments, Hargreaves outlined seven aspects of teaching that he believed should be considered if the relationship between research and practice is to be improved. Both the fishbowl discussion and Hargreaves' talk provided a framework for the next day's presentations and discussions.

The forum resumed Saturday morning, October 9, with a presentation by Debra Miretzky (NSSE) and Steve Tozer (University of Illinois at Chicago) on the history of the research-practice relationship in education as seen through 100 years of NSSE yearbooks. This was followed by a discussion and presentations of current research-practice initiatives that illustrate different research-practice relationships. These initiatives included:

- Middle Grades Science Program, University of Illinois at Chicago.
- The Academic and Social Support Initiative, Center for Urban School Improvement, University of Chicago.
- The KEYS Project, Consortium for Educational Change.
- The Minority Achievement Network, Tripod Project, and AVID, Evanston Township High School.
- Teacher action research, University of Illinois at Chicago and Chicago Public School teachers.
- Chicago Public Schools Math and Science Initiative.

After a lunch break, participants were organized into "cross-role" working groups. The groups were asked to consider what they had heard, discussed, and learned about during the forum and to come to consensus around three to five issues they believed were most important to address to develop and sustain productive relationships between research and practice. Groups were also asked to make recommendations for how to address these issues. The following questions were used to guide group work:

- What can researchers do differently if they want their research to have a greater effect on practice?
- What can teachers and administrators do differently if they want to incorporate good research into their practice?
- How can intermediary organizations support optimal research-practice connections?
- What should policymakers be aware of in making decisions that effect teaching and learning?

I. From the Fishbowl

The fishbowl discussion highlighted a number of issues concerning the relationship between research and practice in education. These issues included (a) the purposes and goals of research; (b) the relevance and usefulness of research; (c) the processes of research; (d) relational issues between researchers and practicing educators; and (e) logistical issues in how researchers and practitioners interact. They are summarized below under two broad themes.

The “What,” “Why,” and “How” of Research

Fishbowl participants observed that there can be substantial differences between researchers and educators in terms of how each sees the goals and processes of research. How each perceives the “what’s,” “why’s,” and “how’s” of research, and whether these perspectives can be aligned, has a great deal to do with whether the connections forged between researchers and practitioners can be truly productive or are merely tolerated.

Goals. What researchers hope to accomplish and what is important to teachers can be very different. According to audience member Steve Tozer (professor, University of Illinois at Chicago), “Research does not always respond to real problems.” Certainly part of the equation in the research-practice relationship is how practitioners and researchers think about the *goals* and *purposes* of research itself. Fishbowl participants posed a number of potentially relevant questions. Is research designed primarily to contribute to the academic literature, as many university reward systems emphasize? Does research provide “definite answers” as to how to handle problems of practice, as some teachers might hope, or does it provide knowledge and understanding to inform and guide professional decision making? Are the findings of research applicable to understanding and solving problems that are shared and seen as important to educators, or is their value primarily in suggesting “future directions for further research”? Who decides the goals and processes of research? Who is meant to benefit, and who actually benefits most? According to the participants, it is difficult to foster mutual interest and investment in the research process if the goals of research appear irrelevant or unimportant to half the “team”—whether researchers or educators—or if the process is likely to serve the interests of one group but not the other. The motivation behind a specific research project was seen by a number of participants as an important factor in defining the research-practice relationship.

According to Renée Clift (UIUC), a fishbowl participant and a university-based researcher who works closely with teachers, a large part of the disconnection between research and practice is the lack of shared goals. She argued that research-practice relationships might be improved substantially if both researchers and practitioners transcended specific self-interests and focused on developing knowledge and practices that promoted teaching and learning and shared goals for students. In other words, the relationship might be focused more productively around questions such as “How do we help kids get better at ‘blank’? The ‘blank’ is what the kid needs. How do we help the kid get better at it?” Other fishbowl participants agreed that if promoting student learning

was the shared objective, rather than more specialized parochial interests, the research and practitioner communities might be likely to collaborate more effectively and generate more broadly useful understandings. As Clift put it, researchers and practitioners have little incentive to “struggle together” when teachers are unsure that the resulting knowledge will be helpful in a practical way. Mark Rigdon (Chicago Community Trust) observed that a critical issue was the lack of incentives for researchers to conduct such “practical” research. He did not see the “how to’s” of teaching and schooling as valued objects of inquiry for many researchers, and added that researchers don’t have much incentive to provide findings that might actually be helpful to practitioners. Indeed, certain incentives may actually discourage this type of research. He observed that “service”—working directly with schools—tends to be less important than “research” in university tenure decisions. Indeed, for faculty not yet tenured, putting a substantial amount of time into direct service activities may take time away from the production of research. At the same time, failing to be “in the field” may prevent researchers from identifying and examining problems that may be of particular interest and relevance to practitioners, or seeing the importance of doing so.

The research process. The ways in which research is designed and conducted may also shape research-practice relationships. Some teachers in the fishbowl noted that they felt that researchers entered schools with an already-defined agenda, leaving teachers little sense of influence over or investment in the work. If not prepared well, or if they do not see value in the inquiry, teachers may be uncomfortable and reticent to participate in research projects, especially if the project involves observing teachers in their classrooms or in other settings, noted Mike Rassel (assistant principal, Hamline Elementary School). Tamara Gathright (Center for Urban School Improvement) observed that, in her experience, researchers looked to understand naturally occurring events and tried *not* to influence practice or student outcomes (e.g., student achievement), while teachers often wanted the work to promote particular outcomes. Some audience members noted that some researchers get what they need to conduct their studies and leave, often without giving anything back to the school or without sufficient attention to the influence or impact their presence may have had on the school and on individual study participants.

A few fishbowl participants saw differences among teachers and researchers in the perceived value of different approaches to and methods of research. Moreover, some participants suggested that these differences had implications for research-practice relationships in that they devalue evidence that might be important and useful. For instance, Don Moore (Designs for Change) suggested that teachers’ reflections about their own practice and about their students’ work may not be seen by teachers or researchers to be as valuable as more traditional forms of research (e.g., survey research), despite the potential worthiness of both. He argued that many teachers in Chicago have become used to the types of quantitative methods that many of the more visible research projects in the Chicago Public Schools incorporate, and consequently may minimize the value of “nontraditional” methods. Further, he contended that while it may be more time consuming, reflective teacher research may provide an important—but overlooked and undervalued—source of data that can contribute to effective schools and school improvement. These comments pointed to the broader issue of differences in what counts

as evidence to researchers and to teachers, and to the implications of this disagreement for efforts to build stronger research-practice connections.

In sum, participants thought that *how* research is carried out has a significant impact on whether there is a perceived gap between research and practice and how wide that gap may be. Of course, the “how” subsumes other factors as well, including the nature and quality of the professional relationships, the use of resources, and the dissemination of findings. For example, finding time is an enduring problem in education, and this is especially true for teachers who have a myriad of demands to negotiate, especially in the No Child Left Behind era. Finding time for teachers to engage in research and to work with findings to improve practice is a real obstacle, and is even more of a problem if teachers and researchers hope to work together. However, to fishbowl participants, the involvement of teachers (or lack of involvement) as contributors to research efforts, and particularly to research design, can play a crucial role in efforts to align the goals, processes, and outcomes of research to the problems of practice.

Quality of interaction. Fishbowl participants observed that the ways in which researchers and educators interact with each other was a crucial element in developing productive research-practice relationships. Indeed, the nature and tone of researcher-practitioner interaction was a theme throughout the forum. The importance of the dynamics of interaction was widely acknowledged among fishbowl participants. For them, interactions that are built on mutual trust and respect are smoother and are more likely to lead to better outcomes, whether these interactions are among educators, students, and parents within the school community or between practitioners and researchers.

Several fishbowl participants pointed to the issue of power differentials as an important factor in the relationship between researcher and teacher. They observed that teachers can feel intimidated or not respected by researchers. Teachers can also give substantial deference to researchers (one teacher referred to “worship” of the researcher). At the same time, researchers try to conduct inquiry in an organizational context—the school and school district—that can be difficult to penetrate, particularly if teachers are distrustful or resent the interruption. Researchers may also be unaware of the informal power structures of the school. Fishbowl participants indicated that two-way communication and trust can be very difficult to build under such circumstances, leading to a lack of understanding about researchers’ motives and the ways in which research is conceptualized and conducted.

Research “Contexts” Matter

According to fishbowl participants and audience members, there are some significant contextual obstacles to research initiatives being embraced by practitioners. In other words, beyond the focus of a *particular* research project, the *milieu* around research can be off-putting.

Too much information to take in. The cacophony emanating from the “school improvement industry” can contribute to educational research seeming less credible than

it might otherwise be. Keeping up with what “should” be done, and how to do it, can be as frustrating as staying on top of the latest foods to avoid or seek out. As Peter DeCraene (teacher, Evanston Township High School) put it, it is sometimes hard for teachers to reconcile their personal experience with what the research says *should* happen. Trying something out that fails miserably or being unable to see how a particular intervention can be structured to work in a particular classroom environment, he said, can lead to a cynicism about research in general. “What works” in a classroom in an East Coast suburban district, for example, may not seem to have much to offer a teacher working in a minority population, high poverty, low-performing urban school. A number of teachers questioned how one is supposed to deal with all the research findings, make sense of contradictory findings on the same subject, and recognize the ideological differences in the research community. Kim Collier (Consortium for Educational Change) referred to reform “hurricanes” that hit schools every three months or so, noting that teachers come to see the cascade of programs and policies as fads rather than as any coherent, systemic initiatives for reform—an unfortunate but not unexpected response, in her opinion.

The use and usefulness of theory. Fishbowl participants noted that how practitioners and researchers perceive the place of theory can play an important role in research-practice relationships. Research that is seen as too theoretical may seem impractical, and therefore not particularly relevant or useful to practicing educators or, for that matter, to policymakers and the public who may be most interested in “actionable results.” On the other hand, research that is seen as having little or no theoretical grounding may be judged as not particularly robust or useful if it is so “action-oriented” that it fails to spark insights or allow practitioners to develop a broader understanding of phenomena, thereby providing a more informed basis for practical decisions and action. Who needs to learn from theory? Researchers and academics certainly value theory, but the received wisdom is that teachers tend to have little patience with it and are looking for practical advice. Policymakers and politicians tend to want “results,” as does the public, though for different reasons.

A lack of acquaintance with theory can be an obstacle to using both what is already known and what might be discovered, according to Steve Tozer (University of Illinois at Chicago). As he explained, evidence is never free from theory; we take in and make sense of what we see and do because of the theories that we hold. These theoretical assumptions, grounded or not, factor into the decisions made by both teachers and researchers. As Andy Hargreaves put it, making theory explicit—that is, making it *examinable*—helps both researchers and teachers make better use of the information they collect.

Accessibility of research. The amount of time between the “work” of research and the availability of findings is an issue that fishbowl participants related to usefulness: how can researchers responsibly make data available more quickly? Several participants noted that teachers frequently must make decisions on the spot and cannot wait for the “next study” or professional development day to help guide their practice. School administrators and policymakers must also make decisions well before research can provide the latest definitive word on a subject.

On one level, there are clear differences in research and practice “cultures.” As participants pointed out, researchers and practitioners operate at different rates of speed, with research often lagging behind problems of practice (an issue if one believes that research has meaning only if it is responsive to problems), and where practitioners often do not understand how long it can take to do research. These incompatible expectations can make for frustration on both sides. Getting research into the hands of practitioners more efficiently could have other less obvious benefits, as Laura Cooper (Evanston High School) noted. She described a paradox in which teachers are told that professional development activities provide “vital” knowledge, with no accompanying explanation as to why this knowledge presumably was being withheld until the professional development day. What does this mean, she asked, to teaching’s identification as a “profession of knowledge”? How might this delay affect teachers’ perceptions of research as valuable?

On another level, as Saungktakhu Richey (Chicago Public Schools) argued, while there was an “abundance of information,” there was little systematic delivery of this information, and teachers aren’t helped to be interested or motivated in learning. She believed that this resulted in practitioners who have little exposure to research or who find it difficult to investigate the possibilities for professional growth on their own.

Consequently, participants wondered how a system of support that promoted successful research-practice connections and facilitated the capacity of districts to get data into the hands of teachers and administrators could be built. They agreed that there was a need to get *beyond* the school level in order to support development *at* the school level. Are there any naturally occurring connections between research and practice, and if so, how can these be exploited? What should the roles of the central office, universities, intermediary organizations, and policymakers be?

There was a recognition that what is learned in a particular setting cannot always “go to scale” or be generalized, as the Evanston High School teachers who network with other Minority Student Achievement Network high schools across the country pointed out. School and classroom contexts make a significant difference in the implementation of a research-based curriculum. Marty Gartzman (Math and Science Initiative, Chicago Public Schools) called Chicago “a mecca for research in the schools,” but noted that the research findings from small samples don’t automatically generalize to the larger system, especially given the diversity of Chicago’s schools, students, and teachers.

Nonetheless, the coordination of a broad effort to establish and sustain networking capabilities, cross-site learning, broad and timely access to information, and other components needed to successfully develop the capacities of individual schools was endorsed as an important step in making research more accessible to both individual practitioners and to districts.

III. Keynote Observations

In his keynote speech, Andy Hargreaves argued that developing and improving the research-practice connection involves paying careful attention to the dynamics of the relationship, saying that to understand what *evidence* is means understanding what *teaching* is. He framed the “practice of connection” as involving seven interactive dimensions, with issues pertaining to each. Hargreaves contended that failure to understand these dimensions of the research-practice relationship would undermine the most well intentioned efforts to advance that relationship. The dimensions are:

- *The technical dimension.* Hargreaves observed that there is a rich literature on the practical aspects of teaching, which is the easiest dimension to identify and conceptualize. How might the knowledge represented in this literature be “packaged” for practitioners most effectively? How is this knowledge most efficiently disseminated and implemented so that the integrity of the research is maintained? Researchers and teachers are both “technicians” who contribute to a quality knowledge base, and they have an investment in its accessibility and meaningful use.
- *The intellectual dimension.* Good teaching means intellectual change and, Hargreaves maintained, change is a complex and demanding process. Practitioners want to know that making a change is worth their time and effort, and this depends on some understanding of what is important and what is not. What change is valuable *enough* to undertake? At the other end, researchers know that the hardest writing they do promotes the intellectual engagement of a broad professional *and* public audience; to make connections with practice, this type of writing is necessary. According to Hargreaves, both researchers and practitioners must stretch intellectually to make a connection.
- *The experiential dimension.* According to Hargreaves, this dimension points to the relationship between craft, or practical, knowledge and scientific knowledge. It is likely that both researchers and teachers rely on evidence *and* intuition to develop knowledge and understanding of different sorts; however, researchers and teachers are also likely to have differences concerning the evidence they find most credible and useful. Hargreaves suggested that over-reliance on one form of evidence is constraining. What matters is the dialogue between different forms of evidence and the recognition that different forms are ultimately experiential.
- *The emotional dimension.* Frustration and passion are part and parcel of both the work of research and the work of teaching. Hard work and commitment to quality brings out strong reactions. Teachers and researchers who recognize and appreciate each other’s dedication will make stronger connections than those who don’t.
- *The moral/ethical dimension.* Working across the research-practice “divide” calls for a commitment to inclusion and mutual respect for the professionalism of both teachers and researchers and the legitimacy and significance of their work. This

means communication and consultation, a recognition that there is no one “right way” to do things, and a commitment to appropriately sharing findings in a timely manner. Teacher-researcher teams owe it to each other to be straightforward about what’s working and what’s not, and to be willing to admit limitations and negotiate solutions.

- *The political dimension.* According to Hargreaves, at the most basic level, researchers want to work in study sites that will allow them to identify and gather evidence, and teachers want researchers to tell them how to teach math and reading. As already suggested, these different perspectives, if not bridged, can work against productive research-practice connections. Hargreaves observed that, as in any other relationship, interests and objectives need to be laid out early and explicitly and negotiations ought to proceed from there. Both researchers and practitioners should be able to expect that some balance among self-interests will be achieved.
- *The cultural dimension.* Hargreaves noted that in any field-based research process, *some* sort of research climate is created that defines the shared experience of those in a school, both during and after the process itself. Whether the climate will “bring two solitudes together,” as he put it, or contribute to a greater divide has much to do with relationship building, a shared sense of responsibility, and the understanding that the researcher moves on but the teacher remains. Creating space to talk is the critical foundation of a collegial and collaborative climate.

IV. A Historical Perspective on the Research-Practice Relationship

Debra Miretzky and Steve Tozer began Saturday morning’s session with an overview and discussion of the history of the research-practice relationship as seen through the lens of more than 100 years of NSSE yearbooks. The yearbooks provide ample evidence that the relationship between research and practice has historically been problematic and fraught with disconnection. As the faculty of the State Normal University in Normal, Illinois wryly noted in a 1903 NSSE yearbook on theory and practice,

If a single teacher of encyclopedic culture and the highest pedagogic skill could give a small group of students all their instruction in theory, and in person supervise all their teaching, there might be attained the desired unity between theory and practice.¹

¹ Felmley, D, Homes, M.J., & Mavity, E. ((1903). The relation between theory and practice in the training of teachers. In M.J. Holmes, L. Seeley, & J.A. Keith (Eds.), *The relation of theory to practice in education. The second yearbook of the National Society for the Scientific Study of Education*, Part II (p. 37). Chicago: The University of Chicago Press.

And in 1929, John Dewey characterized education research as an “armchair science,”² decrying the heavy reliance on testing as a means of measuring educational effectiveness and calling for closer collaboration between teachers and researchers, and the active use of teacher professional judgment, for the continuous improvement of education practice.

Since the early 1900s, two conflicting frameworks have shaped the research-practice relationship and debate. One, grounded in the principles of scientific management, was advanced by educational psychologists such as E.L. Thorndike and Guy Whipple (a longtime secretary of and editor for NSSE). According to this perspective, it was the duty of the educational scientist to discover and present empirical evidence to support the best and most efficient ways to teach to achieve particular outcomes. Good teaching was determined as the extent to which teachers hit the mark set by measurement specialists. As Franklin Bobbitt, another scientific management proponent, explained the benefits to teachers in 1913:

Having these definite tasks laid upon her, she can know at all times whether she is accomplishing the things expected of her or not. She can herself know whether she is a good teacher, a medium teacher, or a poor teacher.³

The other framework was a more child-centered, progressive approach associated with John Dewey, William H. Kilpatrick, and others. The progressive movement could be characterized as seeking to help teachers manage their professional work—largely shaped by teachers’ observations of the needs of the children in the classroom—more effectively, to support the intellectual and social growth of the child through “educative experiences.”

These movements co-existed in an uneasy tension, and the progressives could never quite muster the same kind of influence as the educational psychologists who espoused scientific management. As Kilpatrick noted in the 1927 NSSE yearbook on the curriculum:

We have at once two groups. Let us state the extremes. The older party, at present holding control of the administrative fortress, says emphatically: The curriculum must be made in advance and handed out else your teaching will utterly fail, the work will be fatally haphazard. The other party, in proportion better represented perhaps among teachers and theorists, says: If you make your curriculum in advance and so hand it out to your teachers and thus require a set schedule of educational outcomes, the teaching must fail to educate. Properly educative experiences cannot be so ordered in advance as to yield designated outcomes, let alone be ordered months in advance. As stated in these extremes, each side seems to be thinking of the matter as an “all-or-none” kind of affair. Either the

² Dewey, J. (1984). The sources of a science of education. In J.A. Boydston (Ed.), *John Dewey: The Later Works, 1925-1953*, vol. 5 (p. 13). Carbondale, IL: Southern Illinois University Press.

³ Bobbitt, F. (1913). Some general principles of management applied to the problems of city-school systems. In F. Bobbitt (Ed.) *The supervision of city schools. The twelfth yearbook of the National Society for the Study of Education*, Part I (p. 23). Bloomington, IL: Public School Publishing Company.

curriculum is to be totally made in advance and handed out complete for all teachers, or it is not to be made in advance in any degree for or by anybody.⁴

As it happened, the growing dominance of the scientific method, with its emphasis on teacher as implementer, became the leading approach to learning and instruction and structured research-practice connections for much of the twentieth century. Educational scientists figured out how best to teach math, science, reading, and other subjects (creating “principles of method”), going so far as to describe how to position a student at his desk to increase handwriting capabilities or determining the optimal length of practice time for math drills, as two examples.⁵ Methods and results were evaluated and then, new methods that increased a student’s ability to do more equations correctly in a class period than previously achieved would replace the old methods.

The 1937 yearbook, *The Scientific Movement in Education*, presented various ways research had contributed to the organization and administration of schools, teacher training, the curriculum, and the development of subject matter, with a continued focus on methods for improving academic achievement—but found a very limited use of research by teachers, who continued to engage in “routine” practice. Two contributors, C.L. Cushman and Guy Fox of the Denver Public Schools, claimed five reasons for this: 1) the limited training of teachers, many of whom had only two years of preparation beyond high school before entering a classroom; 2) the limited amount of significant research carried on in public schools, with most research bureaus of public schools compiling statistics on performance rather than sponsoring research; 3) the lure of college positions, removing those with the expertise to introduce research projects into the schools; 4) a reluctance by schools to adopt new procedures successfully developed in other schools; and 5) the overly academic nature of much of what passed for educational research.

Cushman and Fox saw cause for hope, citing improved textbooks that helped spread research findings; improved digests and other reporting of research to practitioners (by the American Educational Research Association and NSSE, among others); and the development of long-term programs, some including teacher input, for school improvement in curriculum.⁶ However, overall, there continued to be less than mutual connections between the work of researchers and of practicing educators—what Richard Mayer, in his 2001 overview of NSSE’s historical treatment of learning theory, called a

⁴ Kilpatrick, W.H. (1927). Statement of position. In H. Rugg (Ed.), *The foundations and technique of curriculum-construction: The foundations of curriculum-making. The twenty-sixth yearbook of the National Society for the Study of Education*, Part II (pp. 135-36). Bloomington, IL: Public School Publishing Company.

⁵ See, for example, the *Fourth Report of the Committee on Economy of Time in Education. The Eighteenth Yearbook of the National Society for the Study of Education*, Part II (1919).

⁶ Cushman, C.L., & Fox, G. (1937). Research and the public-school curriculum. In F. Freeman (Ed.), *The scientific movement in education. The thirty-eighth yearbook of the National Society for the Study of Education*, Part I (pp. 67-78). Bloomington, IL: Public School Publishing Company.

“one way street.”⁷ As Stephen Corey, an NSSE Board member, observed at a meeting of the Society in 1951,

The general theory [was] that if we professional researchers, we students of education, conduct our inquiries carefully, meticulously observe all that we can about scientific methodology, and publish what we have found out, then classroom teachers, administrators, supervisors, and other practitioners will read or hear about our findings and behave differently.⁸

Both 1950's *Learning and Instruction*⁹ and 1964's *Theories of Learning and Instruction*¹⁰ lamented the continuing disconnection between both researchers and practitioners and their worlds. G. Lester Anderson recognized that “seldom in the education of the teacher is there rapprochement between the psychology of learning and the methodologies of teaching,”¹¹ and Esther Swenson observed that “classroom teachers, by and large, are apt to be somewhat impatient of what they often refer to as ‘just theory.’”¹²

Frederick McDonald worried that “psychology had become scientific, but the price was separation from the larger issues and problems facing society,”¹³ and T.R. McConnell argued, “What we need most in educational psychology, probably, are carefully designed experiments with double reference: to the fundamental problems in learning theory, on the one hand, and to significant educational problems on the other.”¹⁴ By 1972, the editors of *Philosophical Redirection of Educational Research*, echoing Dewey's warnings about “armchair science,” asserted:

The redirection of educational research requires more than cooperation with current empirical researchers. It also calls for the identification of significant educational problems through the interaction of philosophers with teachers and school administrators.¹⁵

Frances Schoonaker argued that other concerns—“...society's increased fascination with

⁷ Mayer, R. (2001). Changing conceptions of learning: A century of progress in the scientific study of education. In L. Corno (Ed.), *Education across a century. The one-hundredth yearbook of the National Society for the Study of Education*, Part I (p. 65). Chicago: National Society for the Study of Education.

⁸ Stephen Corey's comments were made at NSSE's 50th anniversary celebration on February 17, 1951, in Atlantic City.

⁹ Anderson, G.L. (1950). *Learning and instruction. The forty-ninth yearbook of the National Society for the Study of Education*. Part I. Chicago: National Society for the Study of Education.

¹⁰ Hilgard, E. (1964). *Theories of learning and instruction. The sixty-third yearbook of the National Society for the Study of Education*. Part I. Chicago: National Society for the Study of Education.

¹¹ Anderson, G.L., “Introduction,” *Learning and Instruction*, p. 1.

¹² Swenson, E.J., “Applications of learning principles to the improvement of teaching in the early elementary grades,” *Learning and Instruction*, p. 256.

¹³ McDonald, F.J. “The influence of learning theories in education,” *Theories of Learning and Instruction*, p.16.

¹⁴ T. R. McConnell, “The purpose and scope of the yearbook,” *Learning and Instruction*, p. 12.

¹⁵ Dunkin, H.B., Gowin, D.B., & Thomas, L.G. (1972). Introduction. In L.G. Thomas (Ed.) *Philosophical Redirection of Educational Research. The seventy-first yearbook of the National Society for the Study of Education*, Part I (p. 3). Chicago: National Society for the Study of Education.

technology; shifts in population that have threatened power arrangements of dominant groups; the ambiguous and wavering commitment of the United States to education for all in a society that has become increasingly multicultural, multiracial, and multilingual; and the perceived failure of public schools”—continued to reinforce a technical approach to teaching, with an accompanying demand for “standard products of education,”¹⁶ during the 1970s. Ann Lieberman, though, claimed that the 1970s began a shift to a more inclusive approach. She wrote, “It was... [during] the 1970s that staff development and the ways in which teachers actually transform new ideas into usable practices became an area of study.”¹⁷ While she did not directly address a research-practice gap, she did emphasize the importance of teacher inquiry as a means of enhanced learning for students and teachers alike.

In the last few decades, yearbooks reflected a growing emphasis on the role of the teacher as a change maker and an instigator of or partner in inquiry. Volumes such as *The Changing Contexts of Teaching*, *Teacher Research and Educational Reform*, *Creating New Educational Communities*, *The Education of Teachers*, and varied chapters cast teachers in the roles of leaders and co-collaborators in practice, policy, or research efforts. The focus has clearly shifted from teachers as being acted *upon* to acting, at least in the literature.

However, while progressivism endured as a framework for teaching and learning in more affluent public schools and many private schools and for many teacher education programs, some would argue that, in the No Child Left Behind era, the spirit of scientific management is alive and well. Richard Ingersoll warned:

Having little say in the terms, processes, and outcomes of their work may deny teachers the opportunity to feel that they are doing worthwhile work—the very reason many of them came into the occupation in the first place... If top-down policies create an imbalance between power and responsibility, that is, if such policies hold teachers accountable for activities they do not control, they may decrease the very thing they seek to foster— improvements in teacher performance.¹⁸

History as an Instrument of Reform

Steve Tozer followed this overview with some reflections about the usefulness of history in making sense of educational issues such as the research-practice gap. As he pointed out, understanding the historical context can

¹⁶ Schnoonaker, F. (2001). Curriculum making, models, practices and issues: A knowledge fetish? In L. Corno (Ed.), *Education across a century. The one-hundredth yearbook of the National Society for the Study of Education* (p. 25). Chicago: National Society for the Study of Education.

¹⁷ Lieberman, A. (1992). Introduction: The changing context of education. In A. Lieberman (Ed.), *The changing contexts of teaching. The ninety-first yearbook of the National Society for the Study of Education*, Part I (p. 7). Chicago: National Society for the Study of Education.

¹⁸ Ingersoll, R. (2004). Four myths of the teaching occupation. In M. Smylie & D. Miretzky (Eds.), *Developing the teacher workforce. The 103rd yearbook of the National Society for the Study of Education* (p. 26). Chicago: National Society for the Study of Education.

- Help us define and understand the problem better. Have we defined the current problem well, or are we not seeing important aspects of it?
- Help us recognize the causes and consequences of the problem. What might look obvious today may obscure other contributors to the problem from the past, and blind us to ramifications that have already played out.
- Point to possible solutions.

Consequently, history can actually become an “instrument of reform.”

There exists a significant body of knowledge already about problems of practice in education. The question becomes: Why does practice not follow this knowledge? Why are we not implementing more of the answers? One obstacle to what seems to be a logical flow is the problem of going to scale. This enduring difficulty calls for further research, in and of itself. But first, researchers must recognize that they cannot rest on their laurels. As Tozer reminded listeners, “There is no school system so corrupt as to be incapable of developing *one* outstanding school.” For practitioners (and districts), though, one is not enough.

Tozer further characterized the research-practice gap in supply-demand terms. On the demand side, he observed, research doesn’t always respond to real problems. It is not unusual for researchers to pursue their own or other researchers’ interests, rather than problems of practice or the concerns of society. On the supply side, research that *does* address such problems or concerns isn’t marketed well to teachers and is not communicated effectively in general. In addition, the gap in education has multiple dimensions: researcher-researcher, teacher-teacher, teacher-parent, researcher-student/parent, teacher-policymaker/politician, and so on. Focusing solely on the researcher-practitioner relationship neglects the ways that other disconnections and missed expectations can impact an educational problem. Participants, including Don Moore and Elizabeth Copper (Chicago Public Schools) agreed, noting that research and policy often ignores the contributions of other student environments (community, family) to students’ well being and academic success.

The questions of who defines a problem, how a problem is framed, what the consequences of the problem and proposed solutions could be, who will be affected, and other important considerations all help in identifying, understanding, and addressing problems of practice. Revisiting these questions through a historical lens provides a richer, more comprehensive perspective of the enduring dilemmas of education—the research-practice gap being only one of many examples.

V. Living the Research-Practice Relationship: Project Descriptions

Six projects and initiatives that represented a range of research-practice connections were presented Saturday morning. Each presentation provided further insights for consideration by the working groups that met later in the afternoon.

The Middle Grade Science Program, University of Illinois at Chicago

<http://www.uic.edu/educ/index.html/centers/mgs.htm>

<http://www.uic.edu/educ/mathsci/mgs>

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The Middle Grade Science (MGS) program (along with an affiliated program, Middle Grade Mathematics [MGM]) relies heavily on “narrative inquiry” as a main approach to the study of career changers’ experiences of learning to teach. Participating career changers are from science and mathematics-related fields, preparing to become middle grade science or mathematics teachers. The program provides an alternative route to teaching geared to serving specific Chicago Public Schools that are struggling both economically and academically. This alternative route embeds teacher certification within a master’s degree offered over a three-year induction and school-based mentoring program. During these three years teacher interns engage in ongoing thoughtful and deliberate examination of their emergent practice in light of educational research.

One opportunity for narrative inquiry is through ongoing journaling about interns’ identity construction as urban educators in science and mathematics. Teacher interns write and rewrite stories of their emerging identities as educators and the continuing construction of their practice, particularly in relation to teaching that successfully engages a diverse student population in science or math. Through individual and collective efforts, some stories have evolved into national conference presentations, funded grant proposals, and article submissions. Program faculty are similarly writing about changes in their own practice as mentors and university instructors, changes brought about by their collaborations with these beginning teachers in addressing educational challenges.

The Academic Social Support Initiative, Center for Urban School Improvement (CUSI), University of Chicago

<http://usi.uchicago.edu>

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The Academic and Social Support Initiative at CUSI seeks to redefine social support in schools beyond providing assistance to at-risk students. It aims to promote and sustain healthy environments that facilitate ambitious teaching and learning as well as the positive socio-emotional development of students. This work is guided by the conviction that urban schools can achieve these goals by adopting approaches based on empirical research and aligned with reforms centered on instruction and technology. The initiative is concerned with supporting cultural change in schools. The team charged with developing this approach to social support includes researchers and practitioners at USI and North Kenwood/Oakland Charter School who have a collectively held set of values and beliefs about what students and the adults who teach them need to succeed. This set of values serves as the foundation for creating a

comprehensive system of supports in four domains: (a) school structures and norms; (b) classroom practices; (c) relationships with parents; and (d) school connections to the community.

Consortium for Educational Change (CEC), Lombard, Illinois

<http://www.cecillinois.org/index.html>

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The CEC is a network of Illinois school districts and professional organizations that works to enhance student learning by assisting member districts and schools to become collaborative high-performing educational organizations. The Consortium provides technical support and consultation for local systemic improvement initiatives and creates collaborative opportunities for member districts to support and accelerate each other's development. CEC is associated with the Illinois Education Association.

The National Education Association's Keys for Excellence in Your School Initiative (KEYS) is one of many of the resources that the Consortium provides to its member schools and districts. KEYS provides schools a research-based framework of organizational conditions related to school improvement and student academic achievement. KEYS also provides a survey-based assessment tool that allows teachers and administrators to gather data on the strength of those conditions in their schools. Through its state and local affiliates, the NEA provides resource materials and professional development opportunities to help schools read and interpret their data and use them to guide planning and decision making through a process of continuous school improvement. More information about KEYS can be found at <http://www.keysonline.org/guide/whatIsKeys.cfm>

Evanston Township High School, Evanston, Illinois

<http://www.eths.k12.il.us/>

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Representatives from ETHS described three research-practice initiatives in which the school is involved: (a) the Minority Student Achievement Network (MSAN); (b) the Tripod Project; and (c) Achievement via Individual Determination (AVID).

The Minority Student Achievement Network. MSAN conducts collaborative research that informs school practices, promotes and evaluates evidence-based instructional interventions, and provides professional development opportunities for teachers. The Network's research goal is to develop new knowledge of the factors that contribute to the achievement gap and to use that knowledge to inform the development of policies and practices that will improve the academic performance of African American and Latino/a students. More information about

the Minority Student Achievement Network can be found at <http://www.msanetwork.org/>.

The Tripod Project. The purpose of the Tripod Project is to increase communication and build knowledge among teachers about ways of achieving success in the classroom by attending to all three legs of the instructional tripod—content, pedagogy, and relationships. The project aims to help all students, but particularly African Americans and Latinos, achieve at higher levels. Tripod encourages teachers to generate and share ideas for improving classroom practice. The ideas that teachers generate are shared among participating schools and districts across the United States. A research component provides data to support school improvement initiatives. The Tripod Project provides an intellectual, procedural, and organizational format in which teachers can share ideas about teaching practices with regard to all three legs of the tripod and their interdependence. What individual teachers contribute to the exchange can be shaped and reshaped by other teams of teachers, and then shared more widely among project participants. In addition, the project provides teachers multiple types of peer support for implementing new ideas in their classrooms. More information about the Tripod Project can be found at www.ksg.harvard.edu/tripodproject/.

Advancement Via Individual Determination (AVID). AVID is an in-school academic support program for students in grades 5-12 that places academically average students in advanced classes and prepares them for college eligibility and success. The program centers on a standards-based curriculum that was developed by middle and senior high school teachers in collaboration with university professors, and is based on research on what is known about how people learn, e.g., metacognition. It also includes strategies, such as reciprocal teaching and Cornell Notetaking, that have been well researched. AVID is a large project that conducts its own extensive studies of each program, including following students over many years. Extensive program evaluation is done, and changes are incorporated as needed. Local directors (teachers) are trained to be evaluative of their own programs and to make changes while also sending considerable data to the AVID “program central” to contribute to ongoing research efforts.

At ETHS, AVID is offered as an elective class by a teacher trained to implement the program. Teachers throughout the school as well as administrators attend AVID Summer Institutes, which provide opportunities for participants to learn techniques for bringing out the best in students. More information about AVID can be found at <http://www.avidonline.org/>.

Collaborative University-School Research (CUSP), University of Illinois at Chicago
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The aim of CUSP is to improve teaching and student learning through university-school and teacher-researcher collaborative inquiry. This work has several

defining characteristics: (a) it is *collaborative in nature*—mutual understandings among participants are created through democratic decision making around common goals and actions so that both teachers and university researchers plan the research, analyze the data, and report results; (b) it *focuses on practice*—although the university researchers may have a particular issue or topic of interest, the project addresses the immediate problems or agendas defined by participating teachers; and, (c) it enhances teachers' *professional development*—because such inquiry focuses on classroom practice, participating teachers have the opportunity to construct new knowledge to deal with their own problems, expand their professional knowledge, and acquire research skills for future teacher inquiry.

Two collaborative research projects were presented. The first was Professor Pappas's Spencer-sponsored project in which 13 Chicago Public Schools (CPS) teachers joined her to study how to develop collaborative styles of teaching in literacy teaching-learning (with Anne Barry and Michael Rassel as teacher-researchers). The second was an upcoming NSF-sponsored project directed by Professor Pappas and Professor Maria Varelas (UIC), in which 6 CPS teachers collaborate to study how 1st, 2nd, and 3rd graders learn science content and generic discourse of science through integrated science-literacy units.

Chicago Public Schools Math and Science Initiative

<http://cmsi.cps.k12.il.us/>

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The Office of Math and Science supports mathematics and science instruction throughout the Chicago public school system. Its work is guided by a vision that high-quality, standards-based mathematics and science instruction, as framed by national, state, and local standards, can be provided to all students. This vision is embodied in the Chicago Math & Science Initiative, CPS's effort to transform mathematics and science instruction by providing coherent research-based programs, technical support, and stronger professional development opportunities to improve teaching and promote student achievement in math and science.

CMSI uses research on how students learn to shape its agenda and to choose effective instructional materials, which serve as tools to transfer research to practice. The initiative seeks to provide teachers with the social, financial, and organizational support they need to use the tools most effectively. An external evaluating team collects formative data to study the effectiveness of implementation in diverse contexts and to create professional development opportunities. Teachers are not researchers per se, but their work provides the data for practice and policy decisions.

VI. Recommendations

The last part of the forum was devoted to generating recommendations to strengthen the research-practice connection in ways that might better promote school improvement and improvement in teaching and learning. Participants were organized into small groups and were asked to formulate recommendations in response to four questions:

1. What can researchers do differently?
2. What can teachers and administrators do differently?
3. How can intermediary organizations support optimal research-practice connections?
4. What should policymakers consider in making decisions that effect teaching and learning?

We refer to intermediary organizations as organizations, such as universities, education reform groups, civic and business organizations, and philanthropic organizations, that function to “mediate or manage” relationships between other organizations and to promote change in those organizations,¹⁹ in this case research organizations and schools and school districts. Participants’ recommendations are summarized below.

What Can Researchers Do Differently?

- Study schools that work and look for the “why” they are successful in comparison with similar schools that are not as successful. Build frameworks about what works and then use these frameworks to help other schools. Develop additional knowledge and understanding of the processes of school improvement, that is, “how” schools improve and “why” certain processes of change may be more effective than others.
- Take the time and make the effort to be mindful of relational dynamics with practitioners. Solicit and use input from teachers about the research and its design and methodology. Ask teachers how they can be helped. Before data collection begins, establish mutual expectations. This can be accomplished in different ways. Renée Clift (UIUC) reported that she talks with the educators she works with about “what we do” instead of talking about the “collection of data.” She believes that the way the work is framed is very important in creating a culture of collaboration between researchers and educators. Researchers who may be doing less collaborative work should also consider the purpose, the analysis, and the presentation of their work from practitioners’ points of view.
- “Demystify” research and theory by using accessible language, making plausible connections between research and practice, and recognizing that both teaching and research require inquiry and analysis. Participants observed that teachers conduct a less formal type of research in their everyday teaching, using some kind

¹⁹ Honig, M. I. (2004). The new middle management: Intermediary organizations in education policy implementation. *Educational Evaluation and Policy Analysis*, 26, 65-87.

of theoretical perspective, as they figure out how to engage students in subject matter, help a particular student, or respond to a classroom environment. This type of intellectual activity may be seen as part of a continuum of educational inquiry that can provide useful evidence for classroom decision making.

- Help teachers and school administrators develop a greater understanding of the purposes and methods of research. Help them understand the proper uses and the limitations of different forms of evidence and research findings in application to decision making and practice.
- Secondary educators felt strongly that research needed to more equitably divide its attention (and resources) between elementary and high schools and between suburban and urban schools. They believe that this failure of balance has serious implications for the usefulness of research for a significant proportion of schools.
- See the work of connecting research and practice as a worthy “practice” in and of itself. Participants recalled Hargreaves’ observation that the relationship between research and practice is complex and challenging, and successfully navigating the relationship has important implications for the ultimate significance of efforts to improve learning and instruction.

What Can Teachers and Administrators Do Differently?

- Provide and support the necessary leadership at all levels. School administrative leadership is essential to promote productive relationships between research and practice, according to participants like Kim Zalent (BPI) and Laura Cooper (Evanston High School). Superintendents, principals, and central office administrators can help shape research agendas, represent teachers’ and students’ interests, and support meaningful partnerships between research and practice. As much as possible, leaders should promote teacher development and school improvement through active inquiry rather than simply through attendance at workshops and conferences. Interestingly, doctoral candidates and educators who worked with researchers—those who the Evanston High School teachers called “border crossers” and “risk takers”—were identified as having great potential for playing a bridging role between research and practice. The perception was that people with feet in both worlds of research and practice can be effective informal leaders in promoting stronger and productive research-practice links.
- Make research part of the school culture. Chris Pappas (UIC), among others, saw the need for building research into the school day, at the school level. Staff development days and faculty meetings could be used for discussion and study around research and theory. Participants noted that this is more likely to happen when school administrators promote such efforts and take part in them as well.
- Take an active role in seeking opportunities for professional growth. Teachers can take responsibility to seek out authentic opportunities for professional growth and

learning, whether that means taking part in professional development activities or collaborating with researchers. They should communicate their needs, goals, and expectations directly and clearly, both to their administrators and to researchers. Marty Gartzman (CPS) observed that typically schools and teachers do not search actively for research-based information that might improve teaching and learning, and felt it was important for them to claim this role.

- Be willing to take risks. Teachers who work with researchers should acknowledge and come to terms with their discomfort with observation. As Michael Rassel (Hamline Elementary School) noted, for meaningful classroom research, teachers may need to be observed by others. “The warts are out there,” he pointed out, but professional growth and improvement is often a direct result of a willingness to take risks and then be reflective.

How Can Intermediary Organizations Support Optimal Research-Practice Connections?

- Play an active role in shaping a meaningful research agenda. Intermediary organizations can promote thoughtful consideration of problems that need to be examined and they can take a comprehensive perspective on those problems. Intermediary organizations can leverage key resources—funding, personnel, prestige, and influence—and thus be influential actors in promoting productive research-practice relationships. Intermediary organizations can use their discretionary resources to help shape agendas for research and school improvement and thus provide some counterbalance to more top-down, mandated improvement initiatives.
- Support research that examines problems of practice. The more often intermediary organizations consider the merits of a given research project, its potential beneficiaries, the mutual needs of researchers and practitioners, and the contexts that will influence the research process and practice, among other factors, the more likely that research will align with real problems of practice and will support more productive research-practice relationships. One specific recommendation in this regard was for intermediary organizations to identify and recruit both researchers and practicing educators to together help them identify important problems for investigation.
- Encourage innovative use of technology. Support for a knowledge management system was seen as critical by practicing educators. Suggestions included online journals specifically for capturing teacher work and research collaborations, online forums that provided opportunities to talk about research and practice issues and share work, and data dissemination vehicles. Intermediary organizations may be able to be more efficient about creating and maintaining these types of resources for educators and researchers.
- Support active, two-way professional development collaborations between research and practice. Participants suggested that intermediary organizations

move away from the traditional workshop and conference models of a professional development specialist translating research into “how-to’s” for practitioners. Teachers at the forum, in particular, thought that intermediary organizations could promote more productive relationships between research and practice by encouraging more engaging and challenging collaborations among researchers and practicing educators. Moving teachers from passive, recipient roles into more active partner roles in inquiry would go far to promote both practitioner investment in the research process *and* research-based practice.

- Provide and encourage opportunities for researcher-practitioner networking. Intermediary organizations may encourage more productive research-practice relationships by helping to improve communication among researchers and educators. Some teacher participants familiar with different research projects observed that just as teachers frequently work in isolation, researchers tend to do so as well. Encouraging communication between researchers and educators should sharpen inquiry considerably around problems of importance to practice. Such networking may also help shape the manner in which research is reported and published, making research findings more accessible and useful to practitioners.

What Should Policymakers Consider in Making Decisions That Effect Teaching and Learning?

- Take a broader view of educational problems and ways to study them. Policymakers were perceived by many participants as being too far removed from the classroom or too deeply motivated by ideology to respond effectively to important educational problems. To some participants, it seemed as though policy proceeded from perceptions of failure, that is, unsuccessful schools and unsuccessful teachers tended to garner the attention, and as a result failure rather than success drives policy. Participants thought that policymakers should pay more attention to schools and teachers who are doing good work, keeping in mind that good work is not always defined by gains in test scores. Don Moore (Designs for Change) suggested that schools showing substantial and steady improvement over 10+ years, rather than schools that “teach to test for 4 years and flatline,” should be viewed as models of achievement.
- See the “big picture.” Policymakers should consider how different reforms might support or contradict one another as they are implemented in schools and classrooms. They should also consider that reforms can be developed strategically to form a comprehensive system of supports for school and instructional improvement or reforms can be developed to unintentionally form a fragmented and potentially conflicting bundle of initiatives, the former being more conducive to improvement than the latter.
- Understand the complexity of implementing reforms. Policymakers should understand that “one size usually does not fit all” when thinking about “scaling

up” reform initiatives, even using research-based practices. Participants observed that there are many factors that affect the application of research to practice and that the effectiveness of application may vary substantially across contexts. Nonetheless, as Steve Tozer (UIC) noted, while research cannot sidestep the need to address more widespread problems, there can be merit to inquiry even if it seems obvious that no large-scale answers will be provided. Policy making can be enhanced by an understanding of which findings and which research-based practices can (and should) be scaled up, which cannot, and which need more time to be developed. And such understanding can help to create a context that may encourage more effective research-practice connections.

VII. Concluding Remarks

In his keynote observations, Andy Hargreaves argued that *some* sort of research-practice relationship exists in every school whether the school participates in on-site research or simply sends its staff to professional development meetings. Whether this relationship “brings two solitudes together” or serves to widen a divide has much to do with *how* research-practice relationships are built and managed. According to participants at the forum, the development of shared purpose, trust, a shared sense of responsibility, and an understanding of research and practitioner roles and responsibilities are crucial elements in this process. So too are opportunities for ongoing communication, the spaces for researchers and practitioners to convene around key shared issues, to talk to and to learn from one another. Education leaders play a crucial role; closer ties between researchers and practitioners are much more likely to be sustained when leadership at any and every level, including the university level, sends the message that such connections are important, and especially when this is backed up with the necessary resources.

At the end of the forum, participants provided written, anonymous feedback on their experiences. Overall, the comments—from practicing educators, researchers, and others in attendance—were unequivocally positive about the opportunities that the forum provided to discuss the research-practice relationship more deeply with a wide variety of educational colleagues. There were many comments about the value of bringing together a diverse range of participants, with some suggestions of others who might be included in future forums (e.g., representatives from the teachers’ union). Representative comments included: “I have gained better insight on the views of other professionals.” “It was invaluable to be able to view the questions from this variety of perspectives.” “Made me stop and reconsider my thinking.”

The ivory tower on the cover of the brochure and report is a tongue-in-cheek reference to the perceived divide between those who work in schools and those who study them, and in the minds and experiences of the forum’s participants this stereotyping has at least some basis in reality. A number of comments conveyed a rueful appreciation for the rare opportunity this forum provided for researchers and practicing educators to convene and work together. These comments reflected a sense of frustration shared by most participants about the lack of opportunity for such interaction and the related disconnect between research and practice that most participants perceived. Participants’ comments

suggested that events like this forum were “good starts,” but that there was a long way to go in fostering stronger more productive connections between research and practice. As one participant put it, “This was only the beginning of the conversation. We need to get together outside our respective boxes for this conversation to bear fruit.”

Future forums will provide additional occasions for such conversation to develop and deepen the connections between those who come at educational problems from different positions and with different priorities, as well as inform their understandings of current and enduring educational challenges. Participants’ reflections clearly indicate that these occasions should promote the sort of exchange that stimulates new ways of *thinking about* problems and new ways of *addressing* problems, with the goal of making real differences in the learning and development of children and youth. In the spirit of Dewey’s “grand theory,” which emphasized informed public discussion for effective decision making, we believe discourse in these types of settings will serve to give voice to a range of experiences and perspectives, leading to deeper insights, understandings, and mutual learning, and consequently more powerful policy, research, and practice agendas.

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is an organization of education scholars, professional educators, and policymakers dedicated to the improvement of education research, policy, and practice. The Society seeks to advance the study and practice of education by providing accessible scholarship and promoting informed discourse about the challenges and opportunities of education in a democratic society.

Founded in 1901, NSSE is the oldest national educational research organization in the United States.

NSSE is dedicated to providing in-depth social-foundational and historical perspectives to define and study important education problems today. There is no question that research, policy, and practice can inform and influence each other in mutually beneficial ways. Consequently, NSSE seeks to develop stronger relationships among researchers, educators, policymakers, and other educational stakeholders through collaborative study of educational problems, incorporating its unique historical and foundational perspectives as key contributions to the discourse.

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