Initiating and sustaining partnerships between research and practice: Lessons learned from school and district leaders

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Abstract

Purpose – Many researchers partner with schools but may be unfamiliar with practices for initiating contact and sustaining relationships with school leaders. Partnering with schools requires significant effort from the researcher to nurture communication and trust. This can pose challenges for researchers who are new to the field, have relocated to a new university or need to rebuild relationships due to transitions in school staffing.

Design/methodology/approach – In this mixed-methods study, we interviewed and surveyed school and district leaders in Delaware to learn how researchers can best communicate and form relationships with schools and districts.

Findings – We found no singular best method exists to initiate contact with schools and districts. Rather, researchers should consider the unique needs of the local context. Leaders' decision to participate in research was most influenced by their own interest in the research topic, alignment with schools' needs and researchers' willingness to build a relationship with the local education agency.

Originality/value – Despite broad acknowledgment about the importance of school–university partnerships, few studies directly engage educators in discussing their goals, preferences and needs when working with researchers. We sought to formalize an understanding of best practices researchers can consider when initiating contact and building relationships with schools, directly from the perspective of school and district leaders. Developing these understandings from practitioners ensures the information authentically represents the perspectives of those who researchers seek to connect with, rather than assumptions of the researcher.

Keywords Relationships, Communication, Partnership, Best practice, Establishing contact

Paper type Research paper

Introduction

Partnerships between schools and universities can generate impactful theories, evidence-based solutions, and relevant strategies to inform practice and policy. Many education

researchers partner with schools in some form, whether to co-create research agendas in response to local needs, engage in university-based research activities, or respond to school-based needs (Walsh & Backe, 2013). To conduct these activities, researchers must initiate contact, build trust, and sustain relationships over time with schools. Intentional relationships, ongoing conversations, and empathy serve as the foundation for these relationships that often manifest in partnerships (Frerichs *et al.*, 2017; Penuel *et al.*, 2020).

Partnerships between schools and universities follow many structures and serve many purposes. In some instances, partnerships are formalized through a research-practice partnership (RPP), in which researchers intentionally collaborate with practitioners to leverage their expertise and co-create research agendas that will improve education (Farrell *et al.*, 2021). Other partnerships exist to act as school-based sites for student teachers and university students to complete degree requirements through observation or instruction or to volunteer to support teachers (Walsh & Backe, 2013). Less formal partnerships are more unidirectional, where a researcher presents information that will be implemented in the school, and the school implements the activities that may or may not be aligned with their intrinsic needs (Bauer & Fischer, 2007).

No matter the structure or purpose of the partnership between a university and school, a positive relationship can produce multiple benefits for those involved (e.g. Gutiérrez & Penuel, 2014; Joyce & Cartwright, 2020; Penuel *et al.*, 2020). For example, research conducted in collaboration with educational organizations has shown to be more relevant, actionable, and equitable (Doucet, 2019; Farrell *et al.*, 2021; Ishimaru *et al.*, 2022). Moreover, research partnerships can help make positive changes in teachers' self-efficacy and classroom instruction (Bevan & Penuel, 2017) while also improving students' learning (Jacob *et al.*, 2019) and achievement (Booth *et al.*, 2015). Consequently, partnerships between research and practice are more likely to enable the implementation of research (Coburn & Penuel, 2016). By working with practitioners, researchers can identify critical pathways for research and practical changes or improvements to educational settings (Hoekstra *et al.*, 2020).

Whether a researcher seeks to establish a research-practice partnership with a school or is simply trying to initiate conversations with a school or district to begin developing relationships, an improved understanding of how to initiate conversations and sustain these relationships can help researchers effectively work with practitioners. It is known that communication is critical for fostering relationships between people in general (Duncan & Moriarty, 1998). Hence, communication has proven to be especially valuable within different collaborations between education researchers and practitioners (e.g. Bauer & Fischer, 2007; Farrell *et al.*, 2019). However, the intricacies of how education researchers and practitioners communicate vary according to the needs and preferences of each party.

In education, ongoing conversations to establish partnerships between researchers and educators take many forms (Mulvey *et al.*, 2020). For example, in less formal collaborations between university researchers and schools, the researcher defines the objective of the interaction between research and practice, the type of activities that will occur and their sequence, and the distribution of roles between parties (Bauer & Fischer, 2007). In formalized RPPs, conversations are more in-depth and frequent and are essential to learn about each other's goals and develop a mutual objective for the partnership (Farrell *et al.*, 2019).

Literature on RPPs further defines key components of relationship building that may apply to other school-university partnerships, such as establishing trust between those involved. Trust is an important starting point for a partnership between researchers and practitioners, as it can help establish buy-in and effective communication between both participants (Farrell *et al.*, 2018, 2019; Henrick *et al.*, 2017; López-Turley & Stevens, 2015). Partnerships that aim to create a space where honest, transparent, and trusting conversations can be held are more likely to have successful outcomes (McGill *et al.*, 2021).

Research-practice partnerships also identify that a sense of shared ownership for researchers and practitioners is essential for the relationship (McGill *et al.*, 2021). Meaningful relationships share authority between research and practice to instill mutual responsibility to meet expectations and pursue collaborative goals (Wentworth *et al.*, 2017). Shared authority allows practice sites to act as venues that address questions helpful to both researchers and practitioners (Coburn & Penuel, 2016; Callanan *et al.*, 2020).

Barriers to research-practice relationship building
While educational research has proven to have significant and lasting impacts on educational practice and practitioners, it is not uncommon for universities to encounter barriers when partnering with schools. These barriers can present at several phases in the research process, from communicating expectations and instructions to collaborating on project outcomes to fostering positive and lasting relationships with participants. For example, when communicating with participants, researchers sometimes use jargon when discussing issues facing practitioners (e.g. Sirotnik & Goodlad, 1988). Researchers can encounter challenges when conveying study literature, parameters, and instructions due to lack of consistent terminology (Hoekstra *et al.*, 2020) and differences in expectations regarding norms, roles, and responsibilities (Coburn *et al.*, 2008; Rosen, 2010).

Furthermore, because organizational, pedagogical, and personal realities can differ across school systems, these structures tend to foster the development of various points of view as those in different parts of the district have distinct disciplinary backgrounds, work roles, and ways that they focus their attention (Coburn *et al.*, 2009; Spillane, 1998). Hence, the variation of potential participants' needs, expectations, and understandings can lead to confusion, uncertainty, and even conflict as researchers endeavor to communicate and form relationships for their projects. Moreover, these variations in needs and goals can result in unrealistic expectations and relationships that undermine research as a discursive and democratic process (Crossley & Holmes, 2001). This, therefore, raises questions about whom in districts or schools one should partner with and how best to coordinate across multiple goals and agendas present (Coburn & Stein, 2010).

As the goal of educational research is often to provide actionable support to practitioners, establishing cohesive, collaborative, and supportive partnerships can be essential to the long-term success of a project. However, in addition to facing challenges when navigating partnerships and expectations, researchers also struggle with ensuring that their work is in fact achieving actionability within the educational community and, especially, for their practitioner partners. While researchers may aspire for their work to fulfill specific educational needs, some practitioners say research findings do not translate as useful, actionable guidelines (Campbell *et al.*, 2009). In some cases, this is due to failure to develop shared understandings and expectations, which hinder the researcher's ability to provide not only the theoretical implications of their work but also actionable resources that their partners find useful in practice (Farrell *et al.*, 2019). Moreover, research and researchers are sometimes criticized for being "too distant" from actual practice (Kessler & Glasgow, 2011; Van de Ven & Johnson, 2006). Therefore, it is necessary that researchers always consider the practical needs and community context of those whom they partner.

Current study
While the necessity and benefits of forging partnerships between universities and schools are clear, barriers can impede the formation of a relationship. Research points to key components of building relationships between research and practice, such as communication, trust, and shared ownership. However, how to operationalize these practices is less clear. Without formalized strategies for how to begin or sustain relationships, university researchers may

face challenges when partnering with schools, particularly for researchers who are new to the field, have relocated to a new university, or may need to rebuild relationships due to transitions in school staffing.

An improved understanding of how researchers should initiate contact and build relationships with schools and districts can potentially promote more partnerships that benefit both research and practice. The goal of the current study was twofold. First, as members of a university center charged with building and sustaining stronger pathways between university researchers and our local education system, it is helpful to our team and those we serve to understand how to work effectively with local schools and districts. Second, despite broad acknowledgment of the importance of relationships, trust, and communications, few studies directly engage educators about what they want when working with researchers. Therefore, we sought to develop a formalized understanding of practices for researchers to consider when initiating contact and building relationships with school and district leaders directly from the perspective of school and district leaders. Developing these understandings from practitioners ensures the information authentically represents the perspectives of those whom researchers seek to connect with rather than the assumptions of the researcher. We sought to answer the following research questions in Delaware:

RQ1. What are school and district leaders' *experiences* with researchers?

RQ2. How do school and district leaders prefer researchers *initiate contact*?

RQ3. What factors contribute to leaders *agreeing* to collaborate with researchers?

RQ4. How can researchers *sustain relationships* with school and district leaders?

Although we did not involve K-12 partners in the study's conceptualization, our motivations for conducting this research stem from conversations we have had with practice partners in prior work. We explore this topic using primary research collected directly from school and district leaders. While we conducted this research in Delaware, we believe the lessons learned to be useful in a variety of settings and contexts. The current study expands existing literature by leveraging direct perspectives from school and district leaders to understand how leaders prefer researchers initiate contact and sustain relationships based on their prior experiences with researchers. In exploring how school and district leaders perceive, engage in, and value educational research, we offer insights and strategies for researchers to conduct future studies. We also offer evidence for school and district leaders to consider when agreeing to work with researchers.

Methods
In the summer of 2022, the research team recruited participants and collected data for this concurrent parallel mixed-methods study. We collected qualitative data through interviews while simultaneously collecting quantitative data through surveys. Interview and survey data were collected and analyzed concurrently and later integrated in the interpretation of findings.

Study context
Delaware is a small state, with just three counties, 19 public school districts, and 23 charter schools (Delaware Department of Education, 2023). Over half of Delaware residents (56.5%) live in the northern county of New Castle, where the state's only research-intensive university [1] is housed (United States Census Bureau, 2022). New Castle County is characterized by a large city and mostly suburban towns. The southern and central counties contain both rural and suburban areas.

Many school and district leaders are familiar with the university and have participated in its academic and professional learning programs. Furthermore, many researchers conduct activities in local schools and districts. Consequently, schools and districts close to the University are regularly contacted and must decide which requests to engage with, if any, based on interest and capacity. Understanding how leaders approach these decisions is important information for developing and sustaining relationships between the university and the Delaware education system.

The research team represents a range of roles, including senior researcher, professional staff, and doctoral students, and different levels of experience and familiarity with Delaware schools and leaders. None of the members of the study team have prior experience as a school or district leader. However, several have experience working with leaders across the state through research and academic programs. While we recruited participants using a variety of strategies, our sample may be biased, overrepresenting those familiar with the University and members of the study team. Our study team involved five self-identified females, four of whom self-identified as white and one who identified at Latinx. We identify ourselves in relation to this study because our team is not representative of the broader school and district leader demographics within the state on these two key dimensions of gender and race/ethnicity, as 41.0% of administrative officials in Delaware are male, 22.8% are black or African American, 2.2% are Hispanic, 1.1% are multi-racial, 0.3% are Asian, and 0.3% are Native American (Delaware Department of Education, 2022).

Data collection

The two data collection instruments included a 5-question survey presented on Qualtrics and a 30-min semi-structured interview. The survey captures school and district leaders' involvement, interest, and experience working with researchers. Specifically, the survey asked respondents questions about (1) their preferences for researchers initiating contact, (2) factors influencing their decision to participate in research, (3) their level of concern in allowing different groups to participate in research, (4) their value in research, and (5) the current number of researchers their school or district partners with (see Supplementary File 1 for full survey). The study team wrote nine survey questions and included six questions from the Survey of Evidence in Education for Schools (May *et al.*, 2022) to measure what educators value when engaging in educational research.

We designed the interview to gather open-ended information on leaders' experiences with researchers, the nature of these experiences, and what contributes to their willingness to participate in future research (see Supplementary File 2). All interviews were conducted individually by two study team members via Zoom. Sessions were recorded and later transcribed using Otter.ai, an external transcription service. If the interview participant had not yet completed the survey at the time of the interview, the interviewer asked them to complete the survey before beginning.

Recruitment

The study team used two approaches to recruit participants via email. First, the team sent email blasts to University-based educational mailing list subscribers, many of whom work in school leadership positions across the state. Second, the research team downloaded a publicly available list of all public schools in Delaware, randomly selected 42 schools (20.0% of all schools), and invited all principals and assistant principals of that school to participate via email. Participants were informed that if they chose to participate, which included engaging in a short interview and survey, they would receive a $25 electronic Amazon gift card for completing both activities. Following both recruitment attempts, the study team received 31 replies from school and district leaders indicating interest.

Participants
Of the 31 school and district leaders who replied to indicate interest in the study, 18 completed the Qualtrics survey. Fifteen of the 18 survey participants also completed an interview. The final sample for survey analysis included ten school leaders (e.g. principals and assistant principals) and eight district leaders (e.g. curriculum supervisor and assistant superintendent). However, the interview sample included one less school leader and two fewer district leaders. Of the leaders in our sample, a majority worked at districts in New Castle County ($n = 9$, 60.0%). Three school leaders worked in Sussex County (20.0%), and only one leader worked in Kent County (6.7%). Most survey (72.2%) and interview (66.7%) participants were female, and almost half had five or more years of experience (46.7% of interviewees) (Table 1).

Analysis
We first deductively coded all interview data using an *a priori* coding schema based on the interview questions (see Supplementary File 3). The two study team members who conducted interviews also coded all interview transcripts. Coders were responsible for coding individual interview sections aligned with the coding schema to maintain validity within codes. However, interviewers met weekly and co-coded four transcripts (26.7% of interviews) to ensure reliability between coders. Concurrently, a third analyst conducted a descriptive analysis of the survey data, including calculating frequency and percentages, means, and standard deviations of survey questions.

After completing the qualitative and quantitative analysis, the three members of the study's analysis team met to discuss findings. The analysis team elevated qualitative findings that emerged most frequently and quantitative findings that either validated or extended qualitative results. In response to some research questions, qualitative and quantitative data are integrated to compare themes, whereas in others, data are integrated to describe different components of the same theme.

Results
What are school and district leaders' experiences with researchers?
Our first research question explored Delaware leaders' experiences with researchers. This inquiry was strategic in that the study team wanted to understand participants' pre-existing

	Survey participants		Interview participants	
	n	%	n	%
Total participants	18	–	15	–
Role				
School leader	10	55.6	9	60.0
District leader	8	44.4	6	40.0
Gender				
Female	13	72.2	10	66.7
Male	5	27.8	5	33.3
Years of school or district leader experience				
Less than 3	–	–	3	20.0
3–5	–	–	5	33.3
More than 5	–	–	7	46.7

Note(s): All interview participants completed the survey; three survey respondents did not complete the interview. Data capturing Years of Experience was collected during interviews and is unavailable for the additional three survey respondents
Source(s): Authors' own creation

Table 1.
Descriptive statistics of analytic sample

experiences with researchers to consider how it might inform their current perspectives on topics related to the study. Researchers used both qualitative and quantitative data in response to this research question. Interview data first described the school or district leader's past experiences with researchers, while survey data explained their current relationships with researchers as well as their intrinsic attitudes towards research.

Using interview data, we found that all participants had worked with a researcher before in some capacity. Nearly three-quarters of interviewed leaders specifically noted ties to the University of Delaware ($n = 11$, 73.3%), whether previously attending a graduate or a professional development program, assisting a master's or Ph.D. student with collecting data or participating in a specific research study. Additionally, all survey participants stated their school or district currently works with at least one university.

When asked to reflect on past experiences working with researchers, all participants pointed to a positive experience with a researcher. Some noted a specific researcher they had a positive relationship with, while others noted traits of the researcher that were favorable. Most interviewees ($n = 13$, 86.7%) indicated that positive past experiences influenced their participation in future research.

> Our district has partnered with [the researcher] many times throughout the years, so we have a good relationship with them. ... They were working with our assistant principals on making sure everyone's on the same page as to the importance of the assistant principal. So, what is the role? What is the responsibility? And [the researcher] was great with that, so we partner with them all the time. And because they're Delaware educators, we kind of know them. They're familiar to us, and we are familiar to them. It doesn't mean we know everybody's story, but there is a strong sense of familiarity.

Survey data revealed that most participants had favorable views regarding research, with a majority agreeing that researchers have a solid grasp on evolving problems in schools/ districts and that they want to connect with education researchers (Table 2).

How do school and district leaders prefer researchers initiate contact?
Our second research question sought to identify how school and district leaders prefer researchers initiate contact. We first wanted to understand if leaders prefer a specific mode of communication (e.g. email, phone, or in person) so that researchers can responsively employ methods that work well for leaders. Both interview and survey data were integrated in response to this research question to compare prevalent themes. Interview responses were

	Strongly agree or agree		Strongly disagree or disagree	
	n	%	n	%
Researchers have a solid grasp on evolving problems in schools/districts	15	83.3	3	16.7
I want to connect with education researchers	15	83.3	3	16.7
Most education research suggests actionable steps to take in practice	13	72.2	5	27.8
I know how to connect with education researchers	12	66.7	6	33.3
Research addresses the most important issues schools/districts face	12	66.7	6	33.3
Research takes into consideration the varying levels of resources available to schools/districts to implement research findings	10	55.6	8	44.4

Note(s): Total number of respondents is 18
Source(s): Authors' own creation

mixed regarding how leaders preferred researchers to contact them, with varied affirmations for email, phone, and in-person contact. Alternatively, when asked to select all preferred methods of communication on the survey, all respondents who completed this question indicated email contact ($n = 16, 100\%$), a quarter additionally selected phone ($n = 4, 25.0\%$), and few selected in-person ($n = 3, 18.8\%$). While the interview data did not yield a clear conclusion for how leaders prefer researchers to initiate contact, survey data suggests email is preferred. Interviews deepened our understanding of strategies for establishing communication, as some leaders suggested using multiple methods:

> We get a lot of emails because our names are public information... a five-minute phone call to introduce yourself before an email comes goes a long way. It would make somebody probably not delete the email, to be honest. I know that takes a lot of time, however, and that's why emails are easier, but I think you'd get a better response, if you put a little bit of that effort going in.

> I'm a big fan of redundancies, so maybe an email with a follow up phone call. I've never really been a big fan of the 'just show up' because I am very busy. I could be in a principals' meeting, not in the building, observing teachers, things like that. But I would say typically, for me, you know, an email with a follow up phone call usually will get a response, 'yes' or 'no', but it'll get a response.

Additionally, the study team sought to understand who the best first person is for the researcher to contact when forging a new relationship with a school or district (e.g. school secretary, principal, superintendent). Understanding the best person to establish initial contact can help researchers streamline outreach efforts for both the research team and the school or district. However, interview conversations did not reveal a clear point person. Rather, some leaders indicated it is best to start with the principal, while others indicated a district employee, and others noted it depends on the research:

> It really just depends on the topic. If it was more of a curriculum related thing, sometimes it would be more beneficial to reach out to a math coach or a literacy coach.

While a clear point of initial contact did not emerge, all interviewed leaders indicated they must talk with someone else or have multiple conversations to gain approvals from others before agreeing to participate in research:

> First, we discuss it with our administrative team here in our building, and then I would always run it up the flagpole to our district.

> A lot of times as a principal, we don't know if we're allowed to participate, so then we always have to go up and say, hey, this person called me, is this something other buildings are doing? Or we have to check with other principals.

Last, we wanted to explore what information is most important to include in these initial messages. Interviewees most often noted the importance of sharing a concise summary describing the research's relevance without the intention of overselling the importance. Interviewees further elaborated by noting the importance of specifically including the research's rationale and purpose, time commitment, and expectations of the school. This information helps the leader to then communicate the request with others and to garner support:

> The rationale behind why the research is being done is always provided, which is helpful for us. So that if parents have any questions, we're able to provide that insight.

*What factors contribute to leaders agreeing to participate in research?*
Our third research question focused on the factors that contribute to leaders agreeing to participate in research. We integrated survey and interview data for this question by

comparing top influences from each source and identifying areas of agreement. The survey provided respondents with a list of ten potential influences on their decision to participate in research. They were asked to rank which were most influential from 1–10, with the option to write in an additional eleventh influence. The study team then examined the average ranking of each influence, with a lower value indicating that the statement was more influential in their decision to participate in research (Figure 1). No respondents wrote in an additional influence.

For interview data, we asked leaders to reflect on their positive and/or negative experiences with researchers and describe how these experiences contribute to their potential participation in future research. We then compared quantitative and qualitative results to identify areas of agreement between the two sources. Four themes emerged that contribute to a leader's participation in research: (1) alignment of the research, (2) the researcher's ability to build relationships, (3) the leader's intrinsic attitudes towards research, and (4) logistical considerations related to the school or district. Both interview and survey data support the primary theme of research alignment, whereas the remaining themes emerged from the interview.

Alignment of research
The research's alignment with the school or district needs or the leader's interest arose as an important factor for agreeing to participate in future research in both survey and interview

Figure 1.
Average response of influences to participate in research
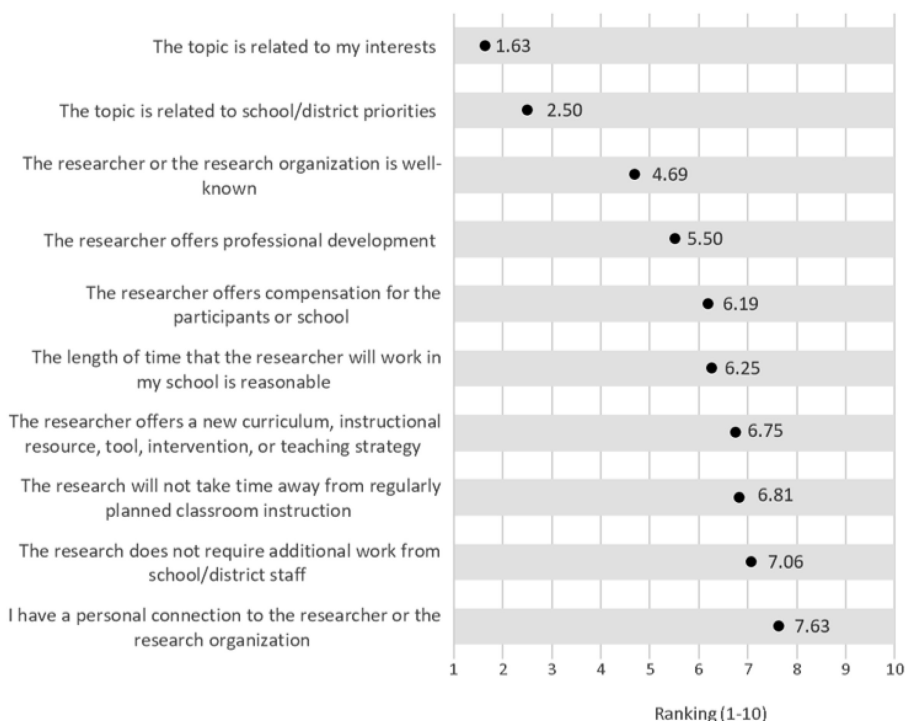
Note(s): Total number of respondents is 16
Source(s): Authors' own creation

data. Most leaders ($n = 13$, 81.3% of survey respondents) ranked research being related to their interests as their first or second greatest influence on participating. The research aligning to the school or districts' priorities was the second most influential, with three-quarters of survey respondents indicating this as their first or second priority ($n = 12, 85\%$). This finding was further supported by interviewees, with the most prevalent positive past experience with a researcher attributed to the research aligning with their school or district's needs ($n = 6, 40.0\%$):

> She [the researcher] wanted to work collaboratively with me. We were trying to move forward some special strategies in reading and she had offered to come and provide some supports in doing that. But in addition to providing the supports, having access to some classrooms to gather data for a bigger research project that she was working on, so we were providing her an environment in which she could do some of the research. And in return, we were getting some professional development supports on an initiative that we were already trying to move forward in our school. And so what was positive about that was it was a direct relation to what we were already trying to do it wasn't somebody coming in and asking us to do something different than what our plan for the year already was.

> When the work they [the researchers] are doing is something that we are looking to achieve in our own school system already, so that it synergizes the efforts, that's always something that kind of piques my interest, because we're either looking for that answer, or we are looking to do that same research.

Similarly, when we asked interviewees to elaborate on negative past experiences, the most prevalent theme was the researcher not exploring the study's alignment to school (40.0% of interviewees).

Leaders expressed that they value when researchers take time to personalize the research to fit the school's climate or needs, even when the research alignment is not initially clear. Instead of implementing the same tactics in different schools, it is beneficial for the researcher to first try to understand the school's needs and to demonstrate how their research fits within each unique school.

> The researcher was very open. . .. It was not cookie cutter. It wasn't like, 'this is what we do for everywhere,' because obviously, we can't do what we do for like Dover, and Wilmington, and Laurel. It's totally different, right? We've got three buildings, and we just need to go about business a little bit differently. So it was definitely fit and tailored to what we were trying to do based on our demographic, our area, our population.

Leaders noted the importance of researchers getting to know the school and district culture before beginning research activities. This can occur by the researcher taking time to talk with the school or district. One leader shared a particularly positive experience when a researcher got to know the school:

> We set a day up in which he [the researcher] visited all three of the schools that would be receiving this professional development, to meet with the leaders, to just really just walk the school, get a feel, get a mood for the school. And then, if there is a research team, slowly weave in that research team.

Researchers' relationship building

Interviewees further characterized their positive past experiences by describing characteristics that the researcher exhibited, such as their ability to build relationships through listening, compassion, and relatability ($n = 7, 46.7\%$ of interviewees). Therefore, it is important for the researcher to have empathetic conversations with the school's leaders to develop a mutual understanding of the research:

It's just having someone that can relate to me and meet me where I am … we may not have the appropriate lingo as far as research, but just taking the time to really understand what I'm trying to say and making sure that I'm understanding what they're trying to say so that they can actually have valid research data to support the decisions that are being made to help to maneuver through the next process, the next step or whatever their final outcomes are. So that's the biggest thing for me is just being able to relate to the person and then be genuine in our conversation if they really want to hear my voice.

Being a good listener, in terms of what my time priorities were as a leader, and understanding the complexities of school life, and what we can be putting on people's plates that's reasonable.

What I want to see is that it's not just being to check off a box at a university. I want to see that you're trying to build a relationship with me as a school leader.

Leaders also valued when researchers authentically built relationships with others in the school, such as teachers and students.

There was an opportunity for everybody that was participating, not just administrators, the teachers, community members, people that were a part of the team to provide feedback, and it was just a very safe open environment. …. And, I felt like we promoted participation from all which I think was nice, you know, for the teachers and the non-administrative staff to feel comfortable.

The researchers tried their best to relate to kids. We could tell they were trying to joke with them and build a rapport with them before conducting the survey. So that was helpful, even when we did it remotely.

Value in research
When we asked interviewed leaders about what makes them willing to participate in research, almost half of the interviewees ($n = 6$, 40.0%) mentioned their personal value of engaging in research. Moreover, participants cited their previous experience, such as completing a graduate degree involving research or seeing the benefit of research in informing practice. Some interviewees also noted that they participate in research because they hope it will have a positive impact on themselves or others ($n = 4$, 26.7%):

I'll always be open to working with researchers. I won't say that I'll always say yes, but I'm always willing to work and to hear what the project is and what their ultimate outcome is, what they're trying to accomplish. And I'm always looking for the opportunity to collaborate in a way that it's a win-win for both parties. It's a win for the people that are involved in the research, the actual participants, and of course, a win for the researcher that hopefully impacts the body of literature.

I've always understood the importance of the researcher practitioner collaboration. I'm simply here after a very long day of work, having this conversation with you, because I believe that I need to engage in those conversations and support the work that will enhance opportunities for researchers and practitioners to collaborate. . . . I want to increase those opportunities for other leaders to take on that approach to understanding issues surrounding their, you know, student needs, and family needs, and to find ways to better leverage those partnerships with researchers. So that there is an increased presence of researchers in school but a purposeful engagement.

Logistics of school
The final theme that emerged from interviews was the barriers within the school that may inhibit them from participating in research. When asked what they view as the biggest barriers to participating in research, nearly half of interviewees ($n = 7$, 46.7%) indicated the amount of time the research requires of participants. This included concerns about how research can take away from classroom instruction time and concerns with adding additional work for teachers or other school leaders:

Pulling teachers out during the instructional time with kids, I don't think ultimately is in the best interest of kids.

We also asked if a specific type of research (e.g. survey, interview, focus group, observation) is easiest for leaders to participate in when engaging in research. Interview results varied between survey, interview, and focus group. Almost half of interviewees said surveys are easiest ($n = 7, 46.7\%$), as they do not require much individual work on behalf of the leader or other personnel, as well as observations due to the fact they are routinely conducted in schools as common practice. At the same time, three interviewees noted observations as challenging because it adds additional stress to the teacher:

> I think classroom observation is probably the most difficult but can also be the most beneficial. Lining up schedules can sometimes be difficult. Some teachers are all about, 'anybody come see me, come see me.' But then others have so much anxiety about it, so I wouldn't want to put any undue stress on anybody.

How can researchers sustain relationships with school and district leaders?
Our final research question focused on how researchers can sustain relationships with leaders and was answered using only qualitative data. When asked what they hope to get from working with researchers, nearly all interviewees (93.3%) expressed that they want findings shared back with the school after the research is concluded.

> If you were able to share the findings in a way that would impact school staff, with best practices of what to implement in their school. In some sort of professional development, I think that would go a long way with principals and school leaders. And I say that because if you're conducting a survey for social emotional needs of students, for example, and you gather those findings, and there's some sort of publication, it would be so impactful if that could then be shared with teachers on how to implement those best practices, for example, in their classroom, that that turnkey, like, whole support method, I think has never happened in my experience. And not everybody can provide professional development, right? And if you're a researcher, sometimes your goal is to share the research to be published, right to get your Ph.D., whatever the case may be. But if we're able to close that loop, and see the impact of what this research has directly on us, versus reading it in some, you know, magazine, or some other form of publication, that to me would be very impactful.

> It's nice to see from someone else's lens. Like it's an outsider that knows nothing about the teacher, no background, knows nothing about these kids. Whereas, if it's me, I've seen the teacher a million times teach. I know all these kids, so having an outside perspective is nice.

> It's always great to have those extra sets of eyes that are seeing this problem, but also seeing how this same manifestation of the problem is showing up in other places. And what are those other variables that are present in other places that I may not.

Some leaders mentioned the benefit of professional development, while others noted a written summary of results and suggestions based on the findings, or a Zoom call to review would be sufficient. Meanwhile, other interviewees expressed that researchers may indicate they will share back findings at the beginning of the study, but sometimes researchers do not end up following through. Some leaders stated they never or rarely have had findings shared back with them.

Discussion
Our research offers several important implications for researchers considering how to initiate and sustain relationships with school or district leaders. First, despite statewide efforts to connect with school and district leaders for this study, the sample of participants had all participated in research before and could point to a positive past experience with a researcher.

While this finding suggests that it may be easier for researchers to work with practitioners who have prior positive experiences, we caution that this may mean that other schools–including those with similar or greater needs–are excluded from opportunities to participate. This finding may suggest additional challenges researchers face when initiating and building relationships with those in these contexts.

When considering how leaders prefer researchers to establish initial contact, we found there is no one best mode of communication (e.g. email, phone call) or a specific person to connect with when starting relationships with schools and district leaders. Rather, leaders pointed to their personal preferences for researchers establishing contact, which varied. The variation in preferences may highlight an additional barrier researchers face when beginning relationships with school and district leaders, as there is no one best practice to follow when initiating contact with different partners. In light of this, some participants suggested researchers use multiple modes of communication, within reason, to connect with one school or district. To understand how best to communicate back with schools or districts, researchers might consider talking with the school to understand their preferences for mode of communication as well as frequency. The researcher can also check in with the school to understand if preferences shift based on current needs.

Further, all participants indicated that they must consult with several others when deciding to participate in a study. It may be beneficial for researchers to anticipate that time will be needed for school and district leaders to conduct these multiple conversations before agreeing to participate, and could potentially build in support for facilitating these conversations. Next, we found that what makes school or district leaders most likely to agree to participate in research is the topic area of the study aligning with current needs or interests at the school or district. Additionally, a researcher's willingness and ability to build a relationship influenced a leader's decision to participate in research. Taken together, these findings are unsurprising as literature in RPPs highlights that shared ownership of research goals as well as relationship building are the cornerstones to successful partnerships between research and practice (e.g.Gutiérrez Penuel, 2014; Joyce & Cartwright, 2020; Penuel *et al.*, 2020). Researchers may consider incorporating time in the research plan to understand local needs, build relationships, and establish trust with participants.

Almost half of participants believed that research does not take into consideration the varying levels of resources available to schools/districts to implement research findings. This finding aligns with prior research that highlights that educational researchers can be distant from practice (e.g. Kessler & Glasgow, 2011; Van de Ven & Johnson, 2006). This further emphasizes the importance for researchers to pursue building relationships when engaging with practitioners. Researchers must not just talk with schools but truly *listen* to better understand the realities of practice.

Across research questions, we repeatedly saw foundational elements of successful RPPs emerge, such as the importance of pursuing mutual goals, facilitating bi-directional conversations, and developing trusting relationships (Farrell *et al.*, 2018, 2019; Henrick *et al.*, 2017; López-Turley & Stevens, 2015; McGill *et al.*, 2021). Given that research-practice participation was not a central focus of our study, this further supports our theory that best practices from research-practice partnerships can be a helpful starting point in understanding how to form any relationship with schools and districts.

Implications for practice

Based on our findings, we recommend that researchers take the time to listen to school district partners they seek to work with, as this will enable them to authentically understand the local context and the unique needs of the school or district. Rather than implementing a "one size fits all" approach for connecting with schools and districts, researchers might consider

approaching each new school or district as a unique new entity and intentionally tailoring strategies to meet that individual's needs. Building time into the research plan to talk with school and district leaders, understand their needs and interests, and modify plans to align with the school or district can help researchers form stronger relationships with practitioners.

For example, the University of Chicago established a long-standing partnership with the Chicago Public Schools by dedicating a year to gathering community input to craft its research agenda before engaging in a study (Tseng *et al.*, 2017). The University hosted focus groups with teachers, local leaders, and community members that culminated in a public forum to identify research priorities important to the community and then incorporated these priorities into research efforts. In another partnership, Penuel *et al.* (2015) describe how researchers and district leaders collaborated to define, create, and implement study strategies to address instructional improvement efforts important to the district. To start, researchers co-constructed the theoretical framework guiding the study with district leaders, rather than citing a theoretical framework from research as is the norm in many studies. To complete this, the researchers interviewed leaders to understand their visions and priorities for instructional improvements and their theory of instructional change. The researcher then engaged in a year-long inquiry to observe the theory of change in the district. Along the way, the researcher maintained regularly scheduled-meetings with the district leader to adapt their understanding of the theoretical framework and findings (Penuel *et al.*, 2015).

These two examples offer insights into how researchers can build successful partnerships by taking time to listen to school and district partners and to engage in meeting their needs. In both examples, researchers used strategies such as holding focus groups and interviews to prepare for a research study responsive to local priorities. In addition to these formal information-gathering efforts, researchers can regularly schedule meetings to hear from leaders about their priorities and collaboratively identify strategies to address these priorities. These informal practices might offer a fruitful starting point for better understanding district priorities and how to responsively address them.

Limitations

We acknowledge several limitations to our research. First, our sample size is relatively small. With just 16 participants, it is not possible to generalize findings beyond the state of Delaware. Considering this limitation and how vital the local context is when engaging with school and district leaders, we encourage future researchers to explore similar topics in their own region.

Another limitation of this study is that we developed all instruments before the study began. More specifically, we chose the list of influences schools and leaders consider when deciding to participate in research. A sequential design may have been more appropriate, where we first interview school and district leaders to identify common themes, then survey leaders to rank the themes that are most important to their decision to participate. This may better reflect the beliefs and values of the school and district leaders and omit the researchers' influence.

Because roles, experiences, and training influence our research (Luttrell, 2010), we acknowledge that our positionality may have impacted our interactions with school and district leaders. Although several team members have worked with leaders across Delaware, none have prior experience as a school or district leader. As such, we drafted our research questions from a researcher's perspective to learn from practitioners. An avenue for future research is to examine the questions that may arise from a school or distinct leader's perspective when working with researchers. Further, our gender and racial identities may have influenced this project, including introducing bias in the recruitment of participants, and the collection and analysis of data.

A limitation to this study is that school and district leaders were not included in the conceptualization or completion of the research, given our limited first-hand understanding of school and district leader experiences. Collaborating with leaders in the design, development, analysis, and interpretation of findings would have served as a form of member-checking to ensure that our findings accurately capture their perspectives. In response to this limitation, we intend to share results with researchers at our University while emphasizing that different practices work for different leaders and that bi-directional conversations to adjust lessons learned here are critical. We hope that emphasizing the flexibility of our findings and the importance of adjusting to meet the local context will support greater collaboration with schools or districts in our area.

Finally, it is important to note that all school and district leaders who participated in our study had some prior experience with participating in research. Additionally, nearly three-quarters of interviewed participants had ties to the University of Delaware. Schools with negative or fewer experiences with researchers may have an equal or even greater need to work with researchers. Future research should intentionally seek to connect with these schools to learn more about the additional barriers they may potentially face.

Conclusion

In this study, we sought to learn more about school and district leaders' experiences with researchers, how leaders prefer for researchers to initiate contact with schools, factors that contribute to leaders agreeing to collaborate with researchers, and how researchers can sustain relationships with leaders. We pursued this inquiry because many education researchers conduct research in local schools but may be unfamiliar with practices for initiating and sustaining relationships, especially researchers who are new to the field or have recently transitioned between institutions.

Through interview and survey data, we found that all leaders had positive past experiences with researchers. We found there is no one best method to initiate contact with schools and districts, rather methods vary and should be tailored to the individual leader's preferences. We also found that the research topic relating to their interests or needs and the researcher focusing on building relationships with the local education agency most influenced their decision to participate in the research. Finally, we found that leaders wanted researchers to follow up with the school to share findings, whether through an email or more formal practices such as a professional development.

From this work, we learned there are many ways researchers can be better partners to school and district leaders. Strengthened communication and careful consideration of the complexities and unique needs of a particular school or district are imperative. We recommend researchers build time into their research plan to get to know the school or district before conducting formal research activities. We also recommend researchers be intentional about building strong relationships to allow for bi-directional conversations with leaders, in which leaders can feel safe, heard, and understood. Through these conversations and relationship building, researchers can ensure research aligns with the school or district's needs, priorities, and ongoing initiatives. Finally, we recommend researchers discuss the best way to share findings with the school based on the school or district's preferences, whether brief or detailed, and allow for plans about sharing research to be modified as needed by the school or district.

Note

1. The state also features five additional institutions of higher education with lower levels of research intensiveness.

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Supplementary file 1
Survey

(1) How do you prefer researchers to initiate contact about doing research in your school/district? Please select all that apply.

- Email (1)
- Phone Call (2)
- Letter (3)
- Flyer (4)
- In-person (5)
- Other (6) _____

(2) What characteristics of the research most influence your decision to participate? Please rank order the options provided, with the most important characteristic as option 1 and the least important as option 11.

- The topic is related to my interests. (1)
- The topic is related to school/district priorities. (2)
- The researcher or the research organization is well-known. (3)
- I have a personal connection to the researcher or the research organization. (4)
- The researcher offers compensation for the participants or school. (5)
- The researcher offers professional development. (6)
- The researcher offers a new curriculum, instructional resource, tool, intervention, or teaching strategy. (7)
- The length of time that the researcher will work in my school is reasonable. (8)

- The research will not take time away from regularly planned classroom instruction. (9)

- The research does not require additional work from school/district staff. (10)

- Other (11)

(3) How concerned are you about allowing the follow people at your school/district to participate in research? 0 is not at all concerned, 100 is extremely concerned.

- Teachers ( )

- Students ( )

- Families ( )

- School Leaders ( )

- District Leaders ( )

(4) Please rate your level of agreement with the following statements. (Strongly Disagree (1) Disagree (2) Agree (3) Strongly Agree (4))

- Most education research suggests actionable steps to take in practice. (1)

- Researchers have a solid grasp on evolving problems in schools/districts. (2)

- Research addresses the most important issues schools/districts face. (3)

- Research takes into consideration the varying levels of resources available to schools/districts to implement research findings. (4)

- I know how to connect with education researchers. (5)

- I want to connect with education researchers. (6)

(5) How many external organizations does your school/district work with? Please provide an estimated number for each option below.

- Universities (e.g. staff from University of Delaware, Delaware Technical Community College, etc.) (1)

- Community-Based Partners (e.g. in-school, afterschool providers, libraries, museums, etc.) (2)

- Professional Development Providers (3)

- Other (4)

Supplementary file 2
Interview protocol

Introduction

(1) Begin by welcoming participants

(2) Introduce yourself, and if applicable the co-facilitator, and the note taker.

(3) Give a brief overview of the project and goals for the focus group or interview.

- "I'm going to be talking with you today to learn more about what school leaders consider when researchers approach them to work in their school. As a school leader, your perspective is extremely valuable and informative to this topic. Our goal is to learn more about how we can improve communications between researchers and school or district leaders. There are absolutely no right or wrong answers in our conversation today."

(4) Give participants information about the process, time, and breaks.

- "So before we begin, can you go ahead and fill out a brief survey that should take no longer than five minutes to complete. Once you have completed the survey, we will start our discussion."
- Distribute survey link in the chat

(5) Disclaimers

- "Thank you for completing the survey."
- Ask for Questions
- "Now we are going to transition to the interview, which I anticipate lasting no longer than an hour. I will take notes about what is discussed, and this meeting's audio will be transcribed, but individual names or identifying information will not be attached to comments."
- Ask for Questions
- Do I have your permission to record?
- If yes, start recording and restate your name, the participants name, the date, and the purpose

Questions

Warm-up

(1) What school and district do you currently work at?

(2) What is your role?

(3) How long have you been in this role?

(4) Could you please briefly describe your everyday tasks in this role?

Working with researchers

(5) What is your experience working with researchers either in this role or a previous role?

(6) While working as a school leader, think back to a positive experience you had when a researcher approached you.

- [Pause] So now that you have this positive experience in mind, what about their communication style influenced you to participate?
- [If they can't think of an experience] If you haven't been approached by a researcher, what would make the experience a positive one?

(7) Thinking back on a negative experience when a researcher approached you, what about their communication style made it a negative experience?

- How did you proceed after the negative experience? What were your next steps?
- [If they can't think of an experience] If you haven't been approached by a researcher, what would make the experience negative?

(8) How do your past experiences impact whether you will work with researchers in the future?

(9) What is the process for deciding to participate in research at your school/district?

- What's the best starting point?
- Who is involved? What role do school or district support staff have in deciding to participate in research?

- Who screens requests?

- What happens after the request gets screened?

(10) Common types of research projects include interviews, surveys, focus groups, observations, data sharing. Are there any kinds of research projects that are an easy yes? A hard no? Why?

(11) What do you hope to get out of working with researchers? For example, sharing findings with school? Publication? Other benefits for the school?

(12) *Tie back to daily-tasks noted earlier.*I know earlier you mentioned your daily tasks include ___. Can you tell me more about the initiatives you are currently prioritizing in your school?

- What demands of those priorities might make you more or less likely to engage in research?

(13) Ask for additional information they would like to share

Conclusion

1. Thank participants for joining.

Supplementary file 3

Code	Interview question
1	*What school and district do you currently work at?*
2	What is your role?
2a	Principal
2b	Assistant principal
2c	Describes past roles: respondent shared information on previous or other concurrent roles
2d	Other: respondent names a role that does not align with codes above (e.g. respondent currently works at policy level)
3	*How long have you been in this role?*
3a	Less than 3 years
3b	3–5 years
3c	More than 5 years
3d	Unclear: respondent does not name how long they have been in this role
3e	Other: respondent shares detail about time spent in other roles
4	*Could you please briefly describe your everyday tasks in this role?*
4a	Administrative tasks (e.g. grant planning, meetings, reporting)
4b	Supporting teachers (e.g. covering classes, providing professional development or resources)
4c	Supporting students (e.g. providing mentoring, academic support, or mediation)
4d	Monitoring (e.g. classroom observations, school-level oversight)
4e	Other: respondent shares information that does not align with codes above
5	*What is your experience working with researchers either in this role or a previous role?*
5a	Has worked with researcher: respondent can name an experience working with research in some capacity (e.g. they collaborated with a researcher, a researcher has contacted them, a researcher has worked in their school, they attended a PhD program)
5ab	Has not worked with researcher: respondent cannot think of an experience in which they worked with a researcher
5ac	Background information: respondent shares information on how they worked with researcher, or describes what the experience was
6	*While working as a school leader, think back to a positive experience you had when a researcher approached you. So now that you have this positive experience in mind, what about their communication style influenced you to participate? If you haven't been approached by a researcher, what would make the experience a positive one?*

(*continued*)

Code	Interview question
6a	Type of communication: respondent describes how the communication occurs (e.g. email, phone)
6b	Style of communication: respondent describes attributes of the communication that were favorable (e.g. direct, relatable)
6c	Content of communication: respondent describes what information is shared in the communication (e.g. aligns with school/districts' goals)
6d	People involved: respondent discusses the individuals the researcher communicated with (e.g. teacher, principal, district leaders)
6e	Other: respondent shares information that does not align with codes above
7	*Thinking back on a negative experience when a researcher approached you, what about their communication style made it a negative experience? How did you proceed after the negative experience? What were your next steps? [If they can't think of an experience] If you haven't been approached by a researcher, what would make the experience negative?*
7a	Type of communication: respondent describes how the communication occurs (e.g. email, phone)
7b	Style of communication: respondent describes attributes of the communication that were unfavorable (e.g. indirect, unrelatable)
7c	Content of communication: respondent describes what information is shared in the communication (e.g. misaligns with school/districts' goals)
7d	People involved: respondent discusses the individuals the researcher communicated with (e.g. teacher, principal, district leaders)
7e	Suggestions: respondent shares the communication practices that are more likely to support the collaboration between the researcher and the school/district leader
7f	Other: respondent shares information that does not align with codes above
7g	Never had a negative experience: respondent does not name a negative experience with a researcher
8	*How do your past experiences impact whether you will work with researchers in the future?*
8a	Positive experience: respondent shares favorable past experiences (e.g. liking research, completing graduate program, having a good connection with a researcher)
8b	Negative experience: respondent shares negative past experiences (e.g. researcher was rude, research didn't go well in school)
8c	No opinion/impact: respondent shares that their past experiences do not impact how they will work with researchers in the future
8d	Suggestions: respondent shares positive examples of researchers from their past that they hope other researchers will adopt
8e	Other: respondent shares information that does not align with codes above
9	*What is the process for deciding to participate in research at your school/district?*
9a	Best starting point: respondent describes the best starting point for researchers to contact a school and/ or district to participate in their work
9b	Who is involved: respondent describes which individuals are involved in agreeing to participate in the research (research team, school leaders, teachers, etc.)
9c	Who screens requests: respondent describes who screens requests (e.g. assistant principal, district leader, front desk staff)
9d	What happens after the request gets screened: respondent describes the process of how collaboration is formed between researcher and school/district
9e	Other: respondent shares information that does not align with codes above
10	*Common types of research projects include interviews, surveys, focus groups, observations, and data sharing. Are there any kinds of research projects that are an easy yes? A hard no? Why?*
10a	Easy yes: respondent describes a specific type of research that is easier or more likely for them to participate in
10b	Challenges: respondent describes a specific type of research that is difficult to participate in, or describes general challenges to agreeing to participate in research
10c	Other: respondent shares other information that does not align with codes above

Table A1. (*continued*)

Code	Interview question
11	*What do you hope to get out of working with researchers? For example, sharing findings with school? Publication? Other benefits for the school?*
11a	Sharing findings with school: respondent describes why or how it's beneficial to share findings back with the school
11b	Publication: respondent describes why or how it's beneficial for the research to result in a publication
11c	Other benefits for the school: respondent describes why or how other outputs may benefit the school
12	**Tie back to daily-tasks noted earlier.*I know earlier you mentioned your daily tasks include ___. Can you tell me more about the initiatives you are currently prioritizing in your school/district? What demands of those priorities might make you more or less likely to engage in research?*
12a	Named priority: respondent describes initiatives at their school
12b	Effect of priority: respondent describes how the initiative impacts their willingness to participate in research
12c	Other: respondent shares other information that does not align with codes above
13	*Ask for additional information they would like to share*
13a	Additional information

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