

Welcome to Our Fall Edition

By Paula Arce-Trigatti | NNERPP



Welcome to a new edition of NNERPP Extra! We hope this finds you as well as can be as we navigate the ongoing challenges related to the pandemic. Given these continued disruptions and difficult circumstances, we are especially inspired by the important work taking place in the NNERPP and RPP community. In particular, the NNERPP community's

ongoing commitment to creating positive change in pursuit of a vision of a more just, equitable education system shone through bright and clear at the NNERPP Annual Forum, our yearly July conference. It was a truly energizing learning experience with many important conversations taking place, some of which we are taking up and expanding on this issue of NNERPP Extra. We hope you stay encouraged as well.

In this edition, you'll find:

- **Research Insights:** We provide a high-level overview of what our members have worked on over the past year with respect to postsecondary research to surface similar or complementary work.
- **RPP Deep Dive:** We examine the roles research-side partners can take on in RPPs that go beyond providing research expertise.
- **Extra Credit:** We share recommendations for creating inclusive data visualizations.
- **Improving Improvement:** We hear about new improvement efforts with state- and district-level partners that aim to make continuous improvement an embedded practice.
- **Research Headlines:** We share a roundup listing all of our members' research from the past quarter.

Happy reading and take good care!

NNERPP | Extra Online

Be sure to check out the NNERPP | Extra website if you'd like to explore this issue's articles (and more!) online.

About NNERPP

NNERPP aims to develop, support, and connect research-practice partnerships in education to improve their productivity. Please visit our website at nnerpp.rice.edu and find us on Twitter: @RPP_Network.

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Postsecondary Research Priorities: An Overview of NNERPP Members’ Work in 2021

By Paula Arce-Trigatti and Nina Spitzley | NNERPP

In This “Research Insights” Edition

As returning readers know, the Research Insights series in NNERPP Extra is where we summarize and connect similar or related work conducted by the research-practice partnerships in NNERPP in order to advance our collective knowledge on these research topics. One of the areas we are seeing a lot of activity in is postsecondary research. In this edition of Research Insights, we take a look at what our members have worked on over the past year with respect to postsecondary research, organizing the studies by topic. We hope to revisit this high-level overview periodically to see how the questions that RPPs are asking and the answers they are finding around postsecondary education evolve over time.



Why This Overview

In 2021 alone, eight partnerships in NNERPP published 13 studies examining various aspects of college / postsecondary-related research questions. In this initial overview of our members’ work, we identify key categories of these efforts in order to (i) help you get a better sense of the postsecondary-related questions our members are working on and (ii) connect the research, as appropriate.

We have grouped the 13 artifacts into six broad categories, based on their respective research interests: (i) scholarships; (ii) pre-college classes; (iii) school or district level factors related to postsecondary outcomes; (iv) early warning indicators; (iv) pathways through college; and (v) impacts of the pandemic. As you’ll see in the tables below, many of the studies investigate questions pertaining to state-level interests, while just two are at the district level. Moreover, while we only see one study exploring the impacts of the pandemic on postsecondary-related outcomes, we anticipate this category growing over the next year as more partnerships look into these types of questions. Finally, from a geographic perspective, there is much activity from partnerships situated in the midwestern and western U.S., with less activity in the southern and eastern parts of the U.S.

We begin the synthesis below with studies related to scholarships, and then follow with the remaining topical areas noted above.

NNERPP Members’ Areas of Work

»SCHOLARSHIPS | 3 total | West = 1, South = 2

Region	WEST	Community Philanthropy for Student Success Initiative: Evaluation Summary	Of Note: • Includes community philanthropy initiative theory of action
Location	California	John W. Gardner Center for Youth and Their Communities, January 2021	

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

Artifact Type	Report	<p>Overview. An evaluation of the "Community Philanthropy for Student Success Initiative" (CPI). CPI explored how community funding could play a role in reducing disparities among college completion rates for California students.</p> <p>Keywords: California, college completion, philanthropy, program evaluation</p>	<ul style="list-style-type: none"> • Studies to what extent CPI reached its 5 year goals, including factors that aided/prohibited progress • Shares lessons learned for other philanthropy communities wishing to achieve equitable college completion rates
# of Pages	5		
Region	SOUTH	<p>Helping Youth Realize Their College Dreams: An Impact Study of the San Antonio Area Foundation's Scholarship Program Urban Education Institute, April 2021</p> <p>Overview. An evaluation of the San Antonio Area Foundation's higher education scholarship program, including estimated impacts on college enrollment, degree completion, student debt, and need to work while in college.</p> <p>Keywords: college completion, college enrollment, community philanthropy, program evaluation, Texas</p>	<p>Of Note:</p> <ul style="list-style-type: none"> • Includes 5 clear policy recommendations based on the research findings • Provides technical considerations of the research study and design as well • Study was made possible because of the Foundation's work in collecting the necessary data
Location	Texas		
Artifact Type	Report		
# of Pages	64		
Region	SOUTH	<p>Does the Timing of Money Matter? A Case Study of the Arkansas Academic Challenge Scholarship Office for Education Policy, February 2021</p> <p>Overview. A case study analysis of the "Arkansas Academic Challenge Scholarship" program (ACS), focusing on the impacts of the scholarship on various outcomes (GPA, credit accumulation, graduation rates) for currently enrolled college students, who became eligible when the program was launched.</p> <p>Keywords: Arkansas, college GPA, college completion, credit accumulation, policy evaluation, scholarships</p>	<p>Of Note:</p> <ul style="list-style-type: none"> • Focus on scholarship effects for students already enrolled in college when they became eligible • Explores potential benefits and drawbacks for using merit scholarships as a policy lever • Looks into whether the timing of merit aid matters for various outcomes (i.e., sophomore recipients vs juniors vs seniors) • Includes a discussion of policy implications
Location	Arkansas		
Artifact Type	Policy Brief		
# of Pages	5		

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

>>PRE-COLLEGE CLASSES | 4 total | West = 2, Midwest = 1, East = 1

Region	WEST	Understanding Access to and Participation in Dual Enrollment by Locale and Income Level REL Central, May 2021	Of Note:
Location	CO, KS, MO, NB, ND, SD, WY	Overview. Descriptive study looking at dual enrollment access and participation patterns across a number of central-U.S. states. Explores how patterns varied with school characteristics, examining these in the context of the individual states, as a region, and how they compare nationally.	<ul style="list-style-type: none"> REL Central region is more rural than the national average, providing a good setting to study this Uses data on students and schools from the Civil Rights Data Collection and the National Center for Education Statistics Findings can inform state policies and practices related to college and career readiness, especially in terms of dual enrollment
Artifact Type	Descriptive Study		
# of Pages	14	Keywords: descriptive study, dual enrollment, access and participation patterns, rural education, state policy	

Region	WEST	The Impact of Career and Technical Education on Postsecondary Outcomes in Nebraska and South Dakota REL Central, May 2021	Of Note:
Location	Nebraska, South Dakota	Overview. Research study examining the relationship between completing career and technical ed (CTE) courses in high school and three student outcomes: on-time high school graduation, postsecondary enrollment, and postsecondary completion (within 2 and 5 years).	<ul style="list-style-type: none"> Nebraska and South Dakota enacted CTE-related policies to improve the alignment between workforce needs and high school students' skills Looks at outcomes for CTE "concentrators", which is a student who takes a sequence of 2-3 CTE courses aligned to specific career cluster The study finds a large, positive impact of being a CTE concentrator on student outcomes
Artifact Type	Research Study		
# of Pages	11	Keywords: career and technical ed, high school graduation, Nebraska, postsecondary enrollment and completion, South Dakota, state policy	

Region	MIDWEST	Indiana and Minnesota Students Who Focused on Career and Technical Education in High School: Who Are They, and What Are Their College and Employment Outcomes? REL Midwest, June 2021	Of Note:
Location	Indiana, Minnesota		<ul style="list-style-type: none"> Studies how CTE "dosage" differs among students and for whom (i.e., concentrators, explorers, samplers, and nonparticipants)

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

Artifact Type	Descriptive Study	Overview. Research study providing descriptive look at CTE participation in terms of dosage and evaluating impact of CTE coursework on college enrollment, degree attainment, employment rates, and earnings.	<ul style="list-style-type: none"> Indiana and Minnesota define concentrators differently; findings of the research study are still fairly consistent across states Includes a discussion of implications, especially how high school teachers and guidance counselors might use this work
# of Pages	16	<p>Keywords: career and technical ed, descriptive study, CTE participation patterns, Indiana, Minnesota, postsecondary enrollment and completion, state policy, workforce outcomes</p>	

Region	EAST	<p>The Effects of Accelerated College Credit Programs on Educational Attainment in Rhode Island REL Northeast & Islands, June 2021</p>	Of Note:
Location	Rhode Island	Overview. Descriptive study seeking to understand how accelerated college credit programs (e.g., dual enrollment, concurrent enrollment, and Advanced Placement) impacts high school completion, postsecondary enrollment, and postsecondary coursetaking.	<ul style="list-style-type: none"> Rhode Island has invested significantly in efforts to expand access to college credit programs through "PrepareRI Dual Enrollment Fund" Study compared participation rates in the accelerated college credit programs by student and school characteristics Focused on first-time 9th graders in the 2013/14 school year
Artifact Type	Descriptive Study	<p>Keywords: Advanced Placement, concurrent enrollment, dual enrollment, high school graduation, postsecondary enrollment, Rhode Island, state policy</p>	
# of Pages	18		

>>SCHOOL or DISTRICT LEVEL FACTORS | 2 total | Midwest = 1, N/A = 1

Region	MIDWEST	<p>Do College and Career Readiness and Early College Success in Indiana Vary Depending on Whether Students Attend Public, Charter, or Private Voucher High Schools? REL Midwest, March 2021</p>	Of Note:
Location	Indiana	Overview. Descriptive study that explores the connection between type of high school attended (e.g., public, charter, private) and performance on indicators of college and career readiness and early college success.	<ul style="list-style-type: none"> Indiana made large investments in both its charter schools and private school voucher program Examined how students background characteristics related to high school type While not causal, the study provides a first look at how students are sorting
Artifact Type	Descriptive Study		

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

# of Pages	17	Keywords: descriptive study, early college success indicators, high school type, Indiana, readiness indicators	themselves and their resulting performance on a variety of relevant outcomes, which can lead to future research
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Region	N/A	<p>Steps to Develop a Model to Estimate School- and District-Level Postsecondary Success REL Central, March 2021</p> <p>Overview. Tool that helps state and local education agencies in designing and running a model to predict student postsecondary success at the school or district level.</p> <p>Keywords: model development, postsecondary success, state policy, tool</p>	<p>Of Note:</p> <ul style="list-style-type: none"> • Tool draws from previous work done with the Kansas State Dept. of Education on the Kansas Postsecondary Effectiveness Model • Intended to measure influence schools have on their students' success post-high school • Results can be used for federal reporting requirements and comparative analysis across schools
Location	N/A		
Artifact Type	Tool		
# of Pages	19		

>>EARLY WARNING INDICATORS | 2 total | South = 2

Region	SOUTH	<p>Identifying Indicators that Predict Postsecondary Readiness and Success in Arkansas REL Southwest, June 2021</p> <p>Overview. Descriptive study testing the strength of a collection of middle and high school indicators in predicting postsecondary readiness.</p> <p>Keywords: Arkansas, middle and high school indicators, postsecondary readiness</p>	<p>Of Note:</p> <ul style="list-style-type: none"> • The Arkansas Dept. of Education identified a collection of middle and high school indicators to monitor student performance towards postsecondary readiness • The indicators paired with student background characteristics were more accurate than using student background characteristics alone
Location	Arkansas		
Artifact Type	Descriptive Study		
# of Pages	16		

Region	SOUTH	<p>Alternative Career Readiness Measures for Small and Rural Districts in Texas REL Southwest, February 2021</p>	<p>Of Note:</p> <ul style="list-style-type: none"> • Recent Texas law established a funding bonus for districts related to the number of
Location	Texas		

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

Artifact Type	Descriptive Study	Overview. Descriptive study exploring the potential for alternative career readiness indicators to measure career readiness for students in small and rural districts who otherwise do not have access to CTE program or course resources.	students that met college, career, and military readiness (CCMR) indicators via the state's accountability system
# of Pages	45	Keywords: career readiness , high school indicators , military readiness , postsecondary readiness , rural , Texas , state policy	<ul style="list-style-type: none"> Local capacity and funding issues may prevent small and rural districts from providing the coursework that could result in CCMR

>>MOVING THROUGH COLLEGE | 1 total | Midwest = 1

Region	MIDWEST	Navigating the Maze: Understanding CPS Graduates' Paths Through College UChicago Consortium on School Research, May 2021	Of Note:
Location	Chicago, IL	Overview. Descriptive report exploring the patterns of college enrollment and non-enrollment for high school graduates, including a deep dive into the timing, type, and frequency of post-secondary transitions by student groups.	<ul style="list-style-type: none"> Includes a number of visualizations to help illustrate the "maze" students move through as they proceed through college Provides several snapshots of how postsecondary mobility differs by various student characteristics Unique methodology for developing mobility categories, as well as special use of a sequential approach to describing patterns of transfer and enrollment that provide different takes on college pathways
Artifact Type	Descriptive Study		
# of Pages	39	Keywords: Chicago , college completion , postsecondary pathways , postsecondary mobility	

>>IMPACTS of the PANDEMIC | 1 total | Midwest = 1

Region	MIDWEST	College During the Pandemic: Immediate Enrollment and Retention of CPS Graduates in Fall 2020 UChicago Consortium on School Research, April 2021	Of Note:
Location	Chicago, IL	Overview. Descriptive brief summarizing patterns of immediate postsecondary enrollment and retention	<ul style="list-style-type: none"> Explores the extent to which the pandemic impacted patterns of college enrollment and retention for high school graduates

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Postsecondary Research Priorities: An Overview of NNERPP Members' Work in 2021, continued

Artifact Type	Descriptive Study	for high school graduates during the fall of 2020.	<ul style="list-style-type: none"> Findings show that the class of 2020 continued to enroll in four-year colleges at similar rates to previous classes Findings also show a decline in two-year college enrollment and retention, especially among students of color
# of Pages	24	<p>Keywords: Chicago, COVID, postsecondary enrollment and retention, descriptive study</p>	

Conclusion

The questions that RPPs in NNERPP are examining in their postsecondary research are multifaceted and span the entire postsecondary trajectory, from postsecondary preparation in high school to degree completion and workforce outcomes and how scholarship programs are impacting students' postsecondary success. In particular, partnerships are concerned about equal access to accelerated college credit programs, supporting all students in achieving postsecondary readiness, understanding how students navigate college and providing more targeted support accordingly, examining how career and technical education relates to college and work outcomes, and evaluating how scholarship programs and initiatives support students.

If you are also doing work in this area, we hope this overview helps you determine how your research fits (or doesn't) with that produced by other partnerships, and which questions future research should prioritize. For anyone simply curious to find out more about postsecondary research conducted by RPPs, we hope this article is a starting point for exploring recent postsecondary work. We encourage you to examine the studies included here in greater detail -- and we look forward to revisiting this research topic in the future!

- *Paula Arce-Trigatti is Director of and Nina Spitzley Marketing Specialist at the National Network of Education Research-Practice Partnerships (NNERPP).*

Should Researchers in RPPs Only Research? Exploring Roles for Research-Side Partners That Go Beyond Research

By Emi Iwatani and Quinn Burke | Digital Promise

Introduction

A primary goal of research-practice partnerships (RPPs) is to “[support] the partner practice organization in achieving its goals,” as contended by Erin Henrick et al. in Dimension 3 of the [Henrick, et al. RPP Effectiveness Framework](#) (p. 11). In support of this aim, the authors also suggest three indicators RPPs might use to measure progress towards this dimension:

1. The RPP provides research and evidence to support improvements in the partner organization;
2. The RPP helps the practice organization identify productive strategies for addressing problems of practice; and
3. The RPP informs the practice organization’s implementation and ongoing adjustments of improvement strategies.

Upon closer reflection, these indicators all revolve around what we would label research-centric supports, that is, activities that are tied closely to knowledge-generation and dissemination. Indeed, we have certainly seen several cases where RPP partners on the research-side often support practice-side organizations by providing:

- Research-based information and references
- Research-informed learning opportunities and products
- Research strategies/capacities that practitioners can apply to their own work (e.g., articulating research questions from problems of practice, plan-do-study-act cycles)



And yet, we have also experienced several instances in our own partnership efforts where we needed to engage in non-research related activities in order to support our practice-side partners in achieving their aims. This led us to ask: What else can researchers offer practitioners in these RPP relationships? Do RPP researchers only do research? Or is there a collection of partnership activities that R-side partners should consider part of their charge as well?

In this Deep Dive, we take a closer look at these questions by reflecting upon our own practice, as well as summarizing what we learned during a workshop we hosted at the recent [NNERPP Annual Forum](#) in July, where we asked participants to thought partner with us on research-side activities they engage in to support their practice-side partners. Although there is clearly a role for research-side partners to play with respect to research-related activities, we think there is great potential (and perhaps need) for research-side partners to also consider supporting activities that might go beyond these boundaries.

Our Experience

In our recent CSforAll RPP working with two rural Eastern Kentucky school districts, “[Tough as Nails, Nimble Fingers: Developing a K-8 Coding Pathway for Kentucky Appalachia](#)”, despite our best efforts to make a teacher survey relevant to classroom implementation – harkening back to one of the indicators identified by the Henrick, et al. RPP Effectiveness

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Should Researchers in RPPs Only Research? Exploring Roles for Research-Side Partners That Go Beyond Research, continued

Framework –, our practitioner partner remarked that the information we gathered was not particularly useful to them because they already knew about the general baseline trends that the research side aimed to systematically capture. Although this example may be an isolated incident, it illustrates the nature of the questions we raised above: what else might research-side partners do that goes beyond research-centric activities in our best effort to support practice-side partners?

While we have not confirmed this with our partners, we suspect that some of the incidental and “non-research type” supports we provided in other partnership examples – like suggesting ways to organize their district lesson capture tool, and providing comments on their recent grant proposal – were greatly appreciated, even though these were less central to our goals as researchers. And so, while the priorities of practice-side organizations can align exactly with those of research-side partners, sometimes this isn’t the case.

These examples also touch on a related point: On the one hand, it remains important to think carefully about partnership artifacts that are not conceived in a vacuum but are developed collectively among the key players of the RPP to ensure mutual relevance. While not explicitly called out in the indicators identified by Henrick and colleagues, there is an inherent sense that the activities taken up by research-side partners in support of their practice-side partners will be of benefit to both sides.

On the other hand, the examples also point to the difficult but important work of arriving at (and maintaining) mutual problems of practice. And for this, returning to a project’s original research questions may not be enough, hence the deviation towards non-research-centric activities that will be especially helpful to the practice-side. We note the recently published [NNERPP RPP Brokers Handbook](#) that describes a wide range of brokering practices, which are often “invisible” but help to sustain meaningful RPPs. The Handbook contains a number of examples illustrating the types of activities that are not squarely in the “research” space but are perhaps necessary for partnership work to move forward.

Given these reflections, we decided to next test some of our thinking with participants at the NNERPP 2021 Annual Forum in July.

What Does the NNERPP Community Think?

For our Annual Forum session, “Can RPP researchers serve roles beyond research? Should they?”, we sought to thought partner with the NNERPP community in an effort to expand our understanding of the questions raised earlier. We thought this topic an important one for the RPP community, partly to help examine and calibrate power dynamics within our RPPs, and partly to help increase the potential for impactful RPP work.

About 20 NNERPP members attended the workshop, sharing various ways in which they supported practitioner goals and naming the roles beyond what might be typically expected of researchers (Exhibit 1). The types of supports identified by workshop attendees overlapped closely with the examples we shared about our RPP, including providing technical assistance with data collection/curation, supporting instructional or resource procurement needs, supporting practitioners’ communication needs, and brokering productive relationships for the practitioner organization.

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Should Researchers in RPPs Only Research? Exploring Roles for Research-Side Partners That Go Beyond Research, continued

Exhibit 1. Examples of how research-side partners in NNERPP have supported practitioner goals beyond research (verbatim responses from jam board, organized under categories created by Iwatani and Burke)

Types of Non-Research Activities to Support Our Practice-Side Partners	Examples from the NNERPP Community, Gathered During the 2021 NNERPP Annual Forum
Provide technical assistance in data collection/curation that are not necessarily related to the main project goal	<ul style="list-style-type: none"> • Data policy, practice, and governance coaching and support. E.g. creating codebooks or configuring warehouses • Supported with technical assistance in calculating school/district level goals • Compiled a list of community-based organizations that work with various populations of families and youths • Keeping [practitioners] updated on research outside of what [we are] doing together
Provide strategic thought-partnership	<ul style="list-style-type: none"> • Being a thought partner to support needs sensing
Support instructional needs	<ul style="list-style-type: none"> • Provide support through k-12 intervention student needs with pre-service teachers
Support communications needs	<ul style="list-style-type: none"> • Communicating to the broader community... parents, etc... • Data support, helping tell the story to policy makers about why more needs to be invested in data infrastructure
Support needs for resource procurement	<ul style="list-style-type: none"> • Seeking funding opportunities to support initiatives
Broker relationships and align other players in the field to support district initiatives	<ul style="list-style-type: none"> • Brokering between multiple state agencies working on the same policy • Aiming to create a coherent pipeline from the teacher prep program to schools/district • Presenting research to the legislature

In terms of whether researchers should provide such supports, the group comments were split between “yes,” “no,” and “it depends” (Exhibit 2). Several who said “yes” suggested that **playing roles beyond research helps to ensure the success and sustainability of the RPP goals**. For example, if an RPP is funded to design a CS/CT pathway, but the researchers rely solely on the practitioners to get community buy-in and procure the materials, the chances of the project’s success and sustainability may be jeopardized. Thus, it may be better to support practitioners in these areas, skills and resources permitting.

Another reason for RPP researchers to support practitioners beyond research was based on a **principle of decency** – if our practitioner partners have needs that researchers can easily fill, why not? Isn’t that some of the unstated (if not invisible) benefits of such a partnership? As one workshop participant pointed out, many researchers have deep expertise in data

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Should Researchers in RPPs Only Research? Exploring Roles for Research-Side Partners That Go Beyond Research, continued

infrastructure, and can easily be consulted about this. Likewise, many researchers have experience with proposal writing/review, communications, and strategic networking, which practitioner partners might need and appreciate if these can be easily shared. Many of those who said “it depends” and “no” were concerned about potential negative consequences to the practitioners and researchers, and about what the bounds might be for providing such “beyond research” support. What if the researchers don’t have the interest or expertise to support the districts in any special way? What if this well-intentioned support turns out to be a burden for the practitioners? And what are justifications and boundaries for providing such support? Shouldn’t the RPP provide resources to support this by design, rather than rely on researcher volunteerism?

Exhibit 2. NNERPP workshop participants’ responses to: “Should RPP Researchers support practitioner organizations beyond research? Why/why not?” (Verbatim responses under categories that existed on the jam board)

YES	IT DEPENDS	NO
<ul style="list-style-type: none"> • Yes! • Yes • Because knowledge utilization is important and can be fostered by researchers • Yes! Capacity in practitioner organizations is often limited. Supports offered by research partners are often necessary to translate research findings into meaningful impacts • Data infrastructure could be informed by researchers • After the \$ ends, initiatives often quickly die/ disappear; this is OFTEN characteristic of steep research & practitioner divides 	<ul style="list-style-type: none"> • Depending on the priority to be addressed • Yes, if qualified • TIME. It depends on the task: Is it simple or will it require a lot of extra work? • They should whenever they can but should be based on their skillset based on their strength/training as researchers. (I’m constantly thinking about how to repurpose their skills) 	<ul style="list-style-type: none"> • Does this just mean MORE work for teachers/ admin? Have you ably budgeted for an RPP? • Or maybe instead of “NO”, under what conditions should we discourage this? • If staff are uninterested or don’t have the expertise • I think there is an issue/question to consider in terms of systematizing. Would “beyond research” be something that can be systematized or would it be ad hoc and one-off?

In Closing

In reflecting on workshop attendees’ responses, we appreciated the concerns about negative impact to practitioners, and agree this needs careful consideration. With regards to concerns about the boundaries of the researcher role, we encourage interested research-side partners to continue to explore their own limits, because this is an interesting frontier of RPP methodology. On that front, one exercise that we recommend is to have continual open discussions about RPP members’ individual goals and hopes, in addition to discussing the group’s goals and hopes. We recently did this when creating our project dissemination plan for this academic year. In addition to discussing what we thought might be good products per our shared project goals and

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Should Researchers in RPPs Only Research? Exploring Roles for Research-Side Partners That Go Beyond Research, continued

funding source, we made space for researchers and practitioners to share what types of dissemination efforts they most wanted to see happen, given their personal interests and professional role. From this question, we found out that one of our practitioner partners wants to create a white paper for policy makers, and another wants teacher success stories to be disseminated across the school community. Neither of these are an exact fit with the general research plan as initially conceived, but they are important to our partners, important to project sustainability, and therefore important to us. We have shifted how we conceptualize time and resource allocation to fit these in, and look forward to supporting these efforts, taking on “beyond research” support roles such as editing and co-writing.

Whether, how, when, and under what conditions research-side partners should serve in roles beyond research is very much an open question, and the answer to this question might look different for each individual partnership and project. We hope this article serves as a starter for the RPP community to think further about this, and look forward to the ensuing exchanges and new discoveries.

● *Emi Iwatani is a Senior Learning Sciences Researcher and Quinn Burke is Director of Computational Thinking Research at Digital Promise.*

How to Create Inclusive Data Visualizations

By Negeen Aghassibake | University of Washington Libraries



Data visualization is a powerful tool that can help explore and analyze data. It allows you to take many data points and look for patterns and trends.

But what about the data points themselves? What are they and what do they represent?

When working with data, it is important to remember what is behind the data points. Data does not exist on its own. It can only be generated by the contributions of people and places – whether they share their own information or are the ones who are collecting that information.

As a result, in order to respect and empower the people who are represented in the data or providing their labor to gather, prepare, and visualize the data, it is critical to implement inclusive data visualization practices. Here, I share some practices for creating inclusive and equitable data visualizations.

Framing

To set up the rest of this article, I'll first look at a more theoretical framing, then share some concrete examples of inclusive practices.

Giorgia Lupi, a co-creator of the Dear Data series, writes:

“Data represents real life. It is a snapshot of the world, in the same way that a picture catches a small moment in time. Numbers are always placeholders for something else, a way to capture a point of view – but sometimes this can get lost. Failing to represent these limitations and nuances and blindly putting numbers in a chart is like reviewing a movie by analyzing the chemical properties of the cellulose on which the images were recorded.” [Lupi, G. Data Humanism, The Revolution will be Visualized.

<http://giorgialupi.com/data-humanism-my-manifesto-for-a-new-data-wold>]

This concept sets up the idea that data are a proxy for real people, places, and things. When we manipulate the data (such as when we “clean,” “wrangle,” and “tidy” data), we move further away from those people, places, and things.

Let's look at an example: the U.S. Census. A person fills out a form that uses standard U.S. Census definitions and options for race. In this case, let's say they identify as white. However, if you had asked the person to fill out a short answer question about their race, they would have identified as Iranian, ethnically Persian, which is a very different answer.

When we look at how the United States defines race, we see that “white” actually comprises of large groups of people who likely have different lived experiences, bodies, and histories. There are only a few racial categories defined in the Census, which are not sufficient to capture the full identities of people. This oversimplification of racial data makes it very easy for computers to process and for analyzers to make comparisons, but fails to recognize the full depth of individual histories and identities. This can also erase entire groups of people and create harm if those who are contributing to the data do not feel seen in the data. When working on a visualization, remember to ask yourself: Who is being prioritized in this visualization? Who is being erased? Is anyone being harmed if I create this visualization?

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How to Create Inclusive Data Visualizations, continued

What can I do about it?

Although there are often structural issues with how we collect data that we can't control, there are choices we can make as individuals to be more inclusive in our data visualizations. This is not a comprehensive list, but can hopefully serve as a good starting point!

- 1) Collaborate with others to include multiple perspectives and be transparent in the decisions that you make when you collect, analyze, and visualize the data. For example, you can note in the data visualization if some important decisions were made that affect what is seen in the visualization.
- 2) Put care into how you speak about your data by using inclusive language and labels. Titles and labels are often the first thing that readers of your visualization will see, so using inclusive and transparent language there is crucial.
- 3) Represent the people who have contributed to your data and share data with the community that you are working with throughout the process.
- 4) Remember that icons and images can reinforce stereotypes. Select inclusive visuals that do not reflect social inequities.
- 5) Ask yourself: What do the readers of my visualization see when they first look at it? What they see first can often set the benchmark upon which they judge other categories. For example, "white" is often the first option in questions about race in the Census and the first data point in visualizations, which creates a divide between those who respond as white and other racial categories. Some alternatives to categorizing by size are to categorize alphabetically, by stakeholder group, and so on.
- 6) When reading or creating a map, it can help to think about who created the borders of the map – both historically and in whoever created the base layer of the map. Who is missing in the labels, and who is made invisible based on the decisions around borders?

In conclusion, the biggest help is to pause, think critically about your data and the people behind it, and prioritize inclusivity.

Where can I read more?

There are many people who are working in the data visualization field who are also concerned about inclusion and visualization. A few recommended readings are listed below:

- [“Abigail Echo-Hawk on the Art and Science of ‘Decolonizing Data’”](#) by Manola Secaira (2019)
- [“Data Humanism, The Revolution will be Visualized”](#) by Giorgia Lupi (2017)
- [“A Primer on Non-Binary Gender and Big Data”](#) by Catherine D’Ignazio (2016)
- [“What would feminist data visualization look like?”](#) by Catherine D’Ignazio (2015)

- *Neegen Aghassibake is Data Visualization Librarian at the University of Washington Libraries.*

Improving Improvement: Testing Theories of Institutional Capacity Building

By David Hersh | Proving Ground

This is the fifth installment of *Improving Improvement*, our quarterly series focused on leveraging the power of research-practice partnerships (RPPs) to build schools', districts', and states' capacity to improve. In our first year or so of writing for NNERPP Extra, we have shared an [overview of our improvement work](#), lessons learned from [working with existing partners during the pandemic](#), lessons learned from [creating and launching an improvement-focused RPP in response to the pandemic](#), and [results of pandemic-year interventions](#). We also argued for [using stimulus funding to invest in an improvement infrastructure](#) with RPPs playing a central role.



In the next few installments, over the course of the 2021-2022 school year, we will again be writing about engaging partners in improvement work during a year filled with unknowns, but with a more explicit focus on how we are helping states and districts make continuous improvement an embedded practice rather than an add-on. We begin here by laying out the work ahead for our partnerships and the questions we hope to answer this year. As the school year progresses, we will update you with lessons we learn along the way and share any insights we hope you might find useful. We'll close out the year with reflections on how it all went.

New Partnerships & New Networks

Our goal is ultimately for our partners to make evidence-based continuous improvement –including piloting and evaluating interventions– part of the ordinary course of business in their agencies. Toward that end, one lesson learned from three-plus years working with districts and charter management organizations (CMOs) is that building individuals' competency in the key elements of continuous improvement is a necessary but not sufficient condition for full adoption. Educators work within an institutional framework that often creates barriers to the kind of practices we promote. For example, after guiding partners through a full improvement cycle last year, we asked whether they would continue using the practices on which we worked with them. One partner answered that they could do it but most likely wouldn't. There were several reasons they cited but a key one was that competing pressures and priorities get in the way of the type of deep thinking our process embraces: the classic “urgent vs. important” argument.

To meet our goal of embedded evidence-based continuous improvement, then, we need to begin by breaking down those barriers. Because many of those barriers derive from state-imposed requirements that either conflict with or are in addition to good improvement work, we spent much of 2020-2021 recruiting states to support intrastate networks designed to better align our work with state requirements. The key was that state support would include not just financial support but also an endorsement of the work our partners would do as part of, rather than in addition to, state requirements. We had several states in mind based on prior interactions and two new states signed on to begin work this year.

In Georgia, the Department of Education (GaDOE) is sponsoring a five-district network focusing on attendance and engagement.

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Improving Improvement: Testing Theories of Institutional Capacity Building, continued

Georgia's Continuous Improvement Cycle

Using Georgia's Continuous Improvement Cycle to develop your plan for improvement.

- Comprehensive Needs Assessment
- Identify Root Causes
- Overarching Needs – Action Steps
- Develop a Plan for Interventions
- Implement the Plan
- Reexamine the Data



Georgia has its own continuous improvement cycle for districts to use in developing their improvement plans. Districts using Proving Ground's improvement process will effectively be building organizational and individual capacity to execute the state's model well. At the same time, GaDOE staff charged with supporting their districts will learn additional tools and strategies to help them more effectively engage in continuous improvement work as they collaborate with us.

The second state[i] plans to go a step further. The state hopes to adopt our model as the model for supporting its highest-need districts and align it with their accountability and support system. As this goes to press, the state is finalizing the participant list, with anywhere from five to eight districts participating. To further the incorporation into the broader strategic planning process, districts will have a choice of priority outcomes on which to focus based on their review of their own data.

These new state networks join our existing Ohio attendance network, two partners focusing on math, and over 40 rural partners in the [National Center for Rural Education Research Networks](#). All the networks will learn from each other; each is testing a different hypothesis about how best to make improvement methods part of the ordinary course of business in education agencies.

New Delivery Models

We're also testing other hypotheses by trying new models of delivering support to our networks. Our existing models all involve district partners sharing data with us. Center for Education Policy Research (CEPR) analysts conduct impact evaluations on behalf of these districts, and we incorporate the results into the decision-making process. Now, two new models will assess the viability of building districts' capacity to evaluate impact themselves. The theory behind this is that, to be truly sustainable and impactful, districts will ultimately have to do all parts of the process themselves. Both models will test this, but each will also test one more hypothesis about how to best build capacity and increase the odds of self-directed improvement taking hold.

The first, which we are calling Proving Ground Accelerator, launches this year with both new intrastate networks. Accelerator will test the hypothesis that district teams can be directly trained to institutionalize continuous improvement by assessing the degree to which we can help partners build not just individual but also institutional capacity. All content is delivered in a workshop series in which network members learn the competencies of continuous improvement alongside each other. Workshops will follow an explain-model-practice framework (read more about this approach [here](#)). Partners will also receive support from Proving Ground Improvement Coaches as they execute their improvement cycles on their own between workshops. Accelerator also includes a Superintendent's Institute to help district leaders create and support the conditions for effective continuous improvement and workshops focused explicitly on incorporating continuous improvement into strategic planning, transitioning and sustaining the work.

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Improving Improvement: Testing Theories of Institutional Capacity Building, continued

The second new model, which we are calling **Jumpstart**, launches next year to test the hypothesis that districts will be more likely to adopt improvement methodologies if we can make it easier for them to do it. To that end, we created a web application to guide districts asynchronously through continuous improvement cycles. While all partners will have access to the web app, Jumpstart districts will receive only targeted support in using it. We will start with five pilot districts in Summer/Fall 2022. For now, we are recruiting participants to provide feedback on this model before we launch the pilot.

New Outcomes

Our last hypothesis for the year is that full adoption of an improvement methodology requires demonstrating its utility for any outcome which educators might be interested in improving. To that end, when we recruited partners this year –whether at the state or district level– we did not recruit on particular outcomes. Instead, we let partners choose their desired topics and then tried to include multiple districts for each one. The result was three groups: attendance, math, and a third where districts will choose from a set of state priorities based on their data.

Looking Ahead

In future installments of Improving Improvement, we'll share updates on the progress of each of our networks and lessons learned for practitioners hoping to bridge the research-practice divide.

We are also always open to additional suggestions for topics for future editions of Improving Improvement. Reach out to us with any questions you have about our networks, continuous improvement process, or ideas you'd like to see us tackle.

[1] We have a contract pending. Until it is signed, we will not be able to name the state publicly.

● *David Hersh (david_hersh@gse.harvard.edu) is Director of Proving Ground.*

Research Headlines From NNERPP Members: Last Quarter

ATTENDANCE

REL NORTHEAST & ISLANDS
examines the implementation of attendance supports in the Providence Public School District

COVID-19

EDUCATION POLICY INNOVATION COLLABORATIVE
examines relationship between in-person schooling and the spread of Covid-19 (update)

HOUSTON EDUCATION RESEARCH CONSORTIUM
examines school district action plans from spring 2020

METRO ATLANTA POLICY LAB FOR EDUCATION examines
-- how virtual summer school during the pandemic impacted learning in elementary and middle school
-- virtual learning trends during the pandemic

METROPOLITAN EDUCATIONAL RESEARCH CONSORTIUM
examines digital equity in the time of Covid

CURRICULUM & COURSETAKING

METRO ATLANTA POLICY LAB FOR EDUCATION
examines the relationship between upper elementary math assessment scores and Algebra I with additional supports

EARLY CHILDHOOD EDUCATION

EDUCATION POLICY INNOVATION COLLABORATIVE
-- estimates retention outcomes under Michigan's Read by Grade Three law
-- examines students' progress toward learning goals during the pandemic

REL MIDWEST
examines the impacts of a teacher professional development initiative to improve early literacy instruction

REL NORTHWEST
examines professional development incentives for Oregon's early childhood education workforce

SCHOOL CHOICE

UCHICAGO CONSORTIUM
examines students' experiences with the high school choice process

SCHOOL EFFECTIVENESS AND QUALITY

REL MID-ATLANTIC examines
-- the effect of different designs on school report cards usability
-- the promotion power of public high schools in the District of Columbia

SCHOOL IMPROVEMENT

REL CENTRAL
develops guide to identifying similar schools to support school improvement

SOCIAL EMOTIONAL LEARNING

HOUSTON EDUCATION RESEARCH CONSORTIUM
examines social and emotional skills of Houston students

REL MID-ATLANTIC
examines how data on social emotional learning can inform district decisionmaking

RESEARCH ALLIANCE FOR NEW YORK CITY SCHOOLS
examines the relationship between SEL growth and academic achievement

STUDENT MOBILITY

HOUSTON EDUCATION RESEARCH CONSORTIUM examines
-- how patterns of school year student mobility in Texas differ by subgroup
-- predictors of student mobility

TEACHERS & PRINCIPALS

METROPOLITAN EDUCATIONAL RESEARCH CONSORTIUM
examines
-- the role of principals in retaining teachers
-- the role of teacher working conditions in teacher retention

REL CENTRAL
examines the validity and reliability of a newly developed tool for assessing the performance of teacher candidates

REL MID-ATLANTIC
examines the role of staff surveys in principal evaluation

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Research Headlines From NNERPP Members: Last Quarter, continued

TEACHERS & PRINCIPALS, continued

REL NORTHWEST

examines pathways to teaching in Washington state

TENNESSEE EDUCATION RESEARCH ALLIANCE

examines research on teacher evaluation in Tennessee over the years

WISCONSIN EDUCATOR EFFECTIVENESS RESEARCH PARTNERSHIP

examines educator effectiveness ratings for evidence of racial bias and discrimination

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End Notes

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