Welcome to the second series in the Wallace Foundation's Principal Pipeline podcast. I'm Lucas Held, director of communications at the Wallace Foundation. We've added this second series of podcasts in order to discuss major new findings from a study of the Foundation's six-year Principal Pipeline Initiative. The multi-year implementation and effects study on the pipeline was conducted jointly by Policy Studies Associates and the RAND Corporation, and importantly, the evidence from this study of pipelines is strong enough to make pipelines eligible for federal funding under the Every Student Succeeds Act.

Now when we talk about a principal pipeline, we mean a comprehensive district-led effort to put into place four interlocking components: rigorous leader standards, high quality pre-service principal preparation, data informed hiring and placement, and well aligned on the job support and evaluation, especially for new principals. Those four components can also be accompanied by systems supports to help make pipelines work. Those include leader tracking systems and new roles for principal supervisors.

Now in prior episodes, we discussed the impact pipelines have on student achievement and principal retention, as well as how impact was measured in how pipelines are carried out. So today, we're turning to the question, how was it that RAND actually was able to reliably measure across more than 1000 pipeline schools whether principal pipelines delivered benefits for student achievement and principal retention? So, let me give a warm welcome to my two guests. Susan Gates is a senior economist with the RAND Corporation and co-principal investigator of this final groundbreaking report. And Ty Wilde is a senior research officer at the Wellness Foundation and worked closely with the researchers on the pipeline study.

Thank you both so much for making the time to talk with us today. Susan, let's start out with a basic question. Why is it important to have reliable research on student outcomes in education?
Susan Gates: 02:19  Well, most districts embark upon initiatives and undertake activities with the ultimate aim of educating students. So, when there's new activities that are undertaken, there's a new initiative, it's natural to try to understand whether that effort benefited student achievement, because if, at the end of the day it didn't, then it probably doesn't matter all that much.

Lucas Held: 02:55  So, research is pretty integral to district decision making about what interventions to pursue? Or it might be? It might be integral?

Susan Gates: 03:13  There are many districts that seek out evidence-based initiatives. There are certain funding sources that require districts and states to use evidence-based practices. Any well intentioned leader is likely to seek out interventions that have a research basis for them.

Lucas Held: 03:39  So, I think you've outlined two complimentary reasons for districts to pursue evidence. One is they want to undertake things that will help students, and increasingly we are in a policy environment that prioritizes research evidence. So, it's possible to meet both of these goals with the kind of study that you led on principal pipelines.

Ty, let's turn to you. You worked closely with RAND on the design of the study. Tell us a little bit about the challenges of figuring out across 1100 schools whether a leadership intervention would actually produce benefits.

Ty Wilde: 04:28  Oh, that's a great question, Lucas. I think that there are a number of challenges in identifying the most reliable and feasible research strategy for measuring the impacts of the pipeline on student achievement. I think one of the challenges was that you really weren't in a situation where you could do... Most people actually don't like the expression “the gold standard,” but you really weren't in a position where a randomized control trial was going to be feasible because you can't randomly assign principals within a school district, which is what you would do if you were doing an RCT or a randomized control trial.

So what you needed to do was think about, are there ways where you could measure the impact of this initiative, which had both a district-wide component and a component specific to individual schools in the absence of that randomized control trial. I think the key insight that the RAND team had was that they would identify comparisons, comparison schools outside of each individual pipeline district within the same state that could
be matched to the individual schools in the pipeline district, and then measure. And the change in outcomes for each of these schools could be measured over time and compared.

The benefits of this strategy were that it's compelling and reliable and it itself was feasible. It's not just that the initiative was feasible, but they were able to access data from schools across each of the states in which these pipelines were located in order to construct the comparisons and measure changes over time.

Lucas Held: 06:33

Susan, Ty mentioned that it would be difficult to do a randomized trial in this environment. Tell us a little bit about what the quasi experimental design and how this worked. Maybe you could just say a word about why it wasn't enough, at the most basic level, to just measure whether schools got better. So, that might seem to some an obvious solution. Let's just track test scores across 1100 schools. Why wasn't that enough?

Susan Gates: 07:15

Well, there are a number of reasons why just tracking whether scores got better in schools that got new principals would not be the best approach. Prior research has shown that schools that get a new principal tend to have been experiencing declines in student achievement prior to the placement of that new principal, and those declines tend to continue for a year or two, even when an effective principal is placed. So, just looking at the simple trajectories of achievement might actually send a misleading message about the effect of an initiative like the Pipeline Initiative.

So, we knew that we wanted to be able to compare schools that get a new principal with other schools that get a new principal, but we wanted those other schools to be schools that hadn't been exposed to this Pipeline Initiative. Now remember, the Pipeline Initiative really was conceived as a district-wide intervention. The Initiative was asking districts to think strategically about the full range of activities that they undertake to prepare, select, and support and evaluate principals. So when we thought about what that basis of comparison might be, well it couldn't be other schools that got newly placed principals in those pipeline districts. So, we really had to look outside of the districts to similar schools in the same state.

Fortunately, each of the states in which the pipeline districts were located have statewide databases that would allow us to not only identify schools that had received a newly placed
principal, but then also track their outcomes over time. So, that's what we did.

Lucas Held: 09:29 So this comparison with schools in the same states was the way out of this conundrum. What makes you confident that the benefits found were due to the pipeline and not other factors? There was a question that came up, for example, well if the intervention was really new principals, why would you have effects in schools that didn't have new principals?

Susan Gates: 09:59 Yeah, that's a great question. In social science research, when we're not able to do a random control trial, there is no certainty. So, we did a lot of different sensitivity checks to test whether there were effects under different sets of assumptions and scenarios. Our sensitivity checks all confirmed the approach that we took, but at the end of the day, as you mention, Lucas, we did find that there were effects also for schools that did not receive a newly placed principal. In some sense, that was not terribly surprising to us because, as I mentioned previously, the initiative was conceived as a district-wide effort to improve the full range of activities that districts undertake, not only to prepare people for the principalship, but to support them once they are in the principalship, and to effectively select them.

It's also worth thinking about the fact that as districts improve their pool of candidates and became better at selecting people for the principalship, they might also have transitioned people who are currently in the principalship out based on the results of evaluation. So, it wouldn't be surprising that they would be moving people out of the principalship earlier and replacing them, thereby effectively improving the overall performance of schools that still had veteran principals. So, it really is a spillover scenario, that although the initiative seems to be focused on new principals, really it permeates a district.

Lucas Held: 12:01 As you describe that, Susan, it's really beginning to sound like a human capital development strategy, which in fact one would expect to see in a human capital strategy. So, let me close with a question for both of you, which is as you step back and think about this, what has this study really added? How has it advanced our understanding of district-wide, of the possibility of a district-wide intervention?

Susan Gates: 12:34 Well, I almost push back on the terminology of a district-wide intervention because really what this initiative asked districts to do was to just do a good job at things that they are already doing, or should be doing. So, in that sense, it's not an add-on. It's not an initiative. It's not a shiny new thing. It's really taking a
step back and saying, it is a core district function to ensure that every school has an effective principal. So, the initiative was really just asking the districts to pursue a set of strategies to do that well.

Ty Wilde: 13:32

If I could just briefly, I'll share what I shared with a group of my neighbors this morning as I was coming in on the train, which is my reaction, taking a step back not as an economist, but just as a person. Oh my goodness, this is something that impacted student achievement and the impacts were positive and statistically significant and meaningful, and there were impacts for children in the lowest quartile. Oh my goodness.

Lucas Held: 14:07

Well, I think both of you have just offered the kind of yin and yang of an educational reform, which is, on the one hand, we're improving the processes that districts already do. And in the words of the immortal Alvin Wilbanks, "Do the right thing, and do it right." And Ty, if it's not helping student achievement, it probably is not the right thing. So, let me give our thanks to our two guests, Ty Wilde and Susan Gates. Thank you for helping us understand how this research was developed, how it is reliable, and we look forward to reading it and learning more. Thank you.