Welcome. You are listening to a U.C. Davis Center for Poverty Research Conference podcast. I'm the center's deputy director, Mariann Page. In January 2014. The Center posted the War on Poverty Conference. The Conference featured top poverty experts from across the country to discuss the U.S. safety net on the 50 year Anniversary of the War on Poverty.

In this presentation, Sean Reardon discusses Sarah Reber's paper, The History and Legacy of Title I. Reardon is a professor of Education and Sociology at Stanford University and Director of the Stanford Interdisciplinary Doctoral Training Program in Quantitative Education Policy Analysis.
>> Thanks Sarah, I always like reading Sarah's papers and listening to her because I learn a lot and and, and I, I would also recommend to you the, the, the paper, the desegregation paper she mentioned, the Brown de-bussing paper which is I think a really nice paper about the, the power of the federal role in changing some features of education.

And so what I wanted to, to do, if I can find my slides here, is. Is talk a littler bit about sort of pick sort of where Sarah left off in, in thinking about the role of the federal government in equality of education, but particularly, I wanted to show a little bit of data on the trends in educational outcome in equality over time.

Because of, part of what Sarah and her colleagues have done really well is sort of show us some of the trends in how ESCA Title I effected sort of inputs and, and effected school context in terms of desegregation. And I wanna now to sort of try to say, what does this tell us about the federal role in effecting sort of student outcomes, and particularly inequality in student outcomes?

And so, I'll show you a few pictures here. So this is. Yeah, you asked me to be upbeat, but this is going to be kind of down beat. So some, these are the trends of, the black lines are the trends in the achievement gap by income. The difference in average test scores between kids from the 90th and 10th percentile of the income distribution.

And the blue and the red lines are the racial achievement gaps over time. The Black-White and Hispanic-White achievement gaps. So the, the good news here, of course, is the racial achievement gaps are actually dramatically lower now, than they were in the 1960s and 1970s. With a lot of that progress happening, sort of in the early era, but evidence of sort of a, a, new, new progress happening in the last two decades.

The bad news is that they, the achievement gap by income after being sort of flat for this, the 60s and 70s, sort of started to grow substantially in the 80s and, and grew a lot in the last few decades with, I'll talk a little bit more about maybe this.

Maybe this is good news right here that we can, we can think about. But, so let's think about what the Federal role in this might be. So here's the Black-White achievement gap the dark line is the data from the long-term trend NAEP, and probably the, you know, it's a consistent test over time.

The other lines are this Black-White gap just measured with different data sources. From main NAEP, from state accountability tests, and, and, from state NAEP, which is main NAEP, you know. These are averages within states. But whichever source we use, the story is basically the same. In the last few decades, the Black-White achievement gap has narrowed, Sig, you know, significantly.

Not, certainly still quite big. More, you know, three quarters of a standard deviation or something. But it's gone down by maybe a fifth of a standard deviation or so over the last few decades. Now we could think about sort of two interesting eras of federal policy in, in education.

One is, is the. And Natera was talking about the, the ESCA and the start of Title I. And so, I've shown that here this sort of region here is kind of the period when kids were born who experienced some of their schooling before Title I, and some of their schooling under Title I and, and then this there is.

Sort of Title I is in effect for all through kids schooling. And then this is the same thing for the NCLB era. So kids born in the late 80s get to eighth grade just in time for like one year of NCLB maybe or something. And kids born in

97 or so, are in kindergarten when NCLB starts.

So, after this line you know, it's just all, all NCLB all the time and this is the middle era. So, so you might think of sort of Title, the Title I intervention really being largely a, a, federal role in providing more funding as Sarah shows, more funding increases.

And you might think of NCLB as being the federal. In increasing regulations without increasing funding, right? The, the, the unfunded mandate sort of story. So there's sort of different kinds of federal interventions. The initial Title I is, is a substantial amount of extra money from the federal government without a huge number of requirements, although the requirements grow over time.

The NCLB is, is no new money, but a lot of new requirements. But, a particular kind of requirement, written into the legislation that says you have to pay attention to achievement gaps. You have to pay attention to inequality in educational outcomes, not just, average scores. And, so, the hope of course was that NCLB, will narrow achievement gaps, while raising achievement for everyone, by forcing schools and districts and states to focus on, on achievement by sub-group.

And so this looks, I think, like it might be good news for the federal role, right? The, the Black-White gaps start to narrow around the time, I mean this is a lot of hand waving here. Around the time that NCLB starts. And so maybe, maybe that's because of NCLB.

So. But if we look at one new piece of data. So, in the last decade we have two, three studies that have, provide national representative tests of kindergarteners' school readiness. Test scores in, in math and reading at the times kids enter kindergarten. And so, by comparing the size of the gaps when kids enter kindergarten, we can see what's the, what's that black white gap been doing over time.

And it's been narrowing over this time period about the same rate as the gap in grades 3-8 has been narrowing. Now we can't thank NCLB for narrowing the kindergarten achievement gap, because kids have not experienced any NCLB intervention when they get to kindergarten. And so, what this suggests is that the progress we've made in the black whight gap in the last decade or two probably can't be attributed to NCLB because it's happening before kids get to kindergarten, and the amount that it grows between kindergarten and, these are sort of.

Estimated at age, at grade four basically. So the amount that the Black-White grows between kindergarten and grade four has been pretty stable over that time period. So, if NCLB were working we hope that you know, this trend would be going down a lot faster than this trend would be going down, but that's not what it looks like.

So, whatever. Is, is the cause of this good news. I doesn't suggest, you know, it is, at a very high level that it is a sort of NCLB federal kind of a story. Now let's look at the same thing for the income gaps, so this is the, the income gap over time.

And again, of cor, of course it's going up here in the NCLB in, era. And maybe, I don't know, if you were trying to be optimistic, you might say well, look, Title I looks like it slowed down the increase of the gap. But I wouldn't put much stock in this early trend.

It's based on some pretty lousy data from 1960 and so I, I, I would, I would believe the trend. You know, in this era but, very early period is not particularly great data. So we don't know much about what Title I did, but it certainly doesn't look like it made it get smaller.

Cuz it started to get bigger, but it didn't get bigger when Title I started to get bigger starting later so. It's probably sort of unconnected largely. But what happened in the most recent era. Well, if we look at the kindergarten gaps for, for the same three cohorts of kids the good news is the gap in kindergarten school readiness by income seems to have been going down over the last decade in, in contrast to what the gap has been doing for the sort of 25 years prior.

Now it's a little bit unclear if, if we, when we didn't have this piece of data, this, this last dot. We just got this data a

few months ago, and so if you ever saw me show this picture before I never had that last dot and I, and the line didn't sort of bend down like that, and so it just looks unremittingly bad.

And now maybe it good but this is just one noisy piece of data. I wouldn't sorta hang your hopes on one, on, on one dot on this picture. There's a lot of dots going up in this sorta of one here, but maybe it's good news. I think we need to wait a little while to sadly know what the real trend is.

But in any case in, we see these gaps going down in this recent era. What the cause of that is, again, probably isn't due to anything in K-12 education, because the gaps are going down when kids get to kindergarten. So it's got something to do with things happening before the time kids get to school.

That may be in, increased access to high quality preschool and childcare for lower and middle income kids for example, but it wouldn't be a, you, you'd be hard pressed to tell a kind of K-12 policy story that would, that would explain that. Next thing I wanted to look at was the trends in the high school graduation rate.

So this is data from Dick Murnane's recent paper, where he assembles he uses Heckman and La, LaFontaine's data. And, and then adds more recent data to it. And the, this, in contrast, I think, with what Sarah showed, I think yours probably included GED recipients. Murnane doesn't. So these are lower rates that you show in a slightly different trend.

But the Murnane story is basically that the high school graduation rates have been pretty flat over time. There's been some, maybe, a very slow narrowing over time for a while. But in the last two decades there's been a kind of. Not only increase in graduation rates overall but most of that increase is driven by Blacks and Hispanic rates increasing and so the gap, high school graduation rates now is about half the size of what it was four decades ago.

So that's good news. Does that coincide with NCLB or anything? Well this 1984 is when the cohort who graduated in 2002 would have been born, so these kids didn't experience anything, and these kids maybe got a few years of high school in NCLB. So, it's hard to attribute this narrowing to anything about NCLB.

Of course, we have to wait a while to see if 20 to 24-year-olds graduate, so we can't tell for the more recent cohorts what the outcomes are. This is data that I got from a child trends report but on, on, on attainment by race. We don't see. You know, there's obviously big racial gaps here, and the racial gaps particularly the hispanic white gap, but to some extent the black white gap actually grow after Title I kind of come in place, so that, that again is not good news for, for any crude story you might tell about the role of the federal government.

So all of that suggests to me. That there, there's no sort of prima facie kind of evidence that suggests that the, that either Title I or NCLB made any large-scale improvements in, in racial or economic disparities and outcomes. Despite the fact that they made some substantial changes in, in funding and in, in desegregation.

Now part of the reason for that might be as Sarah points out that the. Even on his big increase in Federal funding, the Federal has always been tiny essentially in, in education. For a long time, Federal funding accounted for about 7% of, of all education spending in the U.S. I think maybe it's now up to 10% or something like that.

But it's, but it's, it's still a small amount. So, even a big increase in funding doesn't change the amount of dollars most schools have available, it does, what has changed more recently of course is the requirements attached to it. And so, I will just sort of end by giving you a quick snap shot of this paper, that we have been working on looking to see if NCLB, narrowed achievement gaps in a more nuanced way than I just showed you here.

And so first, if we just look on average within states at what achievement gaps have been doing over time, these are the black/white achievement gaps. They've been going down, as I showed you before. NCLB starts here in 2002, I forgot to draw my line. But, you know, the trend was there before and NCLB starts, in fact, it's even a little steeper here before NCLB starts, so it doesn't look like there's a sort of dramatic change in the trend.

What we then do is we look in every state and we say, are. For each cohort of kids, the more years that they were

exposed to NCLB bioparticular grade, do we see any evidence that that's associated with smaller gaps for cohorts that went with NCLB from kindergarten all the way through eighth grade do we, do they have smaller gaps than a prior cohort than had it from fourth grade through eighth grade or something like that.

It's. So we leverage sort of variation across, cohorts and across grades to look and see if there some sort of a change in the size of the gap associated with the amount of time a cohort's been exposed to NCLB. And we find that on average zero. But variation across states.

Some states, there actually is a, a association. Other states, there's, in fact, a negative association. And here's, this is same story for Hispanics, but here's the, here's the interesting finding, I think. So, on the y axis is, is the sort of estimated annual NCLB effect, and so you can think of this as the amount that the achievement gap changes.

For every year a cohort is exposed to NCLB, every year that they're in school while NCLB is in effect. And so, you know, 0.002 is a small number. But that's for every, that's every year. So if you had NCLB exposure for nine years from kindergarten to eighth grade.

That would add up to be 0.18 standard deviations, which would be, not be a trivial effect. We would be happy if we could, could do that, I think. And you can see that, you know, there's, the effects are sort of scattered around 0. There's a, a bunch of states where it's around 0.01 but a bunch of states where it's actually going in the wrong direction.

But what we then do is we say, NCLB put a lot more pressures on schools in some states than other states for reasons that had to do with NCLB's design. So NCLB says, you have to report and you're held accountable for your students test scores by subgroups as long as there's enough students in that subgroup in your school, and in a grade or in, in your school to yield a statistically reliable number.

Now, how many do you need to have for statistical reliability? That varies across states. The laws of statistics are not the same in every state. So in some states, in some states, y, you only need 20 and in California you need a 100 for reliability. We have, we have much noisier data apparently than everywhere else.

But, so, both because of state's setting this, laws of statistics, interpretation in different places, but, but large we actually because of differences in the amount of segregation and the racial composition of states. The number of black students say, in a state who were in a school where there's enough black students that their scores are reported various dramatically across states.

So, if you're in Louisiana, lots of black students, very highly segregated. Almost every black student in Louisiana is in a school with at least 40 other black students, and so there's enough that the state records their test scores. And therefore, enough, therefore, most black students are in a school where the school is supposed to pay attention to their test scores.

If you go to Vermont, there's not very many black students. Those that are there are not very segregated. And literally, zero black students in Vermont are in a school where there's enough black students that their scores are reported. And so there's no pressure in Vermont. Be, by, due to this feature of NCLB, to, to compel schools and districts to sort of pay attention, specifically to the achievement of their black students.

And so we hypothesize, well if NCLB works, if this sort of accountability regime narrows achievement gaps, it ought to do so mostly in places where most of minority students are in a school where they're scores sort count and it oughta do so less so in the Vermont. So Louisiana oughta see bigger effects of NCLB than Vermont, this is Louisiana that's Vermont.

And so in fact we find this, this slope is statistically significant. There, there is a, there is a bigger narrowing of the gap in the states where more black students are in schools where they're accountable. So we find the same thing though it's much noisier pattern for Hispanics for a variety of reasons.

But but again we find the same basic slope. Now, I don't know if it's, you know. That's enough good news to leave you

with but but it's the one sort of piece of good news, I could find in this data that suggests that the federal, federal government federal education policy might play some role in narrowing achievement inequality.

So I'll, so I'll leave you with that. I'm Ann Stevens, the director of the Center of Poverty Research at UC Davis and I want to thank you for listening. The center is one of three federally designated poverty research centers in the United States. Our mission is to facilitate non-partisan academic research on domestic poverty, to disseminate this research, and to train the next generation of poverty scholars.

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