

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

Welcome to WIDA Webinars. This is a free virtual learning opportunity that offers educators insights and resources on a variety of topics relevant to educators of multilingual learners.

In this webinar you will hear from expert staff and researchers.

If you want notifications for webinars, sign up for our newsletters at [WIDA.wisc.edu/news](https://WIDA.wisc.edu/news).

Let's just dive straight into the topic, which is an important one.

It is examining the impact of COVID-19 on English Learners proficiency as well as examining English Learners subgroup disparities in average proficiency.

I'll go through some of the agenda items, I'll talk a little bit about English Learners in general and the consortium will address some issues with terminology and labels.

I'll talk about the main measure I'll be discussing today, average proficiency as measured by overall composite scale scores on the access test.

I'll show some descriptive comparisons of high-level comparisons basically of average proficiency pre and post COVID-19 for English learners across the consortium.

I'll share a wider report that we've put together, a descriptive report that looks at the impact of COVID-19 by grade level cluster for both proficiency and growth as well as individual domains.

I'll talk a little more deeply about the study that I'm working on that starts to unpack some of the impacts of COVID-19 we're seeing and some of the existing disparities within the English learner population and looking at how the COVID-19 pandemic has impacted these existing disparities and differences.

I'll talk about the theoretical framework that I've used for this work, the concept.

We'll take a little break probably there.

We'll talk about the conceptual and the empirical models that correspond to the theoretical framework and that are used to analyze some of the student scores given the large scale of data that's included in this study.

Then I'll talk a little bit about findings and results, implications, and we'll have time at the end for questions.

It's an agenda, so let's get right to it.

As you can see on the map, you're seeing a map of the WIDA Consortium, what it looks like right now.

It's made up of 42 states, territories, and federal agencies.



## **WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth**

It is dedicated to the research, design, implementation of high quality, culturally, linguistically appropriate system of standards and assessments that is intended to support English learners K-12 context.

Last year, about half a million children started their academic journeys in K through 12 schools in WIDA, 42 states, territories and federal agencies.

There are 10,000 districts that are nested in these states and territories and agencies.

50,000 schools and millions of English learners take the access assessment annually.

These kids enter American classrooms mostly at the at the elementary level, but also across all grades of the K through 12 consortium.

In addition to being a student, they are also identified in their schools as English learners.

And purpose of this additional identification as EL I rests in the federal government's promise and also the judicial systems holding up of that promise that these children should be provided supplemental, not substitutional supports to ensure a quality and equitable education.

States, districts, and schools receive additional federal funds, which typically end up being very short of what is needed to provide quality language instructional education programs with the resources needed to teach these academic with these used academic English and to ultimately enable them to succeed in American classrooms.

In addition to being severely underfunded, many of these language support programs end up being substituted, not supplementary to these student's education.

There are many examples being pulled out of regular instruction to instead attend ESL classes, not having access to full curricula and high-level courses that are required to attend college.

Being tracked to lower levels, lower academic trajectories due to misunderstood uninformed perspectives. Sometimes what these students can do are some of the issues that are becoming increasingly limiting and marginalizing with a longer and more extended stay in EL status for many of these students.

Meanwhile, research and both empirical evidence shows that when students are provided with the support they need, when they do receive these supports and progress through grades and language support programs and exit these programs graduate language support programs before middle and high school.

It turns out that they later outperformed their monolingual peers and standardized assessments who have not been identified as an English learner.

Therefore, in addition to providing a high-quality education to these kids, something that many of you are charged

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

with doing, it is also important to ensure both accurate identification and appropriate time to graduate or exit these students from EL status.

And this is where WIDA and ACCESS for ELL can be useful.

In addition to providing the system of standards professional development research, of which I'm a small part of, WIDA provides a high quality, multi modal English language proficiency assessment called ACCESS for ELLs that's taken by about two million students every year.

States, districts, and schools across the country use the scores from this assessment as a typically very substantial part of the determination whether the student will need additional language supports in the next academic year or whether it is time to be reclassified and exited.

I will be presenting a study that is part of my dissertation work that I'm just finishing up.

I should say it's based on examining large scale assessment data from the online assessment that the English learner population takes across the WIDA consortium.

Moving forward, just some notes about the terminology and labels.

English learners are referred to by different labels.

ELL limited.

English proficient used to be a prevalent term, dual language learners, multilingual learners, emergent bilingual students.

It is important to acknowledge that some of these learner labels such as English learner or long-term EL are in essence deficit and can potentially even further stigmatize students who are still honing their skills as their multilingual skills. And there has been a gradual shift both in the literature and in practice, a welcome shift to a more assets-based focus framing of these students such as emergent bilinguals.

While in spirit with such more positive framing in this work, I purposefully use the terms English learner and long-term English learner to emphasize the rooted nature and the prevalent use of these student categories in federal state legislation, rules, and policies.

As some of the evidence that I will show today will clearly display the academic outcomes that are reported by these students who are assigned to labels cannot claim similar improvements.

Labels may be improving but as we will see some of the academic outcomes are not improving.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

I think it makes the point that a lot more needs to be done in addition to fixing the labels and having a more asset-based framing of the terms.

The main subject of today's analysis, the outcome variable English learner's proficiency, overall composite scale scores.

This is the ISR that many of you of course have seen many times what I'm studying in this study and in future studies of course we'll start unpacking the individual domains.

But what we're looking at in this study is basically overall composite scale scores highlighted in that bottom row.

We know overall composite scale scores range from 100 to 600.

They're vertically scaled, in other words which enables comparisons of overall composite proficiency across grades.

I'm just going to show you a couple of tables that outline at a very high level of what is going on in the English learner world with respect to the overall proficiency in the last several years.

The tables that you see now, the first four rows and the fifth one, that's the average depicted in blue shows pre COVID-19 overall composite scale score averages that are presented by grade.

And the last three columns along with the average again post COVID average.

Depicted in green are the post COVID corresponding overall composite scale score averages again by grade.

This table is formatted using conditional coloring formatting.

Green show high numbers and red show low numbers and yellow in between.

Basically, what you can see from just looking at the distribution of colors post COVID looks a lot more red.

Pre COVID looks a lot more green and yellow indicating that there has been a shift or decrease in overall composite scale scores and the correspondingly the overall composite proficiency levels of English Learners for each of the grades.

And then the last column that you see shows the impact of COVID-19, basically the difference in the post to pre COVID-19 overall composite skill scores, it shows that differences or the impact of COVID-19 is different by grade.

It's larger in the elementary grade levels, grade one, grade two, grade three.

Just looking at these descriptive results, that's where the biggest differences appear to be in terms of the overall composite scale scores pre and post COVID again.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

It's high-level descriptive evidence that COVID-19 did indeed have a large impact on English learners' proficiency.

It is difficult at this point really evaluate what these numbers mean, especially in context of the large variation from 100 to 600 for an individual student.

Remembering that these numbers are aggregated for the entire WIDA consortium, basically all English learners who take the online assessment, not the paper assessment.

It is just based on access online.

These average numbers can translate into large individual level differences.

I'll go unpack that a little more as we move forward.

I'll show a similar graph that's looking at the difference between overall composite scale scores for students for English learners identified as Hispanic versus not Hispanic.

Again, conditional formatting is used.

Green highlighting shows large numbers and red highlighting shows the lower numbers.

And all of these numbers are negative.

Let's just pick a number.

The very first number in the first cell of this table indicates that in 2017 those English learners were Hispanic and in grade one reported overall composite scale scores that are 9 points lower than their non-Hispanic counterparts in that specific year for that specific grade.

Again, comparing color as pre and post COVID you can see that there have been disparities as indicated by those green but still negative numbers pre COVID showing that for most grade levels and for all years there is a difference between Hispanic and non-Hispanic identified English Learners overall composite scale scores.

And looking at the post COVID numbers which are more yellow and red, we can see that those disparities have gotten bigger after the COVID-19 pandemic.

2021 when the COVID-19 pandemic forced the closure of schools and we got the first wave of assessment data in 2021 that was only 70% complete, 30% of the students were not tested.

In 2021, we started putting together reports that would inform the reader, consortium stakeholders as well as

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

nationally what the picture looks like, just looking at overall proficiency and overall growth in in overall composite as well as individual domains.

We've been putting together these reports that are COVID COVID-19 reports and the third one just came out last month put together.

This this report can be found on the WIDA website.

It's in the resource library.

It provides a comparison of average composite skill scores prior to the pandemic, three years before 2018 and comparing those outcomes after the pandemic.

There should be a link in your chat to check the reports and this specific report later. If you'd like a more in-depth view of what proficiency and growth differences have been like for the individual domains.

Because that's one thing that I will not cover today.

I will just be talking about overall composite scale scores.

It's notably the first WIDA report that disaggregates English learner outcomes by ethnicity.

We're going to look at average overall composite skills for outcomes by Hispanic versus not Hispanic identified subgroups just like in these charts in this table the visuals provided in the report are a little better.

This is what they look like.

We provide the English learner average proficiency across the Consortium for access online from 2018 until 2023.

Bars reflect the average overall composite proficiency for scale scores for each of those years.

Blue bars indicate pre COVID years, the green bars indicate post COVID years and 2021 is italicized because only 70% of the students were tested in that year.

It may be a little bit distorted, the estimate for 2021.

Some of the research that we're doing right now is showing that the 2021 estimate was an overestimate and it should be treated as such.

It shows you proficiency so figure 6 shows the average growth of English learners.

Here we take the difference between the two adjacent years overall composite scale scores to calculate individual students' growth and then we aggregated by grade level.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

Cluster growth results look a little bit more promising compared to proficiency results.

If you look at the proficiency results right now, you can see there is a stepwise decrease, and the latest 2023 results show that it's the lowest.

Preliminary indication or signal that we're still in decline following the pandemic at least as the descriptive evidence is shown growth looks a little bit better there.

There is some growth in the early elementary clusters.

It looks like we're even exceeding pre pandemic levels.

However, I would like to make the caveat.

Warning that growth is less stable, whenever we have large negative declines in proficiency.

It is possible that growth estimates may be overestimates because there is a lot more to grow.

When proficiency is low, we can expect growth to be a little higher.

What you're seeing now may just be the proficiency of especially incoming new English learners being lower and then that being reflected in their higher growth as you can see in 2023 results.

As in the third COVID report, this is the first one where we're taking a look at disparities in average proficiency by Hispanic status, comparing the average overall composite scale scores of Hispanics identified English learners to those who were not identified as Hispanic.

As you can see for each of the grade level clusters there are differences for some grade level clusters the disparities are a little more stable than others.

However, all of this provides strong descriptive evidence that the disparities were there even prior to the pandemic and for some grade level clusters they may even be increasing.

All this descriptive evidence again points out the need to analyze outcomes and more rigorous analysis more rigorously.

It's regression analysis.

Regression analysis can be thought of as a tool that enables compressing all these tables into fewer numbers.

It's easier to interpret so that we don't have hundreds of different tables.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

It's easier to sort of bring together results and concentrate and focus them in one table for a more comprehensive across the board examination of how different subgroups of English learners are performing compared to reference subgroups.

And it'll be easier to see what I mean when I get to more specific examples.

But the specific research questions that the study is looking at trying to unpack average and differential impact of COVID-19 on English learners' proficiency.

We're basically interested in both estimating the impact of COVID-19 on average proficiency, but also estimating any potential disparities or differences by the variables that are listed.

We want to see if there is an impact by the years or number of years a student has been enrolled in language in structural educational programs.

If there are differences by newcomer or long term EL status.

If there are differences by ethnicity and race, gender, IEP status, that's in that IEP status is a variable that identifies duly identified students or those English learners who have also been identified with a disability.

Also, some other variables basically those students whose parents have waived receiving in school supports as far as language instructional supports or migrant students.

And we also have data on students' age based on which we can compute how different that age is from the cohort average age.

And that variable basically serves as a proxy variable for the impact of SLIFE or students with limited or interrupted formal education.

Impact of interruptions on student education for each year from their cohort on average.

I also look at ethnicity intersections.

I also look at ethnicity, intersections, basically exploring whether some variables manifest differently for those English learners who have been identified as Hispanic versus not Hispanic.

Also using the fact that we have complete nesting information.

In other words, we know where the students are enrolled in, in what state, in what district and in what school.

We can also use this information to difference out any state district or school specific factors or most of them I should



## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

say without going into technical details of how that is done and come or arrive at a more precise and less distorted estimates, something that is not that is not reflected in the descriptive comparisons that I showed a little bit before.

And the second research question is basically now that we've estimated the impact these differences by different subgroups, disparities across racial identification of English learners.

How has that changed after the COVID-19 pandemic or in other words how have these relationships and disparities been affected by the COVID-19 pandemic?

There are three main lines of literature basically looking at English learner disparities compared to non-ESL and then disparities for Hispanic English learners.

And there is some evidence and reports that are just coming out documenting ways the COVID-19 pandemic has impacted English learners, both on average but also in differential ways.

This is something that I put together using some existing research based on intersectionality.

It's basically reflecting the intersectional nature of English learners' education.

In the center you have English learners or English learner status and there are overlapping individual identities such as ethnicity, race, disability status, refugee immigrant status or language, gender and many other individual level characteristics that are that are not included.

In addition to the individual level, you can see that is sort of encircled by the institutional level factors, school, district, and state level factors that are sort of nested on top of each other.

There are also other factors that may be considered institutional level factors or even individual level factors. I have listed them in this figure because we don't really have good data.

We don't really have a good way of collecting data as far as I'm aware at this scale and scope.

It's sort of unobservable or less observable variables that are somewhat absorbed, some of them in the school level factors such as impacts of programs, teachers, economic status.

But can argue that some of it is absorbed at school, district, state or individual level.

Basically, a theoretical model of how we can picture English learners and all different factors, individual level factors, institutional level factors and unobserved factors that affect education.

The central tenets of intersectionality, guiding principles of intersectionality.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

I think they all make sense in the context, especially in the context of English learner education.

How diverse, unique, different, heterogeneous, context specific, affected by different levels of decision making and social processes intertwined within institutional as well as time variation.

Because I've applied this intersectional framework of intersectionality to English learners. I decided to do the same thing for myself, and this was a pretty useful exercise.

I think I can get this to spin here.

That's not looking very good given that white background.

Anyways, this shows some of the different institutional so to speak, or geographical factors that affect who I am, some of the things that I care about, some of the things that I like doing, some of the things that represent my identity, of course, multiply overlapping kind of way.

I think it's a useful exercise to do this from time to time.

I did this a month ago just revisiting this.

There are many other things that I'm finding I didn't include in this that's showing all the factors and features.

I would encourage everyone to do a similar exercise to revisit from time to time and to explore themselves.

Using this intersectionality framework, it's easy to do.

You can go into PowerPoint if you're interested.

If you go into smart art there are the relationship graphs and basic Venn diagram which you can insert and play around with it. Add labels and different intersections.

I really like this exercise.

I also have a couple of blank ones if you're interested.

If you don't feel like making it yourself, shoot me an e-mail.

I'll send the PowerPoint so you can do it yourself.

I think it's a good time to take a little break here.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

I hear there is some interest in the Venn diagram.

Happy to hear that.

I think we're working on some ways to share it. And we'll be in touch with you about that.

Let's move forward.

What does this intersectionality look like?

More specifically with respect to the data or research questions we're interested in specifically the impact of COVID-19 pandemic, you're seeing a modified version of that intersectionality, theoretical framework of intersectionality.

This is more a conceptual framework or how to operationalize it in the context of the data that we have and in the in the context of the questions that we are interested in.

All the labels that you're seeing, except again for the ones that are listed in that grey zone which we don't really have good data on, are variables that are included in the analysis.

In the regression analysis, you can see that some of these are intersection variables.

Speaking to the name of the framework, we're interested in how students who are Hispanic for example, but also have an identification as IEP student.

How those students are performing as opposed to students who are not Hispanic and have an IEP identification.

Same with thing with newcomer.

Most of these higher level or main effects are interacted with the Hispanic ethnicity more specifically to dig into those in that preliminary evidence which shows there are large differences by Hispanic identification that should be further evaluated.

Let's move forward.

What the data is or a simplified version of the data structure.

There is a level structure.

Let's start from the very top.

As you can tell, just one state is depicted here.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

And within each one of those states there are hundreds and hundreds of districts.

And just for simplicity I've group everyone together. I'm showing one state here.

But you can imagine that nesting happens for each one of those states included. And the number of districts or schools would change correspondingly.

But just to look at the overall tree of distribution.

We have students who have taken the test multiple times.

Some of them don't take the test multiple times, but the numbers in red at the very bottom indicate the year the test was taken by a specific student.

And as shown in Level 2 nested in a specific school shown in Level 3, the school is in Level 4 nested in a specific district in a specific state.

And all of this gives A5 level structure of the data and there are about 10 million observations so to speak year by student observations.

We have 10 million data points of students observed overall composite scale score along with the state district school that they're in along with the year that they took the test in.

As well as all these individual level identifiers and their interactions that we can include in the model and estimate the differential performance as well as the impact of COVID-19 for us this longitudinal pattern of test taking.

It is one of the reasons we focus on proficiency rather than looking at growth longitudinally.

We're not looking at an individual student picking a cohort of students and then following the students up for several years.

We're just interested in what the proficiency of a student looks like each year controlling for or considering all of those individual level and institutional level characteristics.

That's why I am showing you this.

That very first number 11.9 or almost 12% that shows that 12% of kids that are in this analytic sample or 400 thousand of them or about 400,000 of them have taken the assessment once in 2023.

That's the most frequent pattern.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

In other words, these are all newcomer kids that have taken the assessment in 2023. There are 400,000 of them. And the next highest group is those kids who have taken the assessment both in 2022 and 2023 and there are about 300,000 of them.

If you keep going down the list. If we only limited the sample to those kids who have non missing observations throughout the entire period.

That pattern #7 shows four white ones and three white ones indicating that the students had overall composite skills for observation for each of the seven years.

We would only include those students that have adjacent observations across years.

It would result in a large 95% loss of the sample.

We wouldn't be able to talk or make generalizable statements about what we're finding with respect to different proficiency manifestations also if we were to limit the sample this way.

In other words, just look at kids who have taken the test over and over again across a long period of time to evaluate their growth.

This would inadvertently shift the focus of the analysis to long term.

Again, we wouldn't be able to make generalizable statements about the overall English learner population.

We would only be looking at those students who have not been reclassified because the ones that are reclassified are no longer in the data.

Let's move forward.

And one of the things that we're able to do in this study is using intersectional lenses as well as using the large number of students. Tremendous samples complete with data we have.

It shows an intersection of race and ethnicity. Basically, taking a racial look rather than just an ethnic or racial look of how differences or subgroup disparities are manifested for learners.

As you can see, about two thirds of WIDA's population is identified as Hispanic and one third is not Hispanic in that green circle on the right.

And within each of the ethnic categories there are six usual categories or racial categories of White, African, Asian.

Native American, Native Hawaiian, or Pacific Islander and Mixed Race.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

Which are the students who indicate more than one race?

Because again we have so much data. We're particularly interested in digging down deeper and understanding disparities by intersection students, intersectional identities.

We can look at the differences in average performance of these fourteen different subgroups, again not just Hispanic versus not Hispanic, but Asian Hispanic versus Asian.

That's one of the ways large scale data is powerful and enables making statistically precise comparisons whenever a large sample like this is present.

As different models that are used. I'm not going to unpack all these.

It's different models with increasing complexity that account for all different levels of variation that I showed in this slide here.

Basically, what the model is doing. It's just looking at that level scale score of the student and comparing it to all the other students' scores without adjusting for the fact that some of the students take the test multiple times and are nested in specific schools and districts.

And once we estimate this model. We can get to a more complex one that introduces the additional levels of variation.

Which is the final one that includes all the different state, district, school, student, and time variation along with all the individual level factors that are shown variables and factors that are shown in this in this graph in this figure.

That's the final equation.

That's what it looks like.

There are three and a half million unique students distributed over seven years for which different relationships are estimated. These are shown in the different rows of these tables.

I'm not going to unpack all of this.

Welcome to rewatch the presentation to dig specifically into what numbers specifically mean.

I'll just give you one example.

If you look at the last row of this table. The first variable is estimated at ten scale score points.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

This this number can be estimate can be interpreted.

For each year a student is identified as an English learner, there is an associated ten scale score growth improvements for that student.

If a student was in program for four years, for example, that student's average composite scale score would be expected to be about forty scale scores higher compared to a new student.

The same logic can be applied to interpret the other coefficients, the other numbers in this table, for example, the third-row newcomer student.

Again, for the last column, the final model is students who are newcomers, or basically those students who are taking the test for the very first time.

They're scoring about seven scale scores below those students who have been in program for more than one year.

And using all these different effects and different identifiers.

We can more precisely calculate what the average impact of COVID-19 has been controlling for all factors. Also evaluate what the disparities by specific variables look like.

Again, controlling for this whole list of institutional and individual as well as temporal level factors in the midsection of the table, race, and ethnicity.

It's fourteen different categories.

Having these fourteen different categories enables us to estimate the disparity for each of the races, and they are given in that blue color.

For example, the Asian Hispanic disparity in that last model is estimated negative eight scale score points.

It would be interpreted as to mean that those English learners who are identified as Asian among those students who are additionally identified as being Hispanic, those students score eight scale score points lower compared to their non-Hispanic Asian peers.

And that very last average Hispanic disparity as estimated for all races at negative point four three shows Hispanic disparity controlling for the fact that many kids belong to different racial identifications.

And there are other factors as well, such as IEP, migrant female and all the effects that are listed in the demographics tab.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

It's a lot more to unpack in this table.

I won't have time for that.

Let's just get to some of the results. I mentioned the Asian Hispanic disparity.

This figure that you're seeing shows the Hispanic disparities for each of the races.

Asian African black mixed multiple races, Native American or Alaskan Pacific Islander or Native American White.

And the last category, no race reported basically compares students who are Hispanic and don't report the race to those students who are not Hispanic and don't report the race.

And that's our reference category, baseline category, average Hispanic disparity.

I mentioned in this table, measured at negative point four three, four point two.

It says here should be four point three, but that dotted line shows the average Hispanic disparity at negative four point three when averaged across all the races together.

I talked in the very beginning about the large size of the disparities, the negative point five that we saw in this.

Negative point five in the very last row and column of this table impact of COVID-19.

We talked about how these disparities are large.

At the same time, may not look large in comparison to the average composite skill scores and their theoretical ranges ranging from 100 to 600.

What this is what it implies for Hispanic versus non-Hispanic students.

X axis you're seeing the timing program by years.

The blue line shows the average outcomes for non-Hispanic students and the yellow line shows the average outcomes for Hispanic students.

As you can see Hispanic students. Hispanic English Learners start on average about 10 scale scores lower compared to non-Hispanic as opposed to almost 330 after four years in program which is what that purple dashed lap line shows.

After eight years in program, Hispanic English learners reach peak after seven. Also never catch up to non-Hispanic English learners.



## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

If you look at three years or four years into program. If you look at four years into program, the height of the blue line is about equal to the same for Hispanic English Learners at eight years.

It takes about twice as long for Hispanic English Learners to reach the same level of overall composite proficiency on average as it does for non-Hispanic English learners.

Which could be extrapolated to reclassification or long-term English learner rates because this is overall composite proficiency levels which translates into higher the composite proficiency score, higher the likelihood of reclassification and the lower the likelihood of long-term status.

I want to leave you with some positive findings.

One of the things that I showed on the very first table. If you remember the green to yellow to red contrast, we saw the last year of the pandemic 2023 appears the most red.

I said these are descriptive comparisons. It needs rigorous examinations through regression analysis.

And this is what the regression analysis shows.

When you consider of all the institutional and individual level factors that have a say or can predict or explain how English learner proficiency.

English learner overall composite scores are manifested, or the results look a little bit different. We can see that 2023 is looking higher than 2022 once we have accounted again for all these different factors through a much more rigorous and much more analytic approach rather than comparing average scores across years.

Positive trends and more to look forward to as we're just finalizing the administration.

I'm really looking forward to plugging in all those assessment scores into models checking it.

We all know that the federal government has allocated a lot of money to try to offset some of the learning losses from the pandemic, \$200 billion that was allocated in 2021-2022 that's set to expire in the September of this year.

Potentially we're seeing some results or aftermath of that funding coming through in this higher-level aggregate trend.

It's worth to reiterate that recovery is not uniform for everybody.

We're seeing that the pandemic had a large and sustained impact.

It also had a differential impact on English learners' outcomes.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

As you see disparities or different relationships that were uncovered using regression analysis.

The orange bars showed the picture before or after the pandemic, and the blue bars show what the relationship looked like before the pandemic.

Let's pick the newcomer students again.

We see pre COVID-19 newcomer students scored about eight scale score points lower compared to non-newcomer English learners.

That has changed after the COVID pandemic.

It looks like newcomer students are performing a lot better, so they're coming in at higher proficiency levels.

However, an important caveat, if you look a little higher in the chart, so the 5th or the 6th category that says Hispanic newcomer.

We can see that this difference in the newcomer status hasn't manifested the same way for Hispanic students.

In other words, while newcomer students are doing better, post COVID for the general English learner population, while the same isn't true for Hispanic newcomer students.

It looks like post COVID they're coming in at a slightly lower proficiency level as measured by their overall composite scale score compared to non-Hispanic newcomers.

Very important differences how variables are manifested, and relationships are manifested for Hispanic versus non-Hispanic students as well as pre and post COVID.

I don't have a lot of time to unpack all these differences.

This study should be coming out soon.

Hopefully by the end of the year.

Again, you will have a chance to rewatch the presentation to unpack some of the disparities by yourself using the same logic.

I showed some of the main effects or how these manifest pre and post COVID for Hispanic versus non-Hispanic students.

Here on this chart, you're seeing the same thing for those categories.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

Blue is pre COVID, orange is post COVID.

You can see that there are large differences.

Let's just pick the first category Asian non-Hispanic versus Asian Hispanic students who perform a lot lower compared to their Asian non-Hispanic counterparts.

Also, differences pre and post COVID.

I won't have time to unpack all these differences.

The orange dotted line shows the post COVID disparity in Hispanic identification.

The blue dotted line dashed line shows the pre COVID Hispanic disparity for all races.

We can see after the pandemic, overall Hispanic disparity as estimated for all races increased.

Additional evidence that the pandemic impacted specific students, subgroups and Hispanic English learners.

More negatively, so to speak.

Bringing all of this together.

It's a seven overall composite scale score point impact average impact of the COVID-19 pandemic on average English learner proficiency.

This is about equal to a loss of a two thirds calendar year worth of time as English learner.

It's also about equal to the newcomer effect at that negative seven.

It's a small upward trend in 2023.

When we look at what the model is producing, there are large differences by IEP status.

For example, students have been identified women IEP perform about sixteen scale score points lower compared to non-IEP English learners.

That's about twice the size of a pandemic.

Very large differences.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

We saw negative newcomer and long-term differences as well as large and negative Hispanic and newcomer differences.

I talked a little bit about how newcomer differences are different for Hispanic English learners.

We saw some differences in in timing program as compared to Hispanic versus non-Hispanic English learners' outcomes after four years in program.

Non-Hispanic level of average proficiency is close to Hispanic after at least seven years or almost twice as long.

There are some institutional level effects.

I didn't talk too much about these though. Main take away is that institutional contexts matter

Some of the preliminary findings are showing that including institutional level effects, state, district, and school level effects plays a little bit of an equalizing role in terms of the Hispanic disparity but a very slight equalizing role.

I'm looking forward to unpacking or how coefficients change from all models.

There are some signals and very successful schools and districts who are specialized to service needs of specific subgroups of English learners so Asian or students who are newcomers.

And that is sort of getting into the next stage of this research of finding what those bright spots are that can produce consistently higher results despite the pandemic and despite having challenges that have to do with the demographic population and the funding issues, that inequitable funding and underfunding issues that I alluded to in the beginning of the presentation.

Let's move forward some high-level implications.

We need better targeted and properly aligned resources and support that enables conducive learning environments specifically for students for whom disparities are getting larger.

Hispanic English learners especially, who are were already facing steep obstacles even before the pandemic, need the most immediate and most substantial supports.

We need investments in high quality dual language and bilingual education programs and resources to promote Spanish and other frequently spoken languages.

States and districts are encouraged to perform similar analysis using their own data to further unpack some of the disparities and nuances in their local contexts.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

I did present a lot of data. I'm presenting all online data.

But we know how heterogeneous and context dependent and unique the English learner population can be from place to place.

Looking at the local context and disparities to try to see where the most immediate support is needed, that should be really underscored and highlighted.

What we can do or what we're doing.

I presented some of this research at the most recent ARA conference.

There is a poster that I put together that basically sums up the main points.

Thank you very much.

The number is different from year to year.

If you open the report that I sent you, the ends are given in those in those figures.

It includes the entire population of English learners for whom we have valid overall composite scale scores, and it includes only online.

1.2 million in 2017.

1.5 million in 2018.

It's getting close not quite to 2 million in the last years.

It's online since kids who don't have all four domains completed are not part of this study.

It's an underestimate of the entire population. It's getting close to it.

I know we did different analyses on individual items.

The analysis is performed for different subgroups of English learners, and these are to make sure there isn't differential item functioning or discrimination for specific subgroups.

There is of course a limit to which you can trust this analysis.

Many steps involved that we do both in terms of the analysis like bias and sensitivity review.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

There are a bunch of panels that review the test items and questions.

We have a very high degree of certainty that the differences we are seeing are not due to the test itself, but due to the support or the lack of support that student students are receiving.

And of course there are a lot of other factors, institutional individual level factors, some of which are not part of this study and cannot really be part of any study.

Models are estimating about 70% of the variance and only 30% is left unexplained.

It speaks to a very high precision and very high consistency of these estimates and to credence that these differences we're seeing are real especially in the context of the pandemic increasing and should be taken seriously.

Any first steps in digging deeper into the district data, definitely start with one grade level.

Once you complete the minimum level or one unit of analysis. It's easy to build on and include grade levels.

I would suggest looking at whatever measure of socio-economic status the district or school or state has.

That's one measure that I couldn't include in these data because we don't collect it.

It's an important variable both literature and common sense tells us which is responsible or driving some of these disparities at the individual student level.

Is there an expected average growth each year?

That's a very good question. It is very different from place to place.

It is very different from grade to grade or demographic to demographic.

The best answer I can give to you is reflected in time as coefficient estimated differencing out all potential things we can measure or have measured in the data set including the institutional level effects.

It shows on average. I should make this bold and highlighted. As an average, there is about a ten scale score improvement in overall composite scale scores.

It will be different from student to student.

There is a fixed grade effect or grade bonus.

Depending on the grade and state, differences by individual identities and individual level covariance.

## WIDA Webinars - Using Data and Research to Inform Practical Issues in EL Proficiency and Growth

The ten scale score per year average improvement is what the data is showing us.

What we've observed from the last six or seven years of academic data.

Is there an average year of expected for students to proficiency out?

I think this question is about the timeline to reclassification.

It's very different from place to place.

Research says five to seven years.

That was prior to the pandemic.

If you're looking at these some of these predicted trajectory charts which may change.

We really don't have enough data post pandemic data to have a more precise better answer.

But my hunch would be that if it was five to seven years before.

It's going to be a little bit longer now.

It will hopefully get better and better as education is more adapted to post COVID ways of doing education.

More remote learning or zoom meetings such as this one.