Keith Bailey: We now turn it to the next session which highlights the Post-Secondary Employment Outcomes or PSEO experimental data series. Serving as the moderator of the PSEO panel is Andrew Foote, Senior Economist in the Center for Economic Studies. Please welcome Andrew Foote.

Andrew Foote: All right thank you so much for the introduction Keith. So this panel is a conversation about the Post-Secondary Employment Outcomes, talking about expanding the partnership and also expanding the impact of the data. So thank you all so much for joining us virtually today.

So I wanted to take a quick moment to talk about the outputs, the sort of the data products that PSEO is. And so what it is is employment and earnings outcomes for graduates and we report it at the institution level, the degree level and also the degree field. So it’s really detailed data.

The earnings data is at the 25th, 50th and 75th percentiles of earnings for those categories and the employment data is at the industry sector and Census division level. And we report that one, five and ten years after graduation because we think that short run earnings are and long run earnings are both indicative of the returns to education.

So the PSEO as of May so in a couple of weeks we're releasing one more state and that’ll get us to 401 institutions which is about 18% of the coverage of the entire post-secondary graduate population. We have a number of applications to access this data. We have PSEO Explorer which our data team has put together which is just fantastic. And we also have - you can access the data either by downloading it on the Web site or through the API which is fantastic as well.
And of course in the future we want to incorporate more earnings data so working right now on W-2 and 1099 and we're also working to expand on some new states. I wanted to throw out this wonderful map that our web team made for the data. You can see that there’s 11 states right now that are - that have a system or institution like a group within their state participating in PSEO. And we have, you know, Texas we have a lot of coverage because we have all of the publics in Texas and some of the other states we have slightly less coverage but still a large share of the graduates from those states.

And then we have eight states that are coming on, Indiana’s going to be the next one and then we have seven other states that are coming soon where we have active MOUs but we have not finished processing the data. So we'll be working on that.

And so I wanted to introduce our panelists, they’re sort of the past, present and future of PSEO. Colin Chellman is the Dean of Institutional and Policy Research at the City University of New York and they have been with us for a while and so they’ve interacted with the data much more than some of the other people on this panel because they’ve just had the data for longer.

Dr. Lisa Williams is the Associate Commissioner for Workforce Education and Training at the Louisiana Board of Regents and Lisa just - we just released Louisiana Board or Regents data last week so very much the present. She just, you know, they’ve just got the data and so she can talk more about that rollout.

And then Carrie Mayne is the Chief Economist at the Utah System of Higher Education and she - they have an MOU with us and we're working on getting their data and processing it and so they’re sort of looking forward to when they get the data.
So sort of the past, present and future and we'll talk a lot more about that. So I want to give them a chance. I'm going to stop sharing my screen so that we can just talk now. Just imagine us sitting on a stage like the before times when we could all sit together. So I wanted to give you all a chance to introduce yourself first. So if you could introduce yourself maybe starting with Carrie about how you heard about PSEO and then how you got involved in PSEO as well.

Carrie Mayne: Thanks Andrew and thanks for the opportunity to speak with everyone. My background is actually in LMI. I was in LMI for 14 years and five years as the LMI Director and so I knew PSEO in its early stages of development from the angle of the labor market BLS data side.

And so when I transitioned over to the Utah System of Higher Education for Data and Research one of my priorities was to connect back with the - my colleagues at the Census Bureau and see what we could do to join with the PSEO. And so it’s taken some time to get the MOU in place but we're excited and we have full support from our 16 institutions so we'll have all public universities for the state of the Utah covered once we have everything in place.

Andrew: Dr. Williams do you want to go next?

Lisa Williams: I will thank you so much. It’s always good to be in the present, thank you for that Andrew. Again Lisa Williams is my name, I'm with the Louisiana Board of Regents and we have been - we are PSEO participants one week under our belt and we're excited about it. And I want to thank Andrew, Keith et al. for not pressing charges on me for stalking them for the last 3-1/2 years trying to get Louisiana in the PSEO cohort.
We had an opportunity to see Texas data when it rolled out and I literally stalked Andrew from that point on. It took us a little time with our back and forth dance with MOUs trying to get MOUs signed. We had some turnover in our labor market area and so we're excited now to be a part of this incredible cohort and are looking forward to what’s to come. So thank you one, for permitting us to be a part of your panel today and we look forward to the conversation.

Andrew: Colin do you want to go next?

Colin Chellman: Yes the past will go last. So Colin Chellman the Dean for Institutional and Policy Research at the City University of New York. My office was charged with gaining access to New State Department of Labor wage data.

Six or seven years ago when Cuomo signed legislation allowing institutions of higher education to access wage data for research purposes we sort of working with our state wage data and formed a coalition or a working group with some other large state systems, Florida, Texas and California. Our working group had as its goal to create comparable definitions of populations and metrics so that we could benchmark against each other and answer a number of research questions.

And then so I was along for the ride when Texas and PSEO were working out their first agreement and then once that was signed, you know, we tried to get in line as quickly as possible. So I think CUNY was part of the third wave. So and now our working group has expanded to start discussing uses of the PSEO data and I will leave it there for now.
Andrew: Yes that’s a great segue. So I would love to hear from Lisa and from Carrie and Colin if you have some thoughts about some ways that your office has used or in Carrie’s case since you don’t have the data yet, how you plan to use the data that PSEO creates. And then also if you’ve heard from consumers that have used the data in particularly creative ways.

Lisa: Certainly I'll, I can kick that off. Thank you so much for the question. We as we said just recently received our data last week. We are excited about it. I should start by saying that Louisiana has a state master plan for public post-secondary education and it is really our north star in Louisiana for where we're going as it relates to our educational attainment.

We will have 60% of all working age adults that’s 25 to 64 with a credential degree or other certificate of value, certification of value by 2030. And one of the things that we've done is to look at what - how can we measure whether or not we're really moving the needle toward that goal and these data are going to help us to really begin to track that in a real significant way.

We have been looking in our state at trying to create a SiP to SoC qual to wall for some time and a Louisiana-specific one. And so these data really are going to help us take a quick quantum leap in that regard. I should also mention now that we believe in data and metrics that will paint a more vibrant and vivid picture of what is happening in our state and with our constituencies.

And so we have worked with the Atlanta Fed, the Federal Bank of Atlanta to create a Louisiana-specific cliff tool that talks about individuals in our state that are on benefits and what decisions they can make to keep them from going over a benefits cliff if you will. We have been working with MZ Analytics and have some MZ Analytic data tools as well. We created in-house a higher education master plan dashboard that looks at all of the plethora of
education data enrollment, et cetera, et cetera and you can see all of that on our master plan webpage on our regents page.

We also recently did what IELA Prosperity ended to look at what prosperity metrics are for our citizenry and how we really do move the needle on driving talent development. That is our imperative and we're very interested in it. And this data is almost like the cement you pour in the grout that kind of pulls it all together and so extraordinarily excited to have it. We have not had it long.

In fact we are planning next Friday to have an all hands on deck so I invited 250 of my closest friends throughout state government from our governor’s office to all of our cabinet-level agencies, all of our higher education systems to come and hear from Andrew and Keith and Angel [Colon Rivera] and others from our friends at the Bureau about how to maximize the use of this type of data.

We don’t - we're at the stage now where we have some ideas about how we’d like to move forward but until we really get in and start seeing the power of what we could do we are optimistic about what the path forward will be. So thanks again for the question.

Andrew: Yes Carrie do you want to sort of share what your plans are for the data as well?

Carrie: Yes we’re seeing the most important value in this data to contrast what we currently look at when we partner with our LMI shop to show student outcomes.

We have robust data matching with them and we're able to show outcomes for students who are employed in Utah but there are clearly some missing
components by not having the data on students who leave the state. And what we've learned in some analysis is that it’s not evenly distributed across the workforce or across the graduation population. There are key fields, key regions, key institutions and key degrees that are significantly impacted by the lack of data outside of the state of Utah.

So a good example is when we look at our workforce outcomes for our PhD students they look very weak. We know however that PhD students are probably the most likely students to move away from the state to get employment so this is going to fill in the gap on that story. We also have some competing debates around workforce development, specifically the issue of brain drain for lack of a better term on that, and this is going to be a pretty sharp and easy way for us to really vet out that concept and to see if that really is the case.

Utah tends to be a lower wage state. There’s good explanations as to why that is the case but it is always a question in our minds as to whether or not the higher wages in neighboring states are drawing our students away.

One other area that’s probably a newer concept to me only having a couple years under my belt at higher education is program, review on program approval. So at system office we approve new programs and review existing programs and in some cases some - that analysis is hindered by the fact that the student workforce performance doesn't look as good as the professors in the area believe it to be because they are in the know understanding that their students are getting employed outside the state.

And then to make an argument for program approval for a new program we are excited about the idea of pulling up other state’s data to show when
another state does have a program, these are potential workforce outcomes for neighboring states who are also in PSEO.

So oh one other component is very similar to what Dr. Williams said we too have an education plan. We have a higher ed strategic planning commission that has set attainment goals for the higher education system. They have to do with access, timely completion and then alignment to workforce demand. That alignment to workforce demand measure is going to be enhanced and we're going to tell a cleaner story about that when we present the PSEO data along with other data that we have. So we're very much looking forward to getting our data into the system and seeing our initial result.

Andrew: So Colin I'll ask you first because you’ve had the data for the longest, sort of what are some of the limitations that you see in the PSEO data that as you’ve been using the data you sort of have either run up against or things that you sort of see as questions you maybe can’t answer with the data or have to sort of go and use it more askew, yes.

Colin: Yes absolutely. And, you know, I prefer not to think of it as limitations rather features of the data. And also I should say I really don’t want to complain about the data. The PSEO data has just - has opened a lot of doors and answered a lot of questions that we had.

So with that said this is more of a, like a wish list for the future. A lot of the policy debates that go on within CUNY are equity driven. We have an equity lens on pretty much every policy decision. So those sorts of cross-tabs in the PSEO data would be incredibly helpful to us.

I will say that we are able to do those cross-tabs using New York State Department of Labor data the problem is we aren’t able to track our graduates
outside the state but one way we use the PSEO data is to compare the wages of students by major and college who left the state and see how they compare if we just use New York State’s data and we see that they compare pretty favorably.

So we feel a little more secure now after we've used the PSEO data to do that comparison. You know, really digging into the New York State data so we can do those cross-tabs by race, gender, age, health status but it would still be really useful to have those in the data in the future.

We’d love to be able to separate out data for completers versus non-completers, right now we can’t dig that far down. The update cycle is a little slow, every three years is not as useful to us as, you know, say annual updates. Right now from New York State Department of Labor we get updates twice a year and that satisfies most of our primary stakeholders at CUNY so we’d love to move in that direction with PSEO.

Leveraging the NSC data to isolate students who are continuing their education would also be really useful. And, you know, I know there are already plans to include the IRS data but that’s also going to make the PSEO data a lot more useful. We'll be able to cover self-employed graduates, those who are working for the federal government, those who aren’t currently captured by states UI wage data systems.

And anything about geographic cost adjustments would also be really useful. The vast majority of graduates of the City University of New York stay within New York City. Our wage rates are inflated by our geographic cost of living so a better way - making the data more comparable across states would be really useful as well.
Andrew: Yes those are super helpful. Thank you for sharing that. Carrie I’m going to throw this also to you, do you feel like what are the limitations as you’ve been sort of, you know, getting ready to consume the data and also seeing other states that you sort of see or features going with Colin’s.

Carrie: Yes I’m like the kid with the brand-new present, to me it’s shiny and new and I can’t see anything weak in it but I also want to present as Colin did is I feel like they’re not weaknesses so much as items that are on my wish list of, you know, PSEO Version 7 or what have you.

Definitely and I believe it’s on the list for future development is the geographic detail, being able to see what state the student is - where those students are going. That will be incredibly informative to the conversations about brain drain so we can specifically do as Colin was alluding to sort of comparisons of cost of living to see if the students have a net benefit in the end to seeking employment outside of the state.

One other thing and I haven’t really had a chance to dig into this but something that came to mind for me is that in the technical college system for some of the big accreditation systems they count not just an actual the what they call a graduation, a completion of a degree, but they use the term completion and they mean either finishing the certificate or getting employment.

So I think it will be - I think there’s maybe an opportunity there to understand what we can do in terms of putting those different student types into the dataset and maybe possibly parsing them out or just ensuring that if we are putting students that are not graduates but rather the technical college term completer will that still work within the PSEO framework.
I would also second the idea of having demographic indicators that will help with equity analysis. We are also being challenged to close our equity gaps and understand the workforce outcomes disaggregated by race and ethnicity. So being able to do that with the PSEO data is highly desirable. But again to me I feel like it’s the present I just unwrapped under the tree and we're really can’t wait to start educating our networks about the data that we have available.

We have a few institutions some Tier 1 research institutions that are incredibly excited about this. They feel as though merely matching data into the statewide system is not giving a clear picture of what their true workforce outcomes are. So when you have these research institutions with national network connections you see the students do the - the student workforce outcome have to be a national picture so that’s going to be something that will really revolutionize how we're talking about Utah students for workforce.

Andrew: Yes so the next question I'm going to ask Lisa first which is sort of what your hope for PSEO is in the future. What do you hope PSEO looks like, you know, in a few years’ time as you’re still experiencing it now but sort of what you would hope and this is related to the previous question but yes.

Lisa: Sure thank you for that question. You know, I would like for - if I had my magic wand it would be the all-inclusive go-to data source for Louisiana. And if that means that we need to arrange a match.com between the Bureau and the Atlanta Fed and the MZ to see if there are ways that data braiding and blending can occur so that for all states that are participants there is a more vivid picture of what’s happening in a particular state.

I'll tell you in Louisiana they call me the queen of collaboration. You know, invite me to a meeting I'm coming and I'm bringing, you know, 50 of my
closest friends to be a part. One of the things that I'd like to see and I know they said it’s a Post-Secondary Employment Outcomes experiment but we have individuals that we are heavily engaged with that have been just as involved and are trying and going to make be a large part of the workforce once they are released.

They are getting credentials and post-secondary training while behind the fence if you will and so we want to make sure that we are pulling in data sources from places that we might not necessarily think about. And so whether it’s corrections, whether it is what we're doing with our Department of Children and Family Services, our DCFS, how we’re looking at pulling all of those particular datapoints together I think is going to be extraordinarily helpful if we're able to bring them all into play.

And so we're excited about that. We're excited about PSEO actually having a pre-PSEO. I said pre-PSEO where we start looking at some high school data and then looking at maybe trends over time would be fun and interesting don’t you think Andrew. So we're thinking through how do we look at that workforce education continuum over time and then begin to plan for the long term trajectory of our workforce so we're excited about it.

Andrew: All right so I'll go to just keeping an eye on time I'll go to the last question here which is, and this is for all of you since you’ve all experienced this at various stages which is what would you tell a state either on the LMI side especially for Carrie since you have experience on that side who is thinking about joining PSEO and sort of both what to expect and sort of all of that. So Carrie if you want to start because you sort of have worn both hats.

Carrie: Yes so I think from the LMI side it probably helps to have a good relationship between LMI and a higher education. I remember when I was in that seat
wanted to understand if we were - if our state were to go down this route I really wanted to understand and be knowledgeable about how that wage data was going to be used.

As stewards of the data you’re always looking out for ensuring that the data is treated the way it’s supposed to with the right rules and regulations around privacy. The good thing is the Census Bureau is the go-to partner when it comes to data security and data privacy. So having a good relationship with your higher education system so that you’re both in the know about plans moving forward and you’re coordinating when the data is being used publicly so you’re both aware of it and you can both speak knowledgeably to it from the workforce side and from the education side is important.

I would also say on the education side what I’ve been very impressed with and what I think is very helpful to people is that the staff at the Census Bureau have laid out the data dictionary if you will in a very clear concise and very easy way. So having now worked in education data and being able to compare that to workforce data, education data can be quite messier. So little bit used to having a lot of swings and misses with data on the education side and a little bit more challenging on - I didn’t realize it was so difficult to define whether or not a student was enrolled or not.

But when we received the draft MOU my staff who have no LMI experience but just education data experience were very encouraged by how the data layout was. It was clear, concise, they feel very confident that they’re going to be able to populate the data without having to go through a lot of extra legwork to figure out exactly what the Census Bureau was looking for so that was a huge advantage and encouraged my staff.

Andrew: Colin do you want to go next?
Colin: Sure so I would encourage all systems and states to join the PSEO. The use cases of the data that you’ve heard today, like, make the case on its own. I think the benchmarking possibilities alone make it worth joining this initiative.

So for example using New York State’s wage data, like, I can tell my higher ups that the median earnings are $70,000 for a business graduate at Queens College. So the next question logically is is that good or bad. And I’ve had to say I don’t really know, I only have New York State data for CUNY graduates.

Now with PSEO we have benchmarking data by major and by college. And PSEO did the heavy lifting of providing comparable populations and metrics across states which is functionality that you would have to work really hard with individual states to get. And in fact that’s what I was doing with Texas, Florida and California six or seven years ago, we were trying to create comparable metrics to allow for benchmarking and when more states join we’ll have greater benchmarking possibilities.

I would also say that if you are one of the minority of states without education or postgraduate employment goals for your state this tool, PSEO data could be a really useful lever to encourage your state to develop those goals. It’s really tough to develop goals in the absence of data but once you have data a whole new world opens up and that’s another potential use of the data for us.

This policy side I'm really hoping that we can use it for leverage to create education and postgrad outcome goals for New York State.

Lisa: Do you want me to…
Andrew: Yes, yes.

Lisa: I would say kudos and ditto to what both Colin and Carrie said. In addition to that one of the things that I would add and I think Colin maybe mentioned this earlier where it comes to program approval, board of regents in our state is responsible for approving new programs and then closing those that are not as productive for our citizens. And so it will be very helpful on both sides of that.

The other thing that is extraordinarily helpful as we begin to have these conversations and invite other states to join is that the more states that participate the more diverse the population is and it becomes more of a view of what the real makeup is of our community.

With the state of Louisiana for example Louisiana is the only state in the nation that has an HBCU system. We probably have per capita more historically black colleges and universities so just the diversity question with the addition of Louisiana alone changed really the demographic fiber of what the Census Bureau I think was trying to accomplish and that’s a great thing.

So as other states are coming on board that have populations that are multicultural that it will help us to really look at some trends across diversity and ultimately make policy decisions around equity frames as we really need to do. So for - I think that would be probably my addition to that in addition to what both Carrie and Colin said.

Andrew: All right well thank you guys all for this. I think now we’re going to go to broader questions about PSEO both for - hopefully mostly for the panelists although, you know, if there are a few questions about PSEO specifically
those are things we can all handle. So I'm going to - I know Earlene and our operator will do this part so I'm going to let them do it.

Earlene Dowell: Thank you Andrew. Operator we're ready for questions.

Coordinator: Thank you and if you would like to ask a question please press Star 1 on your phone and record your name. If you need to withdraw your question press Star 2. Again to ask a question please press Star 1 and it will take a few moments for questions to come through so please stand by.

Earlene: Andrew one question did come in on the chat. The question was, if we could release outcomes by race and gender but not also stratified by major due to confidentiality constraints would that still be useful for your needs?

Colin: Yes, yes. And once we see those overall trends I can use CUNY data then to see if students by race or gender are particularly concentrated in or concentrated in particular majors so I can do that secondary analysis. I need your data though to kick that off.

And sorry to jump right in but I'm really excited about that one. I really want race and gender in the data.

Lisa: Agreed.

Earlene: Okay there’s another question, is it also possible to separate data by input cohort? This relates to evaluating equity as many adults or nontraditional learners have tracked through the adult ed or high school course offering which are often all adjunct-led offerings. These offerings may dramatically offer from the day school full time tenured faculty course offerings for traditional age.
Andrew: Yes I'll take that one. It’s currently not possible and it’s not just with the PSEO that is released but with the data we receive from the states. So we know we get a degree file from the states that tells us these are the people that received a degree. We don’t know anything about their course inputs specifically so that would be a lot more detailed.

That would be a good example where there’s some complementarity between what states could do with their data versus what PSEO can do because states usually have access to course level data from their own institutions and so we try to emphasize that there are some questions that are really good for states to answer. And I don’t know if you all have tried to answer those types of questions using the course data.

Carrie: I'll chime in on that Andrew. It’s adult learners is a important subject right now in our state and it’s getting a lot of attention from the governor’s office so we are exploring. But the general idea of having these particular student cohorts that we could trace into PSEO I can see the desire for that and it reminds me Andrew of the conversation you and I were having about the, is it the College Transparency Act that seems to be back in the news a little bit.

I know enough to be dangerous and say things wrong but the higher education led act as it currently exists precludes the federal government from having a student level record data network, a complete one but I believe legislators or congress is reconsidering that through the College Transparency Act and that would possibly get us closer step toward being able to do that. And if I remember correctly Census is the named partner in that so we would have these talented folks in the room representing these desires that we have to understand workforce outcomes by these various student cohorts.
Earlene: And I apologize that question was night school not high school.

Andrew: All right Earlene are there more questions?

Earlene: Yes there are.

Andrew: Okay.

Earlene: Question is, I have been told by college executives that PSEO is a grant and may not continue into the future.

Andrew: I would - we don’t have any indication that PSEO’s going to stop. I know that Keith and Erika will probably talk about this later when they’re talking about LEHD updates more broadly but PSEO has been pretty successful in terms of gaining stakeholders in a number of different areas.

Lisa: And just for the record we would fiercely object to any decision that would interrupt its continuation just for the record.

Andrew: Continue.

Earlene: Okay another question is Colin said the PSEO provides benchmarks for what programs are good and what are bad. Is there any pushback from programs that are deemed bad?

Colin: Well since my name’s in the question I guess I will go first. Yes we have had a lot of pushback but that was actually by design. We want our underperforming programs to get upset and do something about it.
So we have a dean for workforce development who convenes industry focused working groups. So faculty from our colleges get together, like say for computer science, get together with the heads of industry that hire our graduates to talk about whether the curriculum is keeping up with industry trends, if our graduates are actually adding value to companies in the state and the region.

And we see a lot - just looking at the 25 institutions under CUNY we see a lot of variation in the same major across institutions. So there’s a lot of variation and the programs that are underperforming do push back but we made sure that we had a mechanism to respond to that pushback. And that was those industry working groups that I mentioned.

Lisa: Can I add a little bit to that. One of the things when we start looking at approval of programs, our elimination of programs, purging programs, et cetera, one of the things that the data does is that it provides an objective view of what is high wage, high demand for us, what are the forecasts and outcomes in a particular area. What we do not want to do is have the opposite of the complaint be true, that a student has invested its time, his or her time and money in a career pathway that ends up not to be a pathway right. So what we want to do is to make sure that we're constantly ever evaluating those to make sure that at the end of the day people want to get a good job with a livable wage and be able to transition their family to a life of self-sufficiency and prosperity particularly as they start moving through and they want to make sure that the return on their investment pays dividends in the long run.

So I think that there is always a little angst on the side of those of us that are in higher education particularly if the program under the microscope is my
program then how dare you say that my program is bad. But when you can have objective metrics that measure whatever the program is that comes under the lens it’s measured exactly the same then folks will do as Colin says start getting this righteous indignation about we've got to do a better job of updating our program. And so hopefully that’ll help.

Colin: Yes moving past anecdote and into data that was a gamechanger.

Earlene: Are you ready for the next question?

Andrew: Yes.

Earlene: Diversity, equity, et cetera, is very popular right now yet with me being Hispanic this has been a topic since 1964 Civil Rights Act. How will the data analytics gathered really reflect the true movement of the rapidly growing Hispanic population which will continue.

The last thought is I was head of diversity for a major newspaper company and can tell you that diversity equity existed. Well diversity/equity exists/existed, solely if which the company was making a profit. Diversity programs, analytics, et cetera, are usually placed in the background when a profit motive is not accomplished.

Lisa: I'll start that one because diversity always tends to be a topic that people have a little trepidation about really engaging in a genuine way. And if you had noticed I'm a Black girl so I do know that the conversation of diversity, equity inclusion has been going on for a long time but that goes back to a question that was asked previously as to why it’s important for states to be engaged.
For the very reason that you raised the question is that we need states that have very diverse citizenry to be involved so that the data can speak for itself around the question of equity and inclusion. If we don’t measure it we don’t know whether or not equity is really happening in real significant sustainable ways. We do not know if inclusion is taking place. And as a female that works both ways, an African American female we need to look at gender, we need to look at race, we need to look at all of the things that you have asked about in your question.

But that is one of the reasons I think it is so critically important that states take seriously the opportunity that the Census Bureau is providing here to provide the data so that when we look at it in a sober way across the board we can begin to answer the question that your question spoke to and the silent statement that your question made that you didn’t necessarily ask.

Because we do have to move, and this is one of the hot topics now but we do have to move from it being just a headline topic to it moving from tolerance to acceptance and to integration. And so there is some real work that needs to be done but the first step of that is collecting the appropriate data from a diverse population of individuals so that we can really track where we’re going and then set a trajectory of where we really want to go as individual states and as a country.

Andrew: That was super helpful thank you so much Lisa. I think we have time for one more quick question and then we need to go to our next - the next session but Earlene is there one more for us?

Earlene: Yes, excuse me if this is basic, does the dataset include online programs? Have any of you seen differences in outcomes for online programs? These programs are a great opportunity for increasing access for remote populations.
that may not have ability to relocate for education, have any of you seen differences in outcomes for these programs?

Andrew: Yes so I'll answer really quickly initially which is there are a couple online programs. The one that I remember off the top of my head is CSU Global Campus which is in the - has its own separate campus in Colorado. But I'm interested to see for instance for Colin and Lisa if there are online programs that you know are online that are in your data.

Colin: Sorry Lisa do you want to go first?

Lisa: I can just say this, I'm not certain but I can go back and check and I'd like to maybe reach out and share this information back afterwards once I make sure that it’s correct. But in a post-pandemic reality there’s a lot more online and hybrid courses that are being taught even in traditional campuses.

And one of the things that we found and I know what you mean is purely online delivery as a course right but we had a situation where we did a survey on campus, we had students living in the dorm taking online classes because they could take it when they wanted to, how they wanted to, et cetera. And so yes some of that data is included but I want to have our data folks tease out specifically online to get you a more precise answer to that.

But I will say going forward I think we're going to see a lot more online hybrid types of engagement in a post-pandemic reality.

Colin: And I will say that we definitely see - at CUNY we see a big difference in the labor market outcomes for our online programs but that is largely driven by the fields in which they operate.
So some of our biggest online programs are business management and business students, you know, just end up making more money than say liberal arts students. So it’s driven by field more than modality.

Andrew: Yes. All right great well we're at time so I want to be respectful of the next set of panelists so thank you so much Carrie, Colin and Lisa for joining us. This has been fantastic. It’s been great to learn from you all and I hope you guys have a great rest of your day, thank you so much.

Lisa: Thank you.

Colin: Thank you Andrew.

Keith: …the LMI perspective so thank you for taking the opportunity to share with us your perspectives.