**Kathy Booth**

Learn how data can inform action to improve adult learner outcomes.

**AS** [00:00:00] For today's podcast, it's a pleasure to welcome Kathy Booth. Kathy is Project Director for Educational Data and Policy at WestEd and staffs WestEd's Center for Economic Mobility, where she leads projects that help translate data into action. Her current projects include documenting how states are modernizing their linked data sets to strengthen equitable outcomes, measuring systems change efforts to broaden participation in STEM, and delivering technical assistance to community colleges on using labor market information to develop stronger pathways to living wages. Previously, she served as the process facilitator for the development of the California Cradle to Career Data System and supported the Guided Pathways movement. For over five years, she served as a project manager and architect for the Launch Board, a suite of dashboards that make data on student progress, completion, employment and earnings outcomes available to educators for the purpose of program improvement. She also helps to map data across systems, including crosswalking K-12 and community college offerings, tracing adult education pathways from K-12 to community colleges, documenting educational pathways to employment, and aligning data captured by educational institutions and social service agencies that support workforce development. In her previous role as executive director of the RP Group, she led research and technical assistance projects in the areas of multiple measures skills, building pathways and student support. Welcome to the Student Success Podcast, Kathy.

**Kathy Booth** [00:01:36] Thanks, Al. It's a pleasure to get to talk to you today.

**AS** [00:01:39] So, Kathy, I'd like to start all podcasts by asking guests if they wouldn't mind sharing something outside of work, a hobby, a story, a special talent.

**Kathy Booth** [00:01:49] Like many people, I like to do the Wordle, which is a online game where you basically have six chances to guess a five letter word. So lots of people do this and they share their scores with their friends. But I do this one extra step, which is that I then write a piece of micro fiction based on the word that's the answer. So micro fiction is basically the idea that you tell a story in about a paragraph or at most a page.

**AS** [00:02:18] Would you share something, please.

**Kathy Booth** [00:02:19] I'd be happy to. When he looked out, all he could see was the rain streaming down the steamy windows and making the trees into smudgy indistinct shapes. The gloom was so dense that the street lights had come on early. As usual, the artificial electric blue of the LED light failed to illuminate much. He heaved a gusty sigh and wandered back toward the kitchen, wondering if there was anything to eat, which is when he saw her distracted by her phone and standing by the sink, her freshly poured coffee, growing cold. He surprised her with his sudden presence and her smile brightened the room. She stooped down and rubbed him behind the ears. "Who's a good boy?," she asked. And he knew it was him.

**Kathy Booth** [00:03:06] And if you hadn't guessed the word that was the prompt was "hound."

**AS** [00:03:11] Oh, my gosh. That was amazing. Kathy.

**Kathy Booth** [00:03:17] Thank you. Well, I mean, I like to think of myself as a storyteller. At one time, early on in my career, I had a job and it was ending and I really didn't know what I was going to do next. And my college roommate was sort of pushing me and she said, Well, what would you do if you could do anything? And I didn't even think I just said, I want to be a storyteller, but I don't think you can get paid to do that. And it wasn't too long after that that I discovered the world of institutional research and discovered that there are ways that you can be paid to be a storyteller. So I don't know. It's just another facet of that. But I do some other creative things. I'm a salsa dancer, for example, so it's good to have a couple of different things that you do for fun.

**AS** [00:03:59] Wow. So we have worked together in a few settings where we've been doing trainings out in the field, and I got to say that you got street cred. I mean, people listen. Kathy's got something to say, I'm going to listen. And I think part of it is because you are a storyteller, you are able to explain things in such a way. Complex data about students. And I think that's one of your strategies, one of your secret sources, if you will, is that you just are so good at storytelling. And I just love the way you do that with data. So I just wanted to let you know that I saw the street cred. I saw people go. When Kathy talks, we listen.

**Kathy Booth** [00:04:49] Well, I don't think it's my secret sauce because I'm pretty upfront about it. So just for clarity, a lot of the work that I do is with data. And I've worked with technology for most of my career, but I really started out as an accidental techie. I'm actually a very late adopter. I don't like technical tools. I don't like it when they change. And I discovered this could be an asset rather than a flaw because most people don't actually like how confusing technology can make things or, you know, data and numbers. I did not consider myself a math person. I completely succumbed to that kind of stereotype threat that affects a lot of women. But that helped me because what I kept hearing from people when I was working in institutional research was that they didn't have the information that they needed to be able to understand more fully what was happening. So a really good example was just knowing what happens after students leave school. So lots of kids come back, lots of adults come back and they talk to their educators and tell them what a difference they made in their lives. And so you get these little nuggets where you get a sense of impact, but it's difficult to know for everybody. So a lot of the work that I ended up doing earlier on in my career was about getting data to people, but it was always with the intention that we would use that as a ground, sort of the basis for really digging into the stories of students. One of the things that I hadn't expected in my my data journey was that you mentioned in my bio that one of the things that I've done is I've helped link together data, most notably for the California Community College System, where I was really inspired to try to figure out how to get in particular employment data to practitioners, because I think that all of us are united, that we really want to get students to a better life and being able to see if they've attained a better economic standing becomes a way to understand the amount of flexibility they have. Do they have more choices about how they spend their time? Are they worried less about how they're going to take care of their family? I wanted to give people data about their economic outcomes, and what I discovered is that just showing people numbers was very difficult when people wanted to figure out how to take action. And so being able to lead with a story that anchored those numbers, whether their labor market data or even sometimes just straight up outcome numbers like completion or transfer rates, it's easier for people to take action with. So I think that storytelling is the most important part of research, and I think you've seen a lot of that happening in the research community of people saying it's the data is just where you start. It's the conversation where the change happened.

**AS** [00:07:33] Yes, absolutely. So speaking of stories, then, tell us this relatively new center, tell us what it's about. There's a focus on adult learners and perhaps you can help us define, well, what is an adult learner?

**Kathy Booth** [00:07:49] That's such a good question. You know, it's funny, working in community colleges in particular, if you look at who goes to community college, an enormous percentage of students are not what's called traditional aged. So what I think is really funny is that our most common group is the one that we refer to as if they are uncommon. And that gets sort of cut in funny ways. Like we'll say, okay, you know, 25 and older, that's the nontraditional student. And especially if you're looking in career and technical education, that is your typical student. But I have a colleague, Peter Barr, who is a researcher from the University of Michigan. He actually is a product of the California community college system and worked for a period of time at the chancellor's office and has done a lot of research in California. And he took on this question of what is an adult learner in a study that I really enjoy because what he did is he sort of broke down what is it that we ascribe to people over the age of 25 and they're things like the amount of responsibility that someone's juggling and how they perceive themselves as adults and then a set of expectations about the way you would like to learn. So, you want to know why you're learning something, it's applicability, particularly to career. You want to be more self-directed, things like that. And when you look at all of those characteristics and then you look at who goes to community colleges, that actually applies to most of our students, even the younger ones. So I think that an adult learner is really sort of a concept that can be applied to pretty much everyone that goes to community college, but for the purpose of the work that I've been doing, we have been focusing on people that are not just straight out of high school, because one of the concerns that I have is that if you look at information about who lives in our communities, you'll notice that the number of adults, so few people outside of that traditional college age that don't have a post-secondary award is really significant. And given that we've got fewer people graduating from high school just because of demographic shifts, I think that now is a time when all facets of education, not just community colleges, also four-years, need to be looking at that population of folks who don't have an award and figuring out how to put a longer term educational credential on the table. And I believe that because what we know when you look at labor market data is that there are many more choices and much more stability when you get to the bachelor's degree level. So a good example of that is if you were just to take a look at a particular area like in the Inland Empire [California] and you looked at the number of jobs, basically the diversity of different occupations, there's many, many more choices at the bachelor's degree level than there is down at, say, the certificate level or certainly the high school diploma. And I think that one of the things we want to offer our students is choice, flexibility, the possibility of having make changing your mind about your career, of having flexibility if you need to shift. And the other thing that we know about bachelor's degree students is that they're more likely to keep their jobs through a recession or to be able to get more work if they are laid off so it's a place where there's a lot of stability. But we also know that adults tend to not end up getting those bachelor's degrees. So if you were to do a chart that looked at the number of students who are transferring and going on and earning a bachelor's degree for a community college setting, it is inversely related to the age of your students. And so we need to figure out ways to make education work better for those folks who have more in their lives than school. And I think that, unfortunately, we still run our institutions as if our students, all they have in the world to do is to go to school. And I know that lots and lots of people in our colleges wish that were true, but it's not. Know, they've got jobs. They've got family responsibilities. And so if we could be designing our institutions around the reality that people have to flex schooling around these other responsibilities and priorities, we would do better serving everybody. And that could help us address the enrollment crisis that a lot of us are experiencing. And all this is a great long lead up to like why we founded the Center for Economic Mobility. So I work at WestEd, which is an organization that's a nonprofit that does a lot of work in education and does a lot of work on equity issues. And most of the work of WestEd is focused more in the K-12 early education space. But there's a group of us that have been working for close to a decade at WestEd who really focus on post-secondary adult education and workforce and economic development. And what we realized is that these are three silos that tend to serve the same population or could serve the same population, but they have entirely different funding streams, different internal languages, different rules, and it makes it really incoherent. So if you were an adult and you lost your job during the pandemic, trying to figure out where you go to school can be really difficult. And so what we're trying to do at WestEd with the Center for Economic Mobility is to build stronger connections between those different silos of service delivery. Because if you look at, for example, all the work that's been done recently on just addressing basic needs for students, it's really hard for students to go to school if they are homeless, if they are hungry, if they need basic services. If you partner with a workforce development agency, there's all sorts of ways that you can supplement the resources. And so it becomes more than the partnership of the food bank as a way to address hunger. Same thing with adult education. It's really designed for flexible service delivery, open access, open exit, kind of like as it's done in Noncredit in California. And that might just be a strategy that works a lot better for somebody who's just beginning to reenter postsecondary education. But it can serve as a really powerful pathway if it's really clear how you get from maybe a pharmacy to short term credential in an adult school into another medical related job down the road.

**AS** [00:14:02] So the audience for the Student Success podcast, they're mostly practitioners. What are the types of resources, Kathy, that you will have readily available for them to help them understand the kind of changes they need to make?

**Kathy Booth** [00:14:20] So the focus of the center is really threefold. So what we want to do is we want to curate information that is relevant for work that practitioners are doing. We want to work with them to make meaning out of that data. We're not going to just tell you this is what it's about, you know, go forward with our message. We really want folks to dig into the data and bring their own expertise to make sense of it. And then we support people in the actions they need to take to create systems change. So I'll give you an example of a current project. About a decade ago, I mentioned earlier Peter Barr, the researcher who did the work on adult learners. So he was doing an analysis of course taking patterns among community college students in California. And at that time I was the executive director of the Research and Planning Group, and I was doing a lot of work with current technical education faculty about the fact that we didn't have any employment data. And one of the things that I was hearing from those practitioners was that they had students that came and took one or two classes and, you know, got A's in the class and then went out into the workforce and they would report back and say, This is great. This is a skill that I needed to get the promotion or to get licensed in something that's going to give me more job opportunities. But at the time, we were really focused on the completion agenda. So those students were considered failures and those professionals were saying to me, like, I just don't understand why this is failure. So Peter and I simultaneously realized that there was probably a lot of students that were meeting this course taking pattern, and he was able to identify them in the data. So we named them Skills Builders to clarify what they were doing. They were there to upskill or reskill, and we actually were able to put information about them into the accountability framework. At the time that was called the scorecard, where colleges could see if they had skills builder students, if so, in what disciplines, and they could see how much their earnings increased after they took classes. That was happening right after the Great Recession and when the economy got better, interest in skills builders kind of fell off among a lot of the community colleges. And while there is definitely ways that you can see outcomes for skills builder students in tools like the community College Pipeline and the Launch Board, it kind of fell out of conversation. But Peter went off and did the same research in other states. So he went to Michigan and to Ohio and to Colorado and did a very similar analysis and discovered that the number of students that were doing this kind of course taking was remarkably consistent across the states and over time, including in different economic cycles. So it's somewhere between one in seven and one in nine of all first time community college students are participating in this very, very short term course taking. So what we wanted to do when the pandemic hit, we knew that interest in skills builders was likely to increase again because the economy was in such freefall. And so we wanted to understand who was actually benefiting and how much they were benefiting. So one of the things that's interesting right now is that we're having this national conversation in which a lot of people are saying that they don't think it's important to get a degree, that it's sufficient to take a couple of classes, get a certificate, and then you can get a good job. And unfortunately, that is not what the labor market shows. I mean, there are definitely some occupations like welding, like truck driving, where you can do a short amount of training and get a really decent salary. But for most folks, that just isn't true. And a lot of those jobs are not things that everybody could easily do. What we do see is that skills builders get a significant short term boost. So on average, $7,000 more a year, which if you want to talk about return on investment is fantastic. Take one class makes $7,000 more. I think a lot of us would want to do that, but it's not enough to get people to go up an economic rung. So what we did, for example, of a project is that we have created a methodology so that any college researcher could very simply go in and identify how prevalent skills builders are in their institutions and identify what are the courses they are taking. And then we created a resource guide that explains what to do with that information. So basically, you can map those couple of classes onto your longer term credentials. So maybe someone's taking the first two courses in a sequence that leads to a certification in automotive, and then you could reach out to those students who are showing that kind of course taking and say, Hey, why don't you come back and take these next three classes? And if you do, you can get this Toyota certification and you're going to make $30,000 more a year. And that makes the value proposition really clear to individuals. We also we're doing technical assistance, working directly with colleges to help them have those conversations, because one of the things that can happen is that people are not always believing of the data. And it's a great opportunity to lean in and ask people what it is they know that they don't see represented in the information that's being provided and then working through that knowledge to figure out based on what we can see in the numbers what are the activities that are appropriate for their institution and their student body.

**AS** [00:19:30] So I developed an inquiry and action team model, and it works with the coalition of the willing within a career and academic pathway, also known as a meta-major or within a program or discipline. I work with one team. It was an automotive team. What we were learning during the process is that most of their students were just taking one or two courses and they were done. These students saw that as success, as a success because that's what they needed to have the next skill to get a little bit of bump in their raise. But they were not interested in a certificate or an associate's, but it was actually a little bit difficult to know who they were. The faculty had to talk to them and they said, Oh, yeah, I'm just here for for one or two classes. So I'm wondering how do practitioners identify those students that are skills builders? Is that something that they do through your dashboard at WestEd or do you show them how to do it at the college. How do they identify those students, especially given that students change their minds all the time?

**Kathy Booth** [00:20:34] So the methodology that we put out would allow you to look backwards and identify the students who engaged in course, taking behavior consistent with being a skills builder. And so what's great is that Peter is the most rigorous researcher, so he always does ten times as many logistic regression as you need to to really refine this methodology. But despite all that rigor, it really boiled down to exactly what the faculty said to us ten years ago. The skills builders were about to enroll part time. They only stay for one or two semesters. They pass the class. The classes are almost always a CTE class. That's it. And so you can go back and take a look. So if you did an analysis that said, Hey, we have a lot of students in automotive, for example, they're going and we see this over and over again over time. Then you've got something going on in that program. Now, automotive is an interesting case because there is a reason why people would come and take one class, and that is to retake the transmissions course, because as you may have noticed, cars are computers and the transmission courses where you would learn about the new operating system in a car. And so for someone maintaining a job, that one course may be exactly what they need. However, one of the things that I think that community colleges are really good at is helping students realize their potential. So maybe you had a dream of being an engineer and you were going to school and your mom died and you were taking care of your younger siblings. And that whole dream just went out the window and you ended up working in car repair. And there's always jobs and car repair. And I think this is good. I can do this. But if you have a teacher that says to you, Wow, you are so good with this complex process of the computers, have you ever thought about going into electrical engineering? I mean, we've all heard these stories. Many of us have had this happen where you say that to a student and something just rekindles in them. I think that one of the things that I'm often curious about is that there's a lot of discussion, especially with guided pathways now about like, when do you do the career advising and is it a good idea maybe when students first come to have them do assessments of interest so that maybe they could learn about options? Great example in nursing, like most people who want to come to a college and want to do something in medicine, they want to be a nurse because that's the job they know about. They may not know about a radiology tech. We assume that students actually know what their options are. We want to give them the ability to explore. But the truth is, I don't even think a lot of us who work in the colleges really know what the labor market is like. Why would somebody, when they were 35, know any better than when they were 21? Right. So what they will know is a lot more about what their aptitudes are, what makes them love going to work, what makes them hate going to work, what their real needs are related to, how they're going to balance their job and everything else in their lives. So that is a group of people that would really benefit from some focused career advising, especially when we can help people map the skills in something that is on the CTE side of the house to something that is on the transfer side of the house. And I'm going to pause for a moment there to say, I know that is a completely false dichotomy, but this whole like academic versus CTE characterization makes me crazy. I have been confused for most of my professional life as to why there is no clear pathway from construction path, construction crafts to engineering and community colleges, especially when everyone got their strong workforce dollars and put in and machines. So if you go to UC Davis, they do not let the students on those C and C machines until they are seniors. If you're up the road at Sierra, you can get into that course and you're right there doing hands on learning. I think that someone who understands construction in context is going to be a much better engineer, someone who is understood how weird things can get in the car is going to be a much more effective electrical engineer than someone who's only done book learning. And the answer is that we have a problem with math. But rather than taking head on, maybe there's a reason someone has been, you know, doesn't want to take math because someone has told them their whole life that they're no good at it. And I consider myself someone in that place that I, I probably would have been a quantitative researcher, but I was told so many times in high school that as a girl, math was just going to be hard for me, that eventually I believed them. I don't know if somebody had given me some career advising right at that point when I said I wanted to be a storyteller, that was like, Kathy, you were actually a math person. I don't know, maybe I would be doing even more than storytelling. But I think that we owe it to students to figure out what those opportunities are. So the fact that the student said in the moment to those faculty, Oh, I don't know that I want to do that, maybe it's because they don't know what their options are. And maybe the other reason they don't want to do it is because the school was set up through the college, set up in a way that what they would have to do to make it into that transfer pathway is so onerous that it just isn't something that's going to fit into their life and that is something that is completely under the control of people who work in the colleges. So many of those things that get in the way are things that we have the power to change. And that is why the Center for Economic Mobility is looking specifically at structural change. This cannot be a pilot program that helps 20 guys make it from your Toyota program into engineering. This has to be something that gets done across the board so that everybody has a chance to do things differently. And that can be hard, but it's really worth it when you can see the difference in what students are able to achieve.

**AS** [00:26:27] There's so much there, Kathy. So I'll start again from the practitioner perspective. So you they get this data, they understand now who these skills builders are. They have a profile, if you will, a, almost like a Skills Builder Profiles success team that has this profile of students and can reach out to them and get them to the resources for counseling and advisement. That could be a way. And do you have other ideas, ways that you've seen this happen, Kathy?

**Kathy Booth** [00:27:00] So I think that, let's stick with the automotive example. So let's say you realize you have this phenomenon. So I would go talk to the faculty and I would go talk to the current students and especially those those students that are like, Oh, I'm just here for the one class. Ask them why. Ask them where this course fits into their current plans and what their long term plans are. Then what I would do is I would have faculty and deans work together with local folks, whether it's your employer council, to sort of say, okay, so what's really going on for this longer term pathway? So I know that one of the things is that there is a real shortage of people that do automotive repair. And so maybe you start figuring out a way that you're going to create a stackable credential that gets people a step further where the employers can articulate what they really want. And you could say to students based both on like labor market data that maybe you get from a tool like, like lightcast, but you could also get information from employers in your region that say that this is the benefit of going the extra step. And then as you mentioned earlier, we don't always know who the skills builders are until they leave. They may not know that they're going to be a skilled builder until something happens where they're like, God, this is going to be enough for now. So what you really want to be doing is proactive advising. So what you could do is in that like the courses that are where you've got a lot of students, you just spend a little bit of time in one of the classes where you say, Hey, this is what this class does for you. These are the things that you would get if you do these other options and you just lay them out for people and then you make that information available. Maybe it's on the web pages associated with that program. Maybe there is a poster in the classroom, maybe there is a resource in canvas that people go to. It doesn't have to take a lot of instructional time, but you're just putting the information out there. And then also, this is what we saw, when we were first looking at things like a transfer culture in an institution, really working with the faculty and the deans in the automotive program about do they view the students as being transfer material, what are their thoughts and really working on the habits of mind within that that group to say how can we open up these other possibilities? And then maybe you do go that extra mile of saying that you want to make a clear connection between the automotive program and an electrical engineering opportunity at a nearby CSU, and then you work together to figure out how you're going to address. The way that you're going to get people through the math sequence. And maybe you have a special math jam that you do in the summer that's focused on taking the what you know, for a minute context of automotive and applying that to math concepts so that people have the anchors to begin to feel successful so that they move on. So those are some examples for how you could do this. I do have to say that I don't know how much this is actually working in practice, so we are just going out and working with the skills builder data with colleges, and we're really running into people struggling to see how their specific curriculum relates to longer term options. I think that's a wonderful opportunity for us to lean into this. You mentioned earlier that you work with these teams that might be students and not necessarily like the counseling faculty that are doing this work. And I think that this is a skill that we need to build across our institutions, which is a basic understanding of the regional labor market. So I think that one of the challenges that I see in community colleges is that we are still designing toward a job market that no longer exists. So if you look in most regions, there is less and less call for people with middle skills, jobs, and many more of those mental skills opportunities do not pay a living wage. And I think that is because we used to have union protection for that category of work, and that has largely gone away. I also think there's just been a real restructuring of our economy when we lost manufacturing so that there's plentiful, low skills, low paid jobs, and then there's the stuff that requires a bachelor's degree. So imagine there you are, just putting your heart into your job, watching your students move and possible obstacles to be there and then to learn that all that doesn't actually prepare somebody for a job that they can get is devastating news. And if we just leave it at that, nobody wants to look at it. But one of the things that I find really interesting about working with the skills builder data, it's a small enough chunk that you can begin to say, okay, what do we really know? So a good example of a Common Skills Builder course is a bit like a basic Excel or a basic computer applications course where you basically are getting when people are skills building in that area is someone who's trying to make a transition into an office job. So that course might become an incredible possibility to bring information to students about what the office jobs in the region are, being able to help them connect the dots between what they might already know from the work they may have been doing for a decade or more with the skills that are needed for area employment. And because things like in the launch board, there now is regional skills data that's prepared for Californians. The Centers of Excellence produce all sorts of incredible, easy to read reports about regional labor markets. We can really take time with everybody to understand that and then give students the social capital to be able to explain the value of what they know to employers. And I know this feels like it might be a little bit outside the scope of what colleges are supposed to do, especially outside of the CTE space, but the thing that's funny is that there have been surveys for, like, I don't know, 35 or 40 years asking people why they go to college and they say they go to college because they want a better job. So we should meet students where they're at now along the way, when we're helping them get a better job, we can give them an opportunity to learn more about the history of jazz or to be able to write micro fiction or things that are going to make their life joyful. And those things have value, too. But if we met students where they are for the job section and then helped them open up the space for other things, then I think we we're really leaning into the vision we have for giving students that better life that drives them to come to our colleges.

**AS** [00:33:22] Oh, Kathy, that reminds me that, you know, the whole Guided Pathways work and the pushback against it, you know, stop focusing so much on labor and in the workforce as it's, you know I was able to wander and it's a journey, it's a learning journey. And I think, gosh, what a privilege to say that, because have you ever talked to any student? Have you done any focus groups with them? They're there for the most part for a J-O-B. They want to improve their lot. They want to be able to get out of that cycle of poverty. So it's interesting because, you know, community colleges, higher ed in general, the culture change is so stubborn, so difficult. And so I love everything that you're hearing, and I'm thinking about because, yeah, everyone has a role, but because faculty have the most contact with students, then you need exceptional leadership. And by the way, when I say leadership, it doesn't always have to be the president or vice president. You can have influence without a title. It could be a chair who's really intentional about doing what you said. We're in this class, and now I want to teach you not only the content, but let me tell you these other opportunities, the other pathways, Right? Getting that information, that culture change, if you will, takes some time. So you got this skills builder, right, that the center's building. This is one idea, one project that you're working on to help community colleges. Is that the core of the center? Are there other other tools and resources practitioners to know about?

**Kathy Booth** [00:35:08] There are lots of other tools and resources. So we we have four primary audiences. We're focused on open access, postsecondary adult education, workforce and economic development and intersegment collaborations. And so we have tools for adult ed looking at the fact that it's very uncommon for people to transition from adult education into credit bearing postsecondary. We have tools that we're doing in work for us in economic development, working with employers to help make sure that they're really coming out problems with a full awareness of the students needs and not just sort of the bottom line. But I want to go back to something that you said, which is relevant across all of these different groups, which is that the skepticism that people express about focusing too narrowly on jobs and the desire to give students the opportunity to explore. So I think that one of the reasons why this comes up is that when we talk about labor market data, it tends to be very reductive. Welding to welding, nursing to nursing. And then you've got someone like me. I was a women's studies major and a theater minor, and I'm like women's studies, too. I don't know what, right? Well, turns out an institutional researcher makes a lot of sense. Storytelling makes a lot of sense. But it was a nonlinear connection. And so I think that part of what people feel is this discomfort. And that does hearken back to that idea about sort of a narrow determinism. So one of the things that I get distressed about is sort of this presumption that an adult learner can only and should only be directed to a short term program. So what we do now is if you look just structurally at who are the adults in our communities that are less likely to have a post-secondary award, they are more likely to be people of color. So when they reengage the community college, we have this golden opportunity to give them the chance to have a holistic education. And if we say to them, You don't have a lot of money, all you can afford to do is learn this narrow technical skill. We are actually reinforcing structural inequities because the truth is the only way to get up to those management jobs is to have the skills that are taught in the liberal arts, you know, critical thinking and problem solving and teamwork and things like that. And so it actually is important the students get to have access to those other skills. And that is what gets excised from short term technical focused programs. So what I recommend when people are in that conversation is to not shy away from it. Ask people about their own journey of how they cobble together skills to get to what they wanted to do. And then I really think that the truth is that it's not so much that we need to direct people into these like good programs versus bad programs, because I had two bad programs according to the way this normally gets talked about, like who's going to get a job with those types of majors. But I do think that any time you learn something with a coherent focus, if you are blessed with given some social capital to explain the relevance of what you know to a job, you can get pretty far. And I think that's why you see, if you look at the majors that people go into based on race, this is from a national study that my organization did. You see that white people are more likely to be spread across all possible majors and that different groups of people of color end up in majors that sort of correspond to racial stereotypes? I think that everybody should get a chance to do whatever it is. That lights their fire. But that means that colleges have to change the way we explain the relationship of our programs to work. So here's a really good example. One of the most popular majors in California is psychology. So if you were to say to someone, okay, what are the jobs that go with the psychology degree, they'll probably be like, Oh, you could be a psychiatrist or a psychologist or a counselor or things like that. Right. But if you look at the truth. So there's a wonderful study that's done by the census. It's called the American Communities Survey. And they go and they do these really long interviews with representative samples of the population. And it's a really rich source of what happens to people. So you can look at the bachelor's degree that they got and then you can see what jobs they had five, ten, 15 years out. So at WestEd, one of the tools that we have in the Center for Economic Mobility, we actually took that data and we put it into a Tableau show. So you can go in and you're like, okay, I want to know about the Inland Empire, and I want to know for the all the psychology majors, what jobs do they have? Or you can pick a job you can say for all of the managers. What did they major in? And then you get the data that's actually from your region. And you could do this in other states as well. And we pulled from a public file. So one of the things that I love about that is if you look at what psychology majors become, they are equally likely to be a manager as they are to be a counselor. And that makes sense when you think about the skills that are taught. But if somebody comes in and says, you know, I want to run a business, we send them over to the business degree. Now, if you look at the curriculum in the business degree, it's micro and macro economics. And then it's like the general ledger and accounting principles and technology tools that help you with that. Now, if I wanted to be the head of a company because I'm really charismatic and I want to be the boss of everybody, you put me in that business major, and I'm going to be just like hating life, like, do not make me work on the general ledger. And then you happen to take that general studies, like whatever the psychology course, and you're like, Oh my God, finally, something is relevant for what I want to do. And that's right. The student is right that the psychology major is teaching them more relevant skills for their goals. If we looked more at the empirical data and the jobs that people get based on what they study, we could do a better job of directing students, of contextualizing what's done in courses, of making the connections between the skills that people have learned in their jobs outside of school and the content that's being taught. I mean, just imagine in the psychology course, applying that to what it's like to be working in retail and how stores function. I mean, there's a lot there that could be learned. So those are the kinds of things that I think help us lean in to what is complicated about making structural change. So the thing that is so hard about that is you're asking people to change what they do in their day to day. Which is incredibly threatening when it feels like it's a loss. When I tend to do work, I usually start out by saying to people, Why do you work here? For all of the things that you could do, why community college? And I've been doing this for years and the answers are the same. People are a product of the system and they're paying it forward. They want students to get to a better life. They love the fact that they get to teach and not just do research. I mean, it's very focused on the community and the positive opportunities for college. And if what we can show you from the data is it's not working the way you intended. Then it becomes easier when you understand what specifically you're going to be asked to do differently to maybe make that change. Like you, I tend to work with the people that I call the usual suspects. They may or may not have a title leadership role, but whatever the initiative of the moment is, they're on it. And those are the folks that we have to start with because they can make the link between the concept and the reality and their specific institutional culture. And then you work out all that, what we call the yellow light people, the folks that are kind of sit on the sidelines waiting to see where the wind's going to blow because they're not going to throw their heart into something if it's just going to get flushed down the toilet in three years when the next initiative comes around. And I think in related to guided pathways in particular, I think that it was, I was very involved in that movement. It was a straight up attempt to look at systems change. What is it about the college that we could make different so that it would work better for students? And I don't feel like it was always implemented in that way. Like people were like, Oh, I'll make a map, that's great. We will have a meeting with 10,000 sticky notes and we will create meta-majors which just happen to be these exact same academic disciplines that we have always had under a new name. That is not structural change and it's hard to do it, but we've done it. I mean, if you look at what happened during the pandemic and the way people figured out ways to use online technology, for better or for worse, that is making a difference. We are hearing from students that makes it more feasible to go to school to make it more flexible. We figured out how to do that just a couple of years ago. We can figure out the next thing too.

**AS** [00:43:50] I work with social science and humanities teams, and one of the things that I tell them to your point about psychology is if you looked at the LinkedIn data, who are the CEOs, the presidents, whether it be in the corporate sector, NGOs, nonprofit. They're not business majors. The vast majority are not. The top one is not business majors. It's the social sciences, but we don't tell that to our students, the possibilities. And so, for example, the Ivy League. Your're a history, major, you're political science major, you're psychology major. Why do they end up at a place like, for example, McKinsey and Company? Maybe that's not the best example because they have some shady things that they've done. But anyway, the point is, is that they are critical thinkers. They tend to know how to collaborate, communicate, write well, etc. But we don't give students that knowledge and we don't give them opportunities through many internships or just experiences or even networking so that we can let them know that if you're going to be in history major, it doesn't mean you have to end up a historian or, not that there's anything wrong with that, or working at a museum, right, that you can be in a leadership role. And then, yeah, in terms of guided pathways, because I've been heavily involved in that. So many campuses are saying, Yeah, we're doing it, we're doing it. I'm like, No, you're not. You created meta-majors and they're doing absolutely nothing to change the student experience. And you create program maps, that actually don't even have the right math for students' path. And another good example, I think, Kathy, is, to your point about how we put certain students of color into particular programs, and one that comes to mind is early childhood. I think it's wonderful profession. We need our early childhood educators, but we're not giving them sufficient information because the wages are so low. And I saw the data at many campuses, the people who tend to go in that program, who are put who are advised to go to that program, are black females and at least give them information about that. You know, that's a if you're passionate about early childhood, that's great. But, you know, you can also have your own business in early childhood education. You can do X, Y and Z. Back to the structural change, Kathy. So how do you help in your role, given how stubborn culture change is in higher ed, and we know we've got to work with those influencers, so much of this is that leading from the middle, how do you help them with structural change?

**Kathy Booth** [00:46:43] I think it's really helpful to be specific. I think it's really helpful to bring it down to something that's knowable. So I'm going to pivot now to a different example. One of the things that I did most recently was I helped lead the process of designing California's P-20 data system. So what that means is we're going from preschool all the way up through all forms of postsecondary. We also have workforce and social service data that's included in financial aid. California has been trying to build a data system for 30 years, and so it was kind of a daunting thing to be asked to try to succeed where others had failed. And we did succeed. And the reason is that we flipped the story and we started with the concept of user centered design. So we just sort of said, what is this data system for? Why would we do this? What are the things that we really want to see change? And the state where this data would help and who would who would use the data and what would they do with it? And when we started with the use cases, it became so much easier to untangle the things that had sort of broken the planning process in the past. So a really good example is that when you're talking about linking lots of data about an individual there, the security risks go up because you've got more data that could more accurately pinpoint somebody, which means if there a breach, that there's a risk that their information could go out to somebody that's a bad actor. But when so when you're just saying, let's just hook our data systems together, you know, because it would be a good thing to do. The lawyers appropriately come in are like, no, that's not a good thing to do. What exactly are going to do with that information? People are like, well, you know, good stuff. We're going to look at it. We're going to to do some research. Yeah, it's going to be good. And the lawyers are like, not good enough. But when we were able to say we are going to create a secure data enclave that are going to use these types of modern security protocols about access so that you you can report into something and then you're manipulating something in a portal and you can't take anything out. And we're going to have these suppression protocols and these legal agreements and this institutional review board process. None of the lawyers were like, Oh, okay, yeah, we could do that, but you just have to have these things. And in the rule set, I think that's true for any type of systems change. So I think maybe one of the things that was rough about guided pathways was that different people were trying to change different parts of the institution in ways where they didn't understand the whole arc. So I think that we see like more progress on things like changing developmental education where the focus was more narrow. So for those of you out there that are still deeply committed to guided pathways, I would say don't lose hope because the framework is, make the college work better for your students. You may just take it piecemeal. And there are so many things that are happening right now that pertain to guided pathways principle. But just might be one bite out of the apple and just just start there, like just start somewhere. And I think that's a big thing that Guided Pathways said that we need to pay attention to was to move away from pilots. So there was a keynote speech that I sometimes give called The Seven Deadly Sins of Educational Reform, and one of them is Death by Pilot. And the reason why is that when we say, oh, we're going to make change by helping a subset of our students 20 or 142, we're going to take our most talented, change oriented people, and we're going to have them focus so hard on those 142 people. And it is amazing those 142 students do incredible things and then the other 10,000 students continue in a system that is not built for their success. And I actually I used to think it was annoying. And now I think it's actually part of how the status quo sustains itself because you have distracted the usual suspects. So all of your usual suspects out there, what you need to be looking at are the basic rule sets. So for developmental reform, there was this long, long conversation. Is a high stakes test a good way to figure out whether people are ready for a particular type, of course material. And is it good to have long sequences of classes to build skills that people last engaged in eighth grade? Like when we brought it down to that and started saying, let's try something different? Maybe the first it was acceleration than it was requisites. We figured out a different way to solve for the issue of making sure students got the literacy and numeracy skills that they needed to be successful in college. So there are ways like that. And it was that it wasn't a pilot program, it wasn't just the all summer bridge program, it was AB705 that said this change is for everyone. And it's not that it's been perfect. There are definitely students that are still being really poorly served because we you know, there's so much to do in math that that a co-requisite can't solve for all on its own. But it's that shift to understanding your role is to change the base rules so that a whole group of students make it through is the difference. And what I get frustrated about this I think about Obamacare. So President Obama, if you go back and you listen to adversity of hope, was really clear that he could find an issue that was going to shift outcomes for people of color and everybody else, too. And he worked so hard. He made so many compromises. He built such a strong coalition to change the given for whether people have the right to health care. And he changed funding streams, He changed laws. He survived Supreme Court cases. And I shouldn't just say it's him, because there were there were thousands and thousands of people that were helping make this happen. It changed the given and it is holding through all of the the critiques of it. And so that's what we need to be doing in education. And I do think that's possible. So what we're trying to do for the Center for Economic Mobility is find a place where colleges or adult schools or workforce development organizations really want to look at those underpinnings and figure out a better way to connect the money that we already have, the talent we already have to change what it feels like for most people going through those systems by just taking it down to a piece, really understanding the issue in your context. How do you make sense of that? What do you know that enriches a solution? And then walking people through that long change process so that we can stick with it, so that people can get through the rough days and keep pushing on because the students are clearly focused on that in their sights.

**AS** [00:53:29] You know, you're so funny about the pilot because when I work with campuses, I tell them that word does not exist in your vocabulary because they'll say, you know, we'll do some kind of onboarding, I chunk of the guided pathways work into basically onboarding. It's a beast. There's just so much to do. Their career and academic pathways, we created them. Now what are we going to do with them to improve our craft, to increase the sense of belonging and community, to really be intentional about equity and then teaching and learning. That's how I, I chunk up the, the work. And so if we're doing something on onboarding that will impact a lot of students, it isn't always a small number. They'll say, oh, so let's, let's, so Al we're going to pilot this. Nope, let's just call it what it is. It's implementation because pilots go to die. But you know, what is sobering, though, Kathy, You know, it took a law to structurally change this wretched thing that colleges were doing by using a test and having students take high school English and math all over again. So sometimes, and by the way, there's still, as you know, resistance to it. People complaining about it. But we have more people, more students, especially students of color, who have completed English in math than ever before. Do some equity gaps exist at some campuses? Absolutely. And others? They've closed, actually. But. If it wasn't for that law. And I work with campuses throughout the country where they still trying to do the right thing within their campus, but they also not able to change to have more student, student-centered schedule. They're still rolling over the schedule of what is convenient for them now looking at their population and that they have one or two, you know, two jobs, they're parents. So, it is a stubborn system.

**Kathy Booth** [00:55:33] I think that's true. Just related related to the use of legislation. I think it's important to recognize that AB 705 did force remaining colleges in California system to abandon the test and go to multiple measures. But there was a movement that went on for almost a decade in which all sorts of faculty looked hard at what they had experienced with their students and tried all sorts of brave things to make things different. There were policies that were shifted at the campus or district level. I think back to Cuyamaca and the work that they were doing early on. I think of Long Beach City College. So sometimes it does take a lot like it tool a lot for the data system to pass as well. But that doesn't mean that you have to wait for the law. I think that that AB 705 was only possible because of all of the hard work that faculty and middle managers and students had done to figure out what the alternative was, because he wouldn't want the legislature to just be like, Oh, you know what we think you should do is X, because they don't always have the nuance that folks on the ground do. So I think it's just important to look at the whole arc of what change looks like and then just to know what your role is in it. And I want to go back to that example, which I was just giving of Obama. I mean, I think that we tend to think about the figurehead, the person who gets the credit for something, and we forget that the Affordable Care Act required the work of so many people and that sometimes your role in making structural change is a really quiet one where nobody knows you did it and you're not going to get any credit. But you see what's different in the end. That's, you know, sometimes that's just what change looks like. And if we are expecting it to be all fireworks and like we won, we won, we won like that, that isn't actually how it flies. It's these little tiny incremental changes where everyone's hard work matters. Like just I want people to to recognize that your part may seem small, but there's no way this would happen without so many people pulling together.

**AS** [00:57:48] Oh, yeah, yeah. Cayumaca. Terry Nichols, all of that, they they paved the way and it took, like you said, a decade, though. A decade of so many students that were lost. But we are improving. As we wrap up here, I have a question for you. I don't know if you've been pondering this. I was in a meeting the other day and an A.I. assistant showed up to the meeting. It was an artificial intelligence assistant who went there to take notes for the person who could make the meeting. This same person came. He was working with a student, then came late and asked them to stay after the meeting because I wanted to learn about what is this A.I.? And he says, Oh, it's great. I also use it when I'm in the meetings because it just transcribes everything and organizes everything. And then over time, I have all of my notes in this platform. They're all organized. There's key themes. Everything is there. I also saw the other day and A.I., where you can go in, pick an avatar, and it's not a cartoon, it's a human being looking avatar. You type in the text and then you could add a file or images next to it and it in seconds creates a video for you. There's a AI that does graphic design. I'm sure you're familiar with ChattGPT. You give it prompts and it spits out all sorts of answers, right? So it's not like Google where you can see the links and search that actually actually gives you, and it's getting better. It's exponentially getting better. There's going to be significant changes because of A.I. to the labor market. Jobs may be potentially obsolete. I'm wondering if you've had a chance to think about what's happening right now with with A.I. and how you might respond to it.

**Kathy Booth** [00:59:52] Well, A.I. is like any other technology tool. There are ways it can be used that are incredibly productive, like what you're describing about how it's helping someone prioritize a student and still participate in a change effort. And it can be used horribly. I went on ChatGBT and I said, Please describe Kathy Booth and Peter Barr's research on skills builders, and it gave me a very declarative answer that was 100% wrong. Like, not even close. I think that, you know, our economy has been restructuring in lots of ways since the nineties that are pretty profound. And I think that there are a group of workers who suffered first for some of those shifts. Intel is building this huge new factory in the Columbus area, and all the community colleges are all abuzz, getting ready to help. And the major jobs are the people who fix the robots that are going to be building all the microchips. So that is a manufacturing job. But it actually hearkens back more to the jobs of the thirties. When you like, you had your little tool kit that was yours and you would go and fix things. So, you know, the economy is an incredibly complex place. So what is going to happen? All of a sudden, you've got all these, you know, educators that are like, Good Lord, my students are turning in papers that are written by ChatGPT. Now I'm going to have them sit and write it out in a blue book. God help us because everyone's handwriting is horrible because of computers. But, you know, we adapt. And I think that A.I. is not going to be the panacea, but it is going to change the way we do the work. And what it continues to do is focus on the capacity for discernment as being what the computer still can't do. I mean, I don't know, maybe eventually it will correctly summarize my research for me, but until that day, I think that this is back to why it's so important that we're giving students critical thinking skills and the social capital to explain what they can do that is different than a computer. I also think that if you look at the jobs that are growing in our economy there in things like health care, and I do know that in Japan they have robots that are looking after old people. But I think that there are there are lots and lots of worthwhile jobs that I may just be a support in it. And it's not going to take your job away. I think this is one more place where we have to step out of fear and assumptions related to our original economies and think creatively and then think creatively about how it can help us. I mean, one of the things that I hear all the time is that it's difficult for us to figure out which students need, what help, and maybe I can do some of that for us. And maybe we're trying to figure out ways to make sure that we're getting the right resources to the right students. And maybe if I sorts and organize as effectively with a clear role set, then maybe we make it easier to do customized support for students. And that would be fantastic because in the end, what we need to help students make it through is the things that those programs that got siloed as pilots like Puente and MESA and Umoja have been doing for a long time, which is to create cohorts of students, help them find their people. Help them have a community to support them in moving in through an academic pathway that leads to a career that is meaningful to them. And that happens independent of A.I.

**AS** [01:03:17] Yes, you're right. You know, I work, from a teaching and learning standpoint. I work with some of these inquiry and action teams and I told them, because there's the fear set in about AI. And I said, look, you either roll with it or be rolled by it and we're going to have to re-imagine even how we assess learning because of this. We've got to re-imagine how to help students use this, be purposeful in the classroom, that you can use this tool. And we're going to discuss how we're going to use it. It's going to be a learning journey for both of us, as it could be used to enhance critical thinking skills. There's so much potential, but there's also so much fear. I was just looking at it from the labor market, so I know next time because it is getting better and better, I think it'll pick up somehow, it'll say when you put your name there, it'll say street cred somewhere in there. Kathy, I'm sure of it.

**Kathy Booth** [01:04:17] Well, in the meantime go to economic mobility dot wested dot org read the real research about skills builders and get that methodology and the practice guide that can help you put data into action.

**AS** [01:04:30] So I always have show notes, kathy. And I'd love to put the links everything in there so the audience can access all of the beautiful work and to learn more about how they may partner with you down the road. And so I just want to thank you so much for your time. Kathy. It's always a pleasure to talk with you. And I'm just really grateful that you came to visit at the Student Success Podcast. Thank you.

**Kathy Booth** [01:05:04] Absolutely. Thank you for having me.