The Future of Work podcast is a weekly show where Jacob has in-depth conversations with senior level executives, business leaders, and bestselling authors around the world on the future of work and the future in general. Topics cover everything from AI and automation to the gig economy to big data to the future of learning and everything in between. Each episode explores a new topic and features a special guest.

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0:09:51 Jacob: Well, hello everyone and welcome to another episode of The Future of Work with me, your host, Jacob Morgan, and today I am joined by Dr. Denise Trauth, the President of Texas State University. Denise, thank you so much for joining me.

0:10:06 Denise: My pleasure.

0:10:08 Jacob: So, why don't we get started first we're just learning a little bit about you, how did you get involved with being the President of Texas State University? What's your background and what are you typically doing now as the President of the university?

0:10:23 Denise: Well, the first part of that's easier to answer than the second part. But I took a very, what I would consider a traditional path to the presidency. I was a faculty member and worked my way up the ladder assistant professor, associate professor, full professor. I became a department chair along the way and my field is Mass Communication. My PhD is in Mass Communication from the University of Iowa School of Journalism. So, I taught in that area and was the department chair in that area.

0:11:00 Denise: And then I became an associate dean of the graduate school at the university where I was, Bowling Green State University. And then, I moved to Charlotte, North Carolina to become the dean of the graduate school there. And I did that for three years, and then I was tapped to be the interim provost at UNC Charlotte, and became the permanent provost, a year later. All together, I was provost for five years and then I got a call one day asking me if I'd be interested in a presidency. And I guess the rest is history. So, a real traditional career path to the presidency.

0:11:43 Jacob: Very cool. And so, how long have you been at Texas State University?

0:11:47 Denise: I'm in my 18th year as President of Texas State.

0:11:51 Jacob: Wow. Congratulations.

0:11:53 Denise: Well, thank you.

0:11:55 Jacob: And it's interesting that your PhD was in communication, 'cause I'm sure as you've probably noticed, over the past few decades, communication has changed quite a bit with all the different channels that we're using now. So hopefully we can chat about that a little bit later as well. Why don't we jump right into sort of the main topic of today and that is education, learning, and how this is applying to the future of work. What are some of the big trends that you are personally paying attention to in the world of education now?

0:12:27 Denise: Well, if you don't mind, let me give you a little bit of backdrop on who we are at Texas State University, because that does inform everything else that I'm gonna say today during my chat with you. Texas State University is located in the Central Texas, right in the heart of Texas, along I35. We're about a half hour south of Austin and about 45 minutes north of San Antonio. We have 38,200 students at Texas State. And we offer about 200, a little bit more than 200 degree programs at the baccalaureate, masters and doctoral level. So we're a big place. We are on what we call the Innovation Corridor, the Texas Innovation Corridor. If you look at what's happening across about fewer than 100 miles from Austin to San Antonio, what you can say... See is that it's just growing magnificently, and it's growing in terms of population, it's growing in terms of industries, it's growing in terms of wealth. So it's a very exciting place to be at this moment.

0:13:48 Denise: And all of that informs who we are and how we make decisions at Texas State University. So, if I look at higher education, and I look at the backdrop, particularly for Texas State University, one of the first things that I would share with you is that we take the word State in our name very seriously. So, we are always looking at what does the state of Texas need? And Texas is not unlike the rest of the country in terms of what it needs from higher education. As I said earlier, this Innovation Corridor is growing.

0:14:29 Denise: So one of the things we do is stay in close touch with the industries who are already here in the industries that are moving into Texas and that's a real growth area for us. What we see in particular is that business is being impacted by two factors in particular: One is technology, and the other is globalization. And those two factors have a big impact on everything we do. It might not be terribly apparent in every single one of our academic programs, all 200 of them, but it does infuse the way we think about curriculum, the way we approach curriculum, and particularly, how we think about adding degree programs or getting rid of existing degree programs.

0:15:25 Jacob: Maybe we can start with the technology piece. So what are the aspects of technology that are impacting education and what, I mean what can be done about it?

0:15:38 Denise: Well, technology is impacting every square inch of our lives, for every one of us, whether you're talking about now, your cell phone is your alarm clock. Who uses an alarm clock anymore? Everything to how you order your groceries, how you get deliveries, how you communicate with your loved ones. I mean, it impacts everything we do. So, obviously, it's gonna impact the workplace. And equally important, I think, is the fact that the students who are in college right now. In Texas State University, our students tend to be traditionally age. So like 95% of our freshmen are 18 or younger, when they come to us. These young people have grown up with technology. I mean, they learned to swipe when they were toddlers. They think every screen swipes because it does, most of them do.

0:16:45 Jacob: I have a three-year old and she... Yeah, I can relate to exactly what you're saying because she very much grew up knowing the iPhone, the iPad, everything's got a swipe and scroll. So she's right there.

0:17:00 Denise: Yeah. And that phone that we carry around isn't just a communication tool anymore. It's become a tool of research, and it's become a tool... Well, let me give you an example. We have a faculty member here who worked at our research park with a company and they came up with a handheld device the size of a phone, that through their technology can diagnose intestinal problems. So it can figure out if you've got the flu, if you've got food poisoning, what's wrong with

you. And that, of course, has enormous applications for the world, I mean, particularly for underserved parts of the world. So handheld devices are something that at the sophisticated end of the spectrum are being used, as I said, to diagnose diseases.

0:18:03 Denise: At the other end of the spectrum, I go into our Student Rec Center in the morning to work out. The way you get in is you take your phone and you put it on a reader and the turnstile clicks. You go into a wellness class and the first thing... The way you sign into a wellness class is that you put your phone up to what looks like an iPad and it clicks. I mean, it's just how we navigate the world and it's particularly the way young people navigate the world. So that infuses everything from how we deliver our courses, online, for example, but even our hybrid courses.

0:18:41 Denise: We're still great believers in face-to-face communication, which may seem old-fashioned in the context that I'm talking about, but when the vast majority of your freshmen start out at 18, face-to-face communication is still very, very important. But that doesn't mean we don't use a lot of technology when we deliver instruction in a face-to-face manner. And then when our students graduate, they're gonna graduate into a world of work that is just technology infused.

0:18:41 Jacob: Do you think the face-to-face aspect of education or learning, is that ever gonna go away?

0:19:22 Denise: Well, I don't know, [chuckle] would you ever wanna say ever. But I will say this, Generation Z, Gen Z, which sort of is a label that we're putting on students who are in college right now, and that might not be fair to just put one label on over 38,000 students at Texas State. [laughter] But one of the dimensions, one of the characteristics of Gen Z students is, they want relationships. And whatever label you wanna put on them, the students today at Texas State University want relationships. Real authentic relationships. And in many ways, they expect that the faculty and the staff will initiate a lot of those relationships will come to them. So, sure, you could come to them through a technologically-mediated way, but I think they're looking for relationships that are authentic and face-to-face in many ways. So, you have a blend here, but these relationships are important.

0:20:31 Jacob: That's interesting, 'cause we keep hearing so much nowadays about how everybody's just in front of their devices. Nobody wants in-person communication anymore, but at least what you're seeing is that people still very much care about their relationships, and they wanna have that connection with their students, with professors, with employers, which I think makes a lot of sense.

0:20:51 Denise: Yeah. I mean, I'm not a psychologist. So, I can't tell you the reasons for it, but it could be that because we're on our phones so much, or we're on devices so much of the time, we crave face-to-face interpersonal relationships.

0:21:04 Jacob: Yep, yep, couldn't agree more. With technology, there's also a lot of talk around things like artificial intelligence and automation. Is that an area of discussion or worry for you guys over at Texas State?

0:21:19 Denise: Well, we have a lot of researchers in our PhD program in computer science who are working in those areas. Also, some of the faculty who are in our School of Engineering are working on those issues. Artificial intelligence is the way of the future. So, it isn't gonna go away. It is only going to increase, but I think it's one of the reasons why we need faculty members, for

example, in a Philosophy Department studying artificial intelligence. So, for example, we have a faculty member funded by NEC, which is a Japanese-based corporation whose North American headquarters is here in Texas. And they funded a project for one of our faculty members to study the ethics of facial recognition software.

0:22:23 Denise: They're one of the biggest producers of facial recognition software, and they've done tons of research on the technical side, but there's tons of research that needs to be done on the ethical side. And I... Hats off to them for funding that kind of research also. So, I think there's... The world is evolving, and technology is evolving, and artificial intelligence is a big part of that evolution, but I think what we have to do is study it and be sure that we're using it in the right way.

0:22:55 Jacob: Because of technology, are the ways in which professors are teaching, is that changing at all? Because I remember, I went to college 15 years ago, UC Santa Cruz, and the traditional I think... Or the traditional way that most people are used to studying in college is you show up to class, you sit in front of a large lecture, there's 300 people there. You get a homework assignments, you stay for the quarter, the semester. Is that kind of that formula or that template of education, do you think gonna change at all as a result of technology?

0:23:32 Denise: Yeah. What you're referring to is some people call the "sage on the stage."

0:23:37 Jacob: [laughter] Exactly.

0:23:38 Denise: The faculty member stands in front of the room and gives a lecture. Now, I think in all fairness, many of those lectures were very interactive and people who choose to deliver instruction in that way, many of them are using the Socratic method, which is very interactive, and frankly, I think very good for students. But having said that, we now use a multiplicity of instructional techniques and interesting combinations to go back to what we were talking about earlier, almost dualism, between using a lot of technology but also having that face-to-face relationship. But the one thing we know for sure, regardless of how it's being delivered, students need active learning. Students have probably always needed active learning, but we're just maybe more cognizant of that now than we were in the past.

0:24:44 Denise: So, let me just tell you a couple of ways that things are changing. We just opened a new, our newest engineering and science building. And in... What would have been the traditional classrooms, not the labs in that building, but just the classrooms, we no longer... We don't have any fixed seating and we don't have a fixed podium or desk for the faculty member. All of the desks are on wheels and you can configure the room any way you want to. So, often the faculty member will be right in the middle of the room and the students will be all around or on four sides of the faculty member.

0:25:32 Denise: Why does that work better than a faculty member standing at the front of the room? Well, I think because students feel more engaged, if the faculty member is closer, if the faculty member is moving around. It doesn't look quite as hierarchical, and students today are much more accustomed to a flatter hierarchy, if that's not a contradiction in terms, but a flatter involvement here than sort of the hierarchy that comes from having a faculty member at the front of the room and everybody else sitting down.

0:26:17 Denise: So, we configured the classrooms differently. That's one thing. All of these classrooms obviously are capable of having lots and lots of technology, whether you're talking

about the individual devices, or you're talking about the devices the instructor is using. What that means is, all of our new buildings and a lot of our older buildings have been converted. So there's lots of places to plug in and recharge, that makes a big difference. The other big difference is what we're calling, Makerspaces. We have about five or six Makerspaces across our campus here in San Marcus and also our campus in Round Rock, where students can do everything from 3D printing to manufacturing some kinds of prototypes for classes. A lot of opportunities; lasers, laser printers, lots of opportunities for students to make things.

0:27:25 Denise: Again, this goes back to active learning. And we're not just talking about students who are in STEM fields, and science and engineering. I'm talking about across the campus. So one of our biggest maker spaces is in the library, which is accessible to all of our students.

0:27:42 Jacob: Interesting, I love that you said that all of these spaces now have the ability to plug in. Because I remember it was very much about "Put away your devices!" The professors would always say, "We don't wanna see those devices! Now hide your phones, silence everything." Now, it seems like we've gone the other way. "Keep your devices out, plug them in, engage with us via these devices," we've kind of, the pendulum has swung in the opposite direction, it seems.

0:28:09 Denise: Yes, in some ways. It does make it more difficult, I think, to be a faculty member.

0:28:16 Jacob: Yeah.

0:28:16 Denise: Because you have to have some classroom discipline rules, and if students are on their phone, reading Twitter or Instagram or whatever, the whole time, they're not learning. So you have to have some rules, but on the other hand, you're right, when you're infusing technology and the things that technology gives you access to, into your classroom instruction, you're gonna wanna use devices.

0:28:42 Jacob: Yep, so the second trend that you mentioned is globalization, and this is also a huge one, even in the business world, you know, when I interview business leaders on this podcast, globalization comes up all the time. So, what are you seeing there? Why is that such a big trend for you?

0:29:00 Denise: Well, globalization is the way of the future and it's already happened for the good and for the bad. We're now dealing with a worldwide phenomenon of a disease that started in a smallish province of China, and now we've got a worldwide phenomenon that is scaring many people. So we know now, that the world is globalized, and things move across continents, and oceans very, very quickly. What's happening in the other side of the world has great implications for us and the implications are widespread. Starting with the cultural implications. Our students, more and more, are working with... When they graduate and they go to work, and we try to replicate this on our campuses, that they're going into a very diverse environment, where people don't all think alike. Where people certainly don't all look alike, and it's important that we educate our students to go into that kind of a world where there's just a lot of different ethnicities, races, religions, philosophical backgrounds, political parties. That's all now a part of a college education. So that's kind of where it starts for us, is educating our students for this cultural diversity that if they haven't experienced it in the university, they're gonna experience it when they go to work. And all the way at the other end of the spectrum, are some of the problems that we're dealing with as a result of globalization.

0:30:57 Denise: Now, at a university, at a research university, you... There's another word for problems. And that's called, "Research agenda." So for example, we have a lot of faculty at Texas State who are studying what are called invasive species. So there's all kinds of species that are now in the United States and a lot of them come to Texas before they go anywhere else, they come from other parts of the world. And these species have the potential to do great damage. So for example, when a ship pulls into the Houston harbor and discharges water that it picked up maybe three continents away, and discharges that water, it might be discharging a species that has not been in Texas before. And we have a lot of faculty studying that. So when you talk about globalization, it's not just one thing. Another aspect of globalization that we have to keep our eye on, and our students certainly have to keep their eye on is...

0:32:05 Denise: What is globalization doing to the professions in terms of workforce? Outsourcing is something that we started talking about, in this country a couple of decades ago.

0:32:19 Jacob: Yeah, for sure.

0:32:20 Denise: But it has great implications for many, many professions, the profession of accounting for example, a lot of the accounting work that you might think is being done here in the United States is in fact not being done in the United States, it's perhaps being done in India. And the fact that there's such a big time difference between the two countries actually works in favor of American accounting companies. So what is that gonna do ultimately to the work accounting or accountancy workforce in the United States, when the work can be done more cheaply in another country on the other side of the world? So there's just so many different impacts of globalization.

0:33:12 Jacob: Yeah, so we actually got a question from somebody who's watching live. It's a pretty interesting question actually. And he said, "With all these new innovations, do universities see the need of teaching materials? For example, do we need to learn math when a robot or a piece of software like AI does that? Does the university change the student enrollment policy, for example, no longer looking at a math or a science score, and instead focusing more on decision-making or integration skills." And he says, "I'm just curious to hear if education leaders have planned for the future of learning."

0:33:50 Denise: Well, I think there's at least two questions there.

0:33:55 Jacob: Yeah. [chuckle]

0:33:55 Denise: So, the first is a curriculum question, and what I'm hearing is, do students really need to study math anymore? When you're carrying your phone around, you got a calculator. When... Yes, robots are taking over a lot of the jobs that we used to do. One of the things that we are taking a hard look at at Texas State and indeed many schools in Texas and across the country are doing this, is are we requiring the correct math course from the students? Is algebra... And then leading on to calculus, is that the right math sequence or should our students be studying statistics, should more students be studying statistics? And the answer that we're coming up with more and more is the faculty really needs to take a hard look at that and figure out for their discipline what's the best math course? One of the things though that we all I think implicitly know, is that certain subjects when you study them, you become more analytical.

0:35:14 Denise: For example, that would be another argument for studying statistics, because it not only helps you become more analytical, but it also helps you analyze pieces of information that are

in front of you? So yes, the quick answer is yes, we are constantly looking at the curriculum and asking, "Is this the right course or should this course be required at all?" One of the things that we've done at Texas State is reduce the number of courses that are required for our baccalaureate degrees and we are getting them all down to about 120 to 125 credit hours, reducing them from higher than that. One of the incredible by-products of that is that right now at Texas State University, if you start out as a new freshman, at Texas state, your time to degree, your average time to degree is 3.9 years.

0:36:22 Denise: So that means students are graduating faster than four years with a baccalaureate degree. So the four-year degree is now a 3.9 year degree at Texas State. And that's important, because of a couple of things. One is, we're recognizing that a lot of students are taking dual credit courses in high school, and that's a good thing. So that encourages students to stay on that path and take those dual credit courses and not just kind of waste their senior year, like used to be the case for a lot of students is just kind of...

0:36:57 Jacob: I remember that. I remember that.

0:37:00 Denise: Yeah, yeah, so now students take courses and a lot of them complete at least a semester of their freshman year before they even arrive on campus. The other is that they save a lot of money, not just on tuition but on room and board, if they can get out and graduate. And go to work. So what... We are constantly taking a hard look, but I... One of the things that I wanna stress here is there is a reason why employers value a four-year degree, and yes, in certain fields, especially it is about the information that you learn, no question about it.

0:37:45 Denise: But it's also about the skill set that you develop by going to school for four years and taking the variety of courses that you're required to take at most universities. And those lead as I said earlier, to analytical skills, they lead to your working on a team, on a project, which is something that employers really value, is that ability to work on a team. Come up with creative solutions to problems, that's another thing that employers really value is that creativity and problem solving. So it isn't always just about the content of the knowledge, it's sometimes the intellectual skills you develop.

0:38:32 Jacob: I'm glad you actually brought that up because there's been a lot of debate, and I'm sure you've seen probably, many of these and there have been some...

0:38:42 Jacob: I guess you can call them social media pundits or people with large platforms and channels who have been saying that basically a lot of top tier universities, a lot of these four-year educational institutions are gonna disappear, because by the time we graduate with a four-year degree, most of what we've learned is obsolete because companies are starting to value these things less and less. Are you seeing that at all or it's all just... Is that just kind of BS floating around out there?

0:39:10 Denise: Well, I don't know if it's all BS. The world's a big complicated place and there is all kinds of dynamics at work here. But I do think if you look at surveys and there's all kinds of surveying information out there, employers do value four-year degrees. And not just, again, because of the major and the knowledge that you learned in your major, but some of the other skills, hard and soft that you learn along the way. For many employers, some of these surveys tell us the four-year degree has replaced the high school degree. And that's because if you have a four-year degree, employers feel that the quality of the work will be higher, that the productivity will be higher, that

you'll hit the ground running faster. So, again, there's a lot of by-products that come from getting a four-year degree. But the underlying proposition there, is true. Things are changing. There's no question but that when you start as a freshman, 3.9 years later, there's gonna be fields that exist that didn't exist when you started as a freshman. But hopefully we prepare our students for that.

0:40:34 Jacob: Yeah, so I suppose that changes the approach of no longer just teaching people to pass the test and getting the right answers, but changing the way students are taught to get them to maybe think more critically, to learn how to learn, to ask questions, is that at all a part of the, I guess, some of the changes that we're starting to see in education?

0:40:58 Denise: Oh, absolutely, absolutely. And I would say that one of the ways that students learn what you're talking about is by working on teams. So, let me give you an example of something that's going on in one of our PhD programs. It's a PhD program in material science, engineering and commercialization. It's a program that's been in existence at Texas State for five years, and during these five years we've produced five startup companies out of that PhD program, so basically one year. These students who are in a PhD who usually have an engineering or physics, chemistry background are earning a PhD in material science and engineering. But in terms of developing a business plan for a startup, one of the things they do is put together a team, and the team isn't always engineers and physicists and chemists. Their teams are gonna have somebody from the MBA program. Their teams are gonna have somebody working on a degree in Art and Design, who knows how to put together a web presence or who knows how to market a product. And those kind of interdisciplinary teams really are the way of the future for our young entrepreneurs, and our students are getting that in their education.

0:42:28 Jacob: I love that. Yeah, I love that interdisciplinary stuff. I think that's crucial. What are you finding at least from the employers who tap into your university for talent? What are some of the, I guess, the mindsets? So what are they looking for in terms of thinking from prospective employees and what are they looking for in terms of skills?

0:42:52 Denise: Well, all the conversation that we had shouldn't blind the fact that employers still want students to master a body of knowledge. And one of the indicators of that is, again, if you look at some of these surveys that are out there among particularly HR professionals, you'll see the grade point average is still important to them, high grade point averages, which means that a student master the body of knowledge. So, I don't wanna be misunderstood here and sound like that's not important, but they also are looking for soft skills. So let me just give you one niche program. I spent two days last week at the World of Concrete convention, because we have a program here called Concrete Industry Management. It's a niche program. It's about seven-years-old at Texas State. And one of the wonderful things about it, is that the concrete industry has provided scholarships and internships for students who wanna go into that field. It's a field that if you went back 40 years, people who were at the top of the industry didn't necessarily have a college education, didn't need to have a college education. Now they need a college education.

0:44:14 Denise: It's an interdisciplinary program. It's about two-thirds what some people would call civil engineering technology and it's about one-third business. And they really are prepared to go to work, particularly because they get an internship, they go to work in the industry. We have a 100% placement rate for graduates of that program. So, okay, it's a niche program. It's not a huge program. And it in some ways duplicates what we're doing in a civil engineering program, but the two are compatible. Students make a choice between those two programs. But it's a good example. Concrete Industry Management is a good example of what they want. They want people with a skill set. They

want them to have mastered a body of knowledge. You gotta know the chemical formula of concrete. You gotta know what it is. You gotta know how to handle it, but you also have to know a lot of business. You have to... Everything, from scheduling to billing, all of those, sales, all of those kinds of things are important. And on that business side, a lot of those are soft skills.

0:45:26 Denise: Sales is, to some extent, a soft skill. So what I see is that employers haven't backed off, necessarily, from wanting that mastery of a body of knowledge, but what they're also expecting now from college graduates is some of these soft skills, in terms of working on a team, bringing creativity to the project, those kinds of things.

0:45:53 Jacob: Yeah, those are absolutely essential, for sure. And I think you make a good point that having a body of knowledge around a certain area is still very, very relevant, but it's sort of like building on top of that, using that as the foundation and building on top of that, which I think makes complete sense. We got another comment from somebody, and she says, it's from Carrie, she says, "We're seeing more of a need for integrated work-learning experiences throughout learning. Would you recommend more co-op or internship programs to help students apply their learning and get real-world experience?"

0:46:28 Denise: Well, no question about co-ops, internships, clinical placements, all of those experiences prepare a student. And depending upon the discipline that we're talking about here, clinical placements are absolutely required in the health professions, in the health sciences. In some other parts of the university, they're not required, but they're certainly highly recommended. There's a maturation process that we see in students when they go through these kinds of experiences, too. They get experience, they get hands-on experience, on-the-job training, if you will, and they grow up by doing that, they're interacting with professionals. So I would say to any student, the more experience you can get before you graduate, the better it's gonna be. It's not gonna replace the book learning, it's not gonna replace the classroom, but it's certainly gonna augment it.

0:47:32 Jacob: Yeah, no, that's a great point. Are there any other skills or mindsets that you can think of that come to mind as far as what employers are looking for? So you talked, I think, a little bit about some of the traditional softer skills, the competency, the body of knowledge that you need. Is there anything else that employers are looking for, specific around technology, for example, or emotional intelligence as a soft skill?

0:48:00 Denise: Well, you're [chuckle] probably listing them. One of the things I would point out, though, is why employers seem to expect more out of college graduates today than perhaps they did in the past. Research shows us that the average amount of time that a new college graduate spends in her first job is 2.5 years.

0:48:23 Jacob: Wow.

0:48:24 Denise: That's not very long.

0:48:26 Jacob: No. What was it before, as a comparison? 'Cause I think most people are used to the lifetime, longer employment, you stay there for many years.

0:48:36 Denise: Sure, and for... So many industries have been disrupted that jobs don't even exist anymore. Think of travel agents, for example. I can remember when travel agents made all your arrangements, and now, you make all your own arrangements, for the most part. So there's all kinds

of jobs that are disappearing. I think students in a lot of ways are more mobile and look around more. Most of our students wanna stay in Texas, but Texas is a big state, so they can be very mobile and still stay in Texas, and they think like that. And so there's a combination of factors, but the bottom line is, employers have to think carefully about how much they're gonna invest in a person who's gonna stay for 2.5 years. Now, obviously it's in their best interest to lay out a pathway, a promotion pathway, that will entice young people to stay longer than that. But because a lot of people are gonna leave within two years, it's really incumbent on the student to, like I said earlier, hit the ground running. They do have that expectation that they'll have mastered the body of knowledge, they'll know what they're doing, and they can go to work on the day that they start to work. So in some ways it's a more demanding environment that students are in today than they used to be in.

0:50:07 Jacob: Is that a big challenge? Are you hearing the employers who recruit from Texas State that... Are they worried about that tenure, that it's only two and a half years, is that a... Or they've accepted that, that that is just the new world that we're in and they're okay with it, they've made peace with it, and they're fine with the rotation?

0:50:26 Denise: Well, they don't bring it up with me, so I'm guessing, if they're not at peace with it, they at least accept it. And it's an average, so there are gonna be a lot of young people who will stay in the job longer than that. I think employers also realize, we're in a full employment economy here, and they realize that they have to work actively to keep their workers. We do at the university. We're in the same employment situation as our neighbors up the street that are in high-tech industries, with our, for example, our IT workers. So we know you have to do things to keep workers happy and keep them productive at the same time, and that's really the challenge that's facing a lot of industries.

0:51:17 Jacob: Yep, yeah, I know, I hear that time and time again. I'm curious, actually, we talked a little bit about education and your perspectives on education and learning. If we were to go a little bit broader and look at the nature of work and how work is changing, is that something that you're also paying attention to as far as how the world of work is changing and what it might look like in the next three, five, 10 years?

0:51:44 Denise: Well, that is something that we rely on our deep connections with industry to help us get our arms around. Again, being located where we are, just south of Austin and north of San Antonio, we have a lot of industry partners that we go to. In fact, we have advisory boards for almost all of our academic programs and then we have an overarching business advisory board for the whole universities, we work closely with chambers of commerce. We really do stay in touch with the industries that are in the sectors where we have degree programs, to figure out how it's changing. Some things stay the same. I think having employees who come to work on time, will always... Make you rock solid [chuckle] at your employment, and doing the job that you're assigned to do will always be important. But on the other side, you see a little more informality. When I'm in Austin, you don't see a lot of men walking around in ties anymore, that's kinda gone away. Dress codes, more flexible hours, in some companies working from home some of the time. So you see all these kinds of things being introduced. But I think that basic productivity and high quality work are still the gold standard.

0:53:28 Denise: Industries, no matter where they're situated, they want workers who are gonna be productive, and they want workers who are gonna be productive at a very high level of quality. And I've never heard any of them saying anything to me that would indicate otherwise. But I think there

does appear to be more informality, a little loser work environment, if you will.

0:53:55 Jacob: Yeah, yeah. So you mean your employers never come to you and they say, "Yeah we don't care when they work. We don't care about the quality of work." [chuckle] Obviously they still very much care about that stuff.

[chuckle]

0:54:06 Denise: Yeah.

0:54:07 Jacob: So kind of a fun question for you, do you remember the first job you had? And I don't know if you feel comfortable sharing anything about that, but I'm just curious to kind of compare sort of that first job that you had, and if you notice any considerable changes since that first job that you've had and today's corporate world?

0:54:29 Denise: Well, my first job was as a high school English teacher, and to this day, given... And I've had a lot of different jobs since then, so I graduated from college and went to work as an English teacher, which was fairly common for a woman of my age at that time and taught English and journalism, for two years, and then went to graduate school. But it was the hardest job I've ever had. Teaching high school is very, very demanding. And I can, from friends that I have and acquaintances, all I can think of is that it's gotten harder and harder to be a high school English teacher, or a high school teacher teaching anything. There was not much technology in the classroom, when I was teaching high school English. Now, students, for example, in English classes, compose on laptops, that's how they learn to write essays, on a laptop or iPad. So certainly, the technology has changed. Doing research has changed dramatically. Okay, so you used to go to a library, in high school, you taught kids how to use an encyclopedia. You won't do any of that today. You just get on the Internet. But the bigger challenge on the Internet now, is what's true and what isn't true.

0:56:12 Jacob: Yeah.

0:56:13 Denise: What can you trust? And I think that that has implications for a university education too. Our students are so accustomed to going to the Internet, going to Wikipedia, figuring out what they wanna include in their papers. And some of it might be true, and some of it might not be true. That's much harder to discern today.

0:56:35 Jacob: Yeah. Yeah, I remember having to learn to go to the library and look up things on those index cards and trying to find the right place. Yeah, you don't... That doesn't exist anymore at all. So, yeah, the truth from reality or the truth from fiction, I think it is a really hard one to figure out.

0:56:54 Denise: But I will tell you one thing that's been of interest to me because over the course of my career, repeatedly, you hear people advocating for getting rid of libraries. "We don't need the brick and mortar anymore", because of what we just talked about. The reality is that our library is probably more used today than in the past, because it is the center of campus, it's where students go to study. I talked about maker spaces earlier, that we have a maker space, in the library, we have what we call learning commons. When I was in school, the two things you could never do in a library was, were number one, talk and number two, eat. We now have our books in our library.

0:57:42 Jacob: Wow.

0:57:43 Denise: We have lots and lots of spaces for students to collaborate, study rooms where they can go in, close the door, and work on these team projects that I was talking about earlier, so we still need libraries.

0:57:55 Jacob: Yeah. I can't imagine having a coffee shop in a library. When I was in high school people would freak out. You can't even drink coffee in there. When you look forward, let's say 5-10 years, what do you imagine the future of education is going to look like based on some of these trends that you're paying attention to now?

0:58:19 Denise: Well, I would say at the top of the list is we have to educate students to be lifelong learners, because they need to be lifelong learners. They can't graduate from college and think, "That's it, don't have to crack a book anymore, never take a test again." They will be taking tests continuously, they may not look like, they may not be using blue books, but they're taking tests continuously. So, becoming lifelong learners. You've highlighted several things, jobs disappear and new jobs are developed. And they've gotta be prepared to have their own job disappear and they gotta be prepared to take a new job. More and more, they are gonna be on diverse teams. And I think one of the best things that we're doing at Texas State is educating our students in what is a very ethnically diverse environment here. We are what is called a majority-minority institution. So, 51% of our students are ethnic minorities, and that is a wonderful culture to have students go to college in, because they learn to work in a very diverse place. And possibly the other thing that's happening here is the workforce is, as the baby boomers retire, the workforce is shrinking. And that's gonna have implications, it's hard to know exactly what those implications are. Are people gonna be expected to do more jobs?

1:00:00 Denise: That everybody now does the equivalent of two jobs to make up for that? Maybe. On the other hand, people will probably make more money, because the workforce is shrinking as more and more people retire. So I just think they've gotta be prepared for a lot of change. At the end of the day, it's gonna change dramatically.

1:00:23 Jacob: Do you have any suggestions for how to teach that lifelong learning? Is that something that students just need to get or can we teach that, not even just for students, for employees, for leaders as well, how do you grow that muscle?

1:00:40 Denise: I think the simplest way is to don't stop reading. Keep reading. One of the things you do in college, regardless of what you're majoring in, you read. And a love of reading is a wonderful skill. I just think you gotta keep reading, whether you're talking about reading the newspaper online or you're talking about reading biographies or fiction, just keep reading. And that's the simplest way to stay up-to-date with what's happening in the world. I think too many young people graduate from college and, again, think, "Okay, well, I don't have to read books anymore. [chuckle] I'm done with that chapter of my life," and you're not. You've gotta keep yourself educated and you gotta figure out what's the best way for you. Is reading the Wall Street Journal every day the best way to keep yourself educated? Is reading the Time magazine the best way? You gotta figure it out for yourself, but I think you gotta keep reading.

1:01:42 Jacob: And go to a library for Pete's sake, people.

[laughter]

1:01:47 Jacob: We take our three-year-old to our local library here every few weeks. We get a bunch of books. It's great, I love libraries.

1:01:55 Denise: Very good. Yeah, that's good. That's good.

1:01:57 Jacob: So maybe before we wrap up, do you have any advice for employers out there, or for leaders out there, or for future employees out there on things that they should be doing to make sure that they can stay relevant? If it's for a leader, to make sure that they can bring in, and retrain, or retain the best talent? From all the things that you're seeing out there, what should people actually be doing or thinking about as a result of what we talked about today?

1:02:27 Denise: Well, let me just talk about two things. One is universities like Texas State are eager to have industrial partners and we have tons of relationships with individual companies or with organizations that represent industries. Universities want this and I would encourage employers to reach out to universities. Whether they graduated from the school or not, doesn't really matter. Reach out and say, "Do you have an advisory board? I'd like to be a member of your advisory board for," let's say we have a program in construction management, "Can I be on your construction management advisory board?" Universities are hungry for this, they want it. Students benefit enormously from advisory boards, from having professionals come into the classroom, but sometimes the initiative needs to be taken by the industry. The other thing I would say is, I think that there's a tendency for all of us, regardless of what our age is, to think that students should be like me. Okay, they should act like me, they should talk like me. Well, there's generational differences and generational differences are good. They're not bad, they're good.

1:03:44 Denise: I think that employers need to be tolerant of educational differences. Just because somebody comes for an interview without a tie on, doesn't mean they can't do the job. Now, it might mean they haven't been advised properly [chuckle] and maybe they need to be advised, learn to wear a tie. But I think employers need to be tolerant of, and not just tolerant, but need to sort of revel in the fact that students are gonna be different, but that's a good thing. They're bringing something to the table that maybe wasn't brought before.

1:04:17 Jacob: Yeah, be a little bit more open-minded, I think, is probably. I think it was... Was it Elon Musk, I think he recently tweeted, he's like, "I don't even care if you went to high school. Like if you know how to do something, I'm willing to bring you in. I don't care what you look like, I don't care about anything, I just need talented people who can do a good job." So sometimes I think being a little bit more open-minded I think is a very, very good thing. Where can people go... Oh sorry, were you gonna say something?

1:04:42 Denise: No.

1:04:42 Jacob: Oh, okay. Where can people go to learn more about you or Texas State University? Anything that you wanna share or mention for people to check out, please feel free to do so.

1:04:53 Denise: Well, I would go to our website. That's the place that most people engage with us and it's full of great information about all the kinds of things that we're talking about here. If you're ever in Central Texas, I would encourage you to come and visit us. We love to have visitors, we've got two beautiful campuses, wonderful faculty and staff. And sometimes coming to the university gives you a completely different feel for the place, an enhanced feel, if you will, for the place, than

you can get from looking at the web. We, and all universities, have so much to offer the communities that we're in. We have fabulous performing arts at Texas State, we love to share that with our visitors. And I would say that about any university, take advantage of all that they have to offer that's outside of, say, an industrial or a business relationship. Go to athletic events. This is a rich university, it's a university that has something for everybody. And I would just encourage people to become familiar with us.

1:06:19 Jacob: Very well said. I like that. Well, thank you so much for taking time out of your day to speak with me today, I really appreciate it.

1:06:26 Denise: You're welcome. It was my pleasure, thank you.

1:06:28 Jacob: Of course. And thanks everyone again for tuning in. And my guest again has been Dr Denise Trauth, the President of Texas State University. I hope you check them out and I hope you also go visit your local library. I'll see all of you next week.