

NCPN 2020 Virtual

Transcription of Day 1 (Oct 15)

Hi, everyone. I am so happy to sponsor the -- immigrants and refugees are often precluded from participation. We know that with integrated education and training programs that are designed specifically for immigrants and refugees, we can create pot ramps to careers, bridge programs, -- we can create on ramps to careers, bridge programs, pre-apprentice ship for Grams, integrated employment and training opportunities to access to meaningful careers. We know the right thing is different for everyone, but we have spent the last 10 years building a tool that lets us take authentic training content and very quickly identify the domain specific keywords and turn that training content into English language lessons to help English language learners access an entire library of content that can help prepare them for careers in anything from being able to operate forklifts and other warehouse machinery, being able to learn the skills you need to work in an e-commerce warehouse, or, for example, learning the skills you need for I.T. support. This is just one example of how learners can get the English skills, where it is like diagnostics and facilitate and hardware to participate in a career in customer service. How do we know it works? We have spent a decade doing research on it, but here is just one example. One of our more recent success stories is with Emily Griffith technical College in Colorado, where learners in their ESL program over the summer were able to transition directly into career pathways in barbering, certified nursing assistant ships, accounting, and we are very part that we are very excited to participate in this event and talk to all of you were working at the front lines of helping underserved populations get access to new careers.

Claudia: Will come to NCPN's 2020 virtual conference, NCPN's first virtual conference. While we would have liked to have been in Atlanta, we are excited to be able to provide professional develop will be motivational but also hopefully help you in your daily work. We have a great program laid out for you, as you can see from the schedule. We do hope you enjoy the conference. But first, we have some housekeeping remarks. Please use the chat sidebar to interact, to share resources, and to ask questions. And make sure that you have your chat on all panelists and attendees. Please be sure all communication in chat is appropriate. We don't look for this to happen, but if anything inappropriate is posted, that attendee will immediately be removed from the webinar and cannot come back in. You can turn on the closed captioning or go to the link in the chat and open it on your laptop or phone to follow the transcript. Also, because Garrison's keynote is motivational, there will not be Q&A. The opening session is sponsored by voxy, accessible, personalized, and sector specific English that helps learners upscale and re-skill her career pathways. Our speaker today has presented to some of the world's most effective leaders and business developers, including multibillion-dollar manufacturers and top service providers. His clients include American Express, Walmart, FedEx, the NFL, and NASA. He is an Amazon number one best-selling author who has spoken on five continents and been featured in Forbes and Inc. magazines.

He is also a former professional standup comedian and a former Fortune 500 leader who has developed and marketed audits that are still being sold in 30 countries. Please welcome Garrison Wynn.

Garrison: Change is mandatory and stress is optional. How do you get people to change? How do you change? How do you embrace change? What is it that most successful people do to make change happen? We studied thousands of top forms in multiple industries including yours in education. It is about leadership, given occasion, change, integrity, relationships. The bottom line is influence. Are you personally influential to make that happen? That is the topic. Raise your hands if you're dealing with difficult people in your life right now, and those of you who did not raise your hands, you are the difficult people. Some of those difficult people we deal with are the know it all experts. How many of you are dealing with a note all expert in your life? How many of you actually married one? That will happen. Our studies show the number one thing to do is to praise their abilities. It is important that they know that you know that they know something. Repeat back to what they say and you may notice that pointing out their mistakes is not working for you. Focus on the solution. What is the goal? To be right. How many people out there have been right? How many of you have been so right that nobody would talk to you? I had a guy years ago who worked for me, the guy could do everything for this guy was responsible for 20% of the entire revenue. I coached him up. Thank you. One day he was wrong, yes he was. And I was right, yes I was. I looked at him in all his wrongness. He looked at me in all my rightness, and I explain with charismatic flair how wrong he was and how right I was -- he agreed and then he quit. If you criticize others ideas too much in times of change, they will almost never do -- never use yours, no matter how good they are. I started working for a company and I became like a crew manager, and then I got promoted to big manager and regional manager, District manager, and the next thing I know, my boss quits, I got his job and I'm the boss. Oh, yeah, young boss. All my employees are older than I am. Got to work that first day, and I met my people, I said, people, all your hopes and dreams and ideas and innovations, forget about all that. We're going to do things a special way, and that it way is my way. And if it is not my way, it is the highway. They called me punk-ass manager. To make people feel important, when things are changing, people don't choose what is best, they choose what they are comfortable with, whether it is the best or not. If there was one definable best, people would choose that and nothing else would be considered. When it comes to being influential and embracing change in working with people around us it is all about judgment. Raise your hand if you have been judged, if you have judged for the how many of you would never raise your hand regardless of anything I say? Thank you for that . You may be on a laptop or a phone or a friend's phone, that you have stolen, or whatever device you have. Look at your device and look deeply into my eyes. As you look deeply into my eyes, do you see anything weird in there? That is called judgment. We are walking, living, judging -- who out there has ever had to evacuate for a hurricane or a flood or a natural disaster? I did. I had to evacuate Houston, Texas, for a hurricane. We had to come back in, re-evacuating, coming back in, and I get boss on the outskirts of town. I'm sitting in this gas station and there is this crusty old guy. He looks like he's not

going to live through the conversation. He has that far away disturb look in his eye. I feel like I'm not going to get very good directions from this guy. I said excuse me, hand you help me, he's like, what did you come in on, boy? The road we both came in on. In Texas, -- build some rapport. Sometimes when things are changing, stressful, it is about how well do you connect with people around you? I said, sir, I'm hungry, but I'm looking for food, but I don't want fast food. He said there's McDonald's. When I feel like someone is an idiot, I start using and signals. He said pay attention to what I'm talking to you. He said go down the road a piece. I sit a piece of what? Go down the road a mile. He said listen to me, son, go down the road a piece, and there is a highway and there will be a hump on that highway, get on top of that hump and you are on that hump, and you see a dirt road, the trailer park? Don't go in there. Stay on that main road where the old schoolhouse used to be. You are talking about a landmark I have never heard of that no longer exists. What happens next happens to a lot of us. Dealing with faculty and students and curriculum and people and circumstances, and I snapped. You guys ever snap? I snapped. Sometimes it happens. I snapped and I used the D word. I said, sir, you're just dumb. He said, you know what, son, I'm not the smartest person around, but I'm not lost either. Big lesson in leadership, big lesson in change management, in life, everybody knows something you don't. And the minute you think you know it all, that moment, wisdom leads you like that -- leaves you like that. What stasis your intelligence, your time on the job. It is the wisdom that leaves. How many out there remember the old, old, old TV show "Lassie"? Lassie was a story of a dog, a very smart dog, and his friend to me. In the show, Lessie would see Timmy and Lassie would bark, and to me go, what, there is a man with his foot caught on a railroad track? Who remembers Flipper? Same kind of show. Flipper is just like a liquid Lessie, the dolphin, flipper. Didn't have to speak English or any language or the language of the day. Have the technology, the details, the most important information there was, which is go now. The message of the animal shows is trouble is brewing, follow the animals. Everybody knows stuff that we don't. The problem that we have day to day is that people are often wrong. Ever happen you? How many of you deal with people who are wrong? What do you tell them? You just have to say wrong. Maybe it is kind of any peer -- an important leadership motion, that is wrong. I told the guy one time that I know you're intelligent, I just cannot tell by talking to you. We studied 3571 top performers in education, postsecondary education, and we look at the research, over 10 years we developed 5371 top performers and they made this list because they were very, very good at moving change forward and embracing change, kind of without being stressed out or freaked out, helping others move forward as well. They were identifying those organizations for doing that. That's how they made the list. Gallup came in and said can you use the help? Yes, we can. The top 1% did something a lot of other people did not do. The top 1% did something the rest did not do. So we are looking at a group of people that are already great, and the top 1%, what they did is they did not use the word wrong. They said I disagree with you but I'm willing to listen. I've never heard that before, what you said that did not make any human sense. Please tell me more. Took that, three things happened. You might find out that you're much more agreeable than previously thought because you listen. If they could change their story to

match your story in an effort to look right in front of other people, what that's about? Our research showed that was the beginnings of trust. How many out there who have read a book on trust? Who has read a book? If you have never read a book on trust, you have missed very little, very, very little. Most books on trust say the same thing for 75 years. It takes time to build trust. You have to do what you say you will do over a period of time, and that sounds right, I guess. All previous surveys on trust, all papers written, the old Dale Carnegie stuff -- as far back as 1960 -- if you do research before 1960, there are a lot of people named Jedediah. It is weird. Flat out on the day, what we found, what we call the truth about trust, and I sugarcoat this message for a lot of my audience. You have people who know you for five years who still don't trust you, and some know you for five minutes and they do. Why would that be? Because trust is found on two things, compassion and -- [No audio]

Claudia: Garrison? Garrison, your sound went out.

Garrison: we are back? So it's very important that we understand that that trust is a gigantic factor, and the thing about it is that, you know, when we find out what is important about trust, it is a really big deal. What happens is it leads us in a direction, the reality of who people are. When you're trying to build trust, move through change, doing it stress-free, what happens is that we forget sometimes who people are, who they actually are. That is about human nature. So whether you are teaching or whether you are in an administrative position or whatever you're doing -- regardless of what it is -- it could be automotive, supply chain, accounting, technical skills -- whatever those things are, everybody involved in that has the basic human behavior, and human beings want three things. They want love, money, and prestige. They want sincerity, they want you to be real, they want multiple solutions for a single problem, and they want to look good in front of people. Number one, are you real or are you fake? Are you the same with the people you work as in front of your friends and family, or do you put on a work mask? How many of you work with real characters? Why do we trust a real character? Because we know they are being who they are. We know the real characters get away with stuff. Last night he got drunk and stole some laptops. He will bring them back, you know Jimmy. Being who you are is really the key. Recent research done by Accenture and Harvard review shows that even if someone has a hard time dealing with you or do not like everything you say, if they believe you are being who you are and you're being true and transparent, they will trust you automatically. Whoever you are, be that. It is the most influential you can be. When people know you are being real, they are on your side. If you're the kind of person who says there is only way to do it, there is just one way, the minute you say that come everybody under 30 knows you are full of it. You were raised with computers from the crypt -- from the crypt, and there is only one way to do everything. [No audio]

Garrison: OK, we're back. Technical difficulties. Sorry about that. So the safety department guy for Shell Oil said, you know, something really important, and that is people with multiple solutions for a single problem -- you have multiple solutions for a sickle problem. People are open to you if you try to drive a

single agenda. When I think about multiple solutions for a single problem, there is a lady in Florida who is the living embodiment of it because -- the living embodiment because she is a veterinarian and a taxidermist. Her motto was either way you are getting your dog back. Number three is important. Are you willing to help other people? It is, are you willing to teach somebody a new way and have them go out and take credit. Why are these three things so important? Because people believe you're real, they believe you are sincere. And they believe that you are not just stuck with one agenda, you have multiple solutions for a single problem. If they know those three things about you, they will listen to every single thing you say, every time you open your mouth, for the rest of your life. It is the foundation of influence and why some people can move through change stress-free without problems at all. It leads us to the most important thing, and that is believability. When things are changing, some things may be true but not that belief. That's not that believable. Who watches late-night TV? There is an old TV show that is the most unbelievable show of all time, it is called "Bonanza Bonanza was literally the story of a 50 roll man and his three 48-year-old sons. Not believable. We get face-to-face with people who believe things so strongly they are looking for reasons to prove that it is true. That makes change difficult. Let me show you the change conversation that never works. The old way was bad, new way is good because it is new, so you start listing all the features and benefits. What do people say? I don't want new, I'm old school. The reason that is is because nobody wants to be a senior beginner. Nobody wants to wait up and see that they used to know is no longer valuable. They cling to the old way because it makes them smart. A lot of young people, they have a way of doing it that they believe. When you tell somebody that their existing knowledge is not valuable, they don't want to hear what you have to say. When you're talking to people and you let them know that what they know now, their existing knowledge is not good enough, they resist what you have to offer again. It is a normal thing that happens with human behavior. What about change that actually works? Let's talk about the new way. The old way was as good as it could be. You guys were the best that you could possibly do under the circumstances. Let me show you how your existing knowledge, let me show you that what you know now can help with a new way. They start to put those things together. Let me show you how what you know now is similar and they start to make those connections. People need to know that what they already know now is going to help them with the new way. Here is how what you already know is valuable, and once you do that, people are willing to take a look at the new way. So it is similar is first and differences second. Similarities first, differences second. That leads to something else, people who have been around a long time. How many of you know people that you thought were dead and they were not? I thought you died in 1996, she looks good. Those people are valuable, and they bring value. Any team that is going to go through change has to realize that the senior people on that team, the people who have been there for a long time, the people who come from different backgrounds and ideas make the team great. All the research we have seen in the last 20 years shows diverse teams are about 40% or more productive than non-diverse teams and about 300% more creative. So if everybody on your team looks just like you, it is not a good team statistically. It is important that we have those factors together and people can work together.

People have to peel -- have to feel valuable. The number one thing that all humans value is feeling valuable. That is not a feel-good story or a theory or my opinion, that is the cumulative results of 70 years of Gallup surveys and 46 countries and 27 like witches. If you make people feel valuable, they will value you. It leads us to the concept of engagement. That's talk about what employee and student engagement really actually looks like. This is the engagement of people in general. It is important. The first thing is that let's explain engagement. The first thing is that the one thing people have to know is that my supervisor engaged people, engaged employees, they know their supervisor or the people around them support them. They feel supported and cared for with the people around them. They understand how the job they do every single day, the tasks they do every sickle day, how that helps the organization as a whole. Number one, the people around me support me and care about me, and I know that the organization I'm working with cares as a whole. Maybe I see a future, but maybe I just see something I like doing every day. That is what a good job, a good experience, a good life looks like. And people who believe they have a good expanse do the maximum best. People who have a good job doing a job, and employee opinion in general. That is the basic bottom line of engagement. We partner with Gallup and we look at some of the new information out there. Let's pull up different slide. Look at this first slide. You will notice it says actively disengaged. That 30% blue part is the engaged workforce. That is 30% of the U.S. workforce is engaged, mean 70% is not. 55% are what we call disengaged and 15% hate your guts, hope the building bursts and you are in it. That is the U.S. working population. We can ignore this, just do your job, man, stay in class, just do it. If we do that, engagement just goes away. How bad? Right now the research we saw shows that 79% to 80% of all exit interviews when people leave a school, they leave a job, 79% say the reason they left is nobody is paying attention to them. My boss doesn't talk to me. No one is communicate with me. That was one of the largest reasons people leave, nobody is communicating. Ignoring people doesn't work. If the students in a class feel like you are not participating with them or you are ignoring them, engagement goes to nothing. Teachers and instructors who are not willing to engage students and make those connections we talked about, they are not very effective, regardless of how good the curriculum is. Number three is weakness. Let's work on people's weaknesses. A, Johnny, let's talk about the five ways you're terrible. Room, boom, J Boone. It has a track record of working. It is working, if you look at the graph here. The problem, people leave. We found that people were put off by an anonymous survey that I feel like I'm engaged, and then quit. We saw an engagement between -- welcome to the job interview. Let's talk about the five ways you're terrible. Boom, boom, boom. Thank you, see you next quarter. That kind of thing, people might feel like the boss is paying attention to them, they bid they are listening to what you're saying and learning something, but they don't want to be there. So it is the worst case scenario. We find that when you're working on weaknesses you have a tendency to keep some of the people you don't want that don't try very hard, and the people who are willing to try or have the most talent. Big day for -- big deal. So what's working? If you look at the bar here, you'll see that it talks about working on strength. If I sit someone down and say here are the three things you are doing right -- this right, this right, this right, that right, and here is

what to work on, that changes everything. I talk about what's working first, and that the weaknesses second. Here are the four things you're doing right. As simple as that is, it doubled engagement. The people who hate your guts go down, way way down. So very important. What is important to understand is that a lot of people say, OK, that is what Gallup is doing. Gallup sells a service and they sell the survey. That's true, so we decided to talk to people outside Gallup. And here is what we did. This is my 25th year doing this for a living. Speaking of conventions. So we had the opportunity since I have talked all the Fortune 500, many people in education as well. I called educators, the people who spent the money doing employee surveys, and the training, based on what they discovered with the surveys. Here are the numbers that came back from them. 75%, 72%, 70 8%, 81%, 56%. At 66% was a conservative number. We checked and did some fact checking with the companies doing it, not just Gallup themselves. The results are fantastic. Whether you talk about clients, employees, contractors, students, they were 40 times more likely to recommend you and what you have to offer. Number two, they are 15.5 times more likely to stay with you. So employee retention, student retention is high. Nine times more likely to enjoy working with you. They say the experience they are having is very good. 43% safer and more focused on the job. This is important because right now this is such a big deal with all many factors, oil and gas, mining companies, the foundation of all their safety programs are employee engagement, so it is a very big deal. Also they are 86% more likely to be loyal. That is loyal to you, loyal to an idea, loyal to the school, loyal to curriculum, whatever. Also, 4.5 times more likely to recommend their organization's product and services. M is the people in your school will recommend your school to other people. Final analysis, making people feel valuable. Focusing more on strengths and weaknesses allows everything else you do to get better results. We can see how important this actually is. I can take anybody under any circumstance and say, hey, here's what you're doing right, here is what you're doing that is working, and go over what that is, and say here's what you need to work on. Just doing that, that single action dramatically improves my influence. It lowers the stress of the people around me and lowers my own stress as well. If I walk into a meeting and I have to tell people how badly they are doing, I'm stressed out. I can say, hey, here is what is working and here's what you can work on. You can see your kids down. We found out something interesting. The research showed that under age 35, if you tell me something that is not going very well, that is the filter through which I do everything. If you tell me things are bad, I see that and anything else you say comes through that filter. If you start negatively, the positive things that you say are not powerful enough. To the opposite, then you have influence. Extremely important, very important. It leads us to something that is huge, that is the idea of stress to begin with. You guys know that success of the student is the goal. The success of the student, that's the goal. You're creating a workforce of the future, and you are doing it under difficult historic conditions right now. So it is important that dealing with stress and change and the unknown makes everything difficult. So I understand that things are tough. We are meeting today virtually because of those situations, because of those circumstances. What is important to understand is what stress really is. Stress is not a thing. There is actually no such thing as stress. It doesn't exist. Stress is a belief system. It

is the belief that you hold, something you believe, and that belief you hold creates the feeling. People jump out of airplanes for fun. Strapped to another dude for fun, and that they are hospitalized because of work. The belief system you hold about something is what creates the stress. The thing is, where does this come from? Does worry have any value? Well, no and not in modern times, but the reason we are built this way, how we can turn our thoughts into adrenaline and get into fight or flight mode -- back in the day we were faced with a sabertooth tiger. That is a real thing, 2500 pound cat. That cat at home weighs 10 pounds. A giant Tiger is 500 pounds. Monster cat, it was an -- monster cat, it was an apex predator and it was here when people were not around. You had to be careful and cautious and not concerned, and when something happened, you had to take that feeling of fear, throw it into your body so you could run as fast as you could to produce adrenaline. That's what that is. We don't have any sabertooth tigers. If you are seeing sabertooth tigers, something is going wrong. They are not around. We look at situations like life or death, and it creates it. Stress is a belief that you hold. The leading cause of stress is knowing exactly what you're supposed to be doing and consistently doing something else. That is the leading cause of stress. That is an interesting thing. That means knowing what you're supposed to do, knowing your goals and mission reduces stress. Being focused, being prepared reduces stress. We have to set ourselves up for success. It is important that people see you're not stressed because people will take on your actual stress, hugely important. This may sound like a basic thing, but the truth about life is that sometimes we forget the basics and wonder why the specifics don't work. We forget the basics, wonder why the specifics don't work. We talked to the best educators in the world, and those are people that may be teaching people how to operate a supply chain or teaching whatever. We talk to all these people and we find they understand this. Teaching someone to develop their own brilliance is much more effective. Teaching people to develop their own brilliance is much more effective than giving them yours. Meaning allowing people to develop, having those conversations, and aging them, asking students what their opinions are and letting them talk, and making sure that they know they feel heard -- it is an interesting thing about trust because the people who trust people they like -- they like people they trust. There is this weird idea that has been around for a long time. People don't have to actually like me, they have to respect me. But how many people do you dislike intensely that you respect? The answer is zero. Likability is key. Likability comes from the fact that you are listening. It comes from the fact that you are actually willing to listen to someone. When it comes to change management, we keep thinking listening is something where supposed to do because it is the right thing to do. Listening is actually scientific. Let me explain the scientific aspect of listening no one has talked about. You have different chemicals in your brain, some of you more than others, according to last night. When someone feels truly heard and listened to and someone feels too and they feel listened to and trust, the pituitary gland squirts a fluid over the brain that puts a person in an anesthetized state. I call it being stoned on like. They will choose this person on -- over that person. It is why people fall in love with each other, why somebody will stay with same teacher, the same school, the same idea, job forever regardless of tangible results. The pure and simple power of making people

feel heard. When I think about that I have a nonscientific example I like full time received a really, really, really smart, attractive, accomplished good looking woman walking down the street with a goofy looking guy that looks bad, his car looks bad, has no job, no future, no education, no hope, no friends, no nothing? You know who that is? That is one damn good listener. So when people are heard by you, they are on your side. When people feel heard, their stress is lower. And people feel heard, they are more likely to see what you have to offer is valuable. Extremely important. But it leads to something else. That is dealing with people remotely. Many of you are dealing with people and coworkers remotely. That trust is giant because you never one thing remotely is they have to believe that you are doing something, that you are not just at home in your underwear watching Netflix. That you are watching some weird Ben Affleck movie. They have to know that you believe they are working. They have to know that you believe they are working. That means trust you have to have. If they think you think you think you're not doing anything, you don't have any influence. Number two, they need to know what a good job looks like. They need to know what a finished job's like, what it has done. Not the steps to get there, not the process, not the curriculum, but what does a finished job look like when it is done. We talked to lots of people in manufacturing, lots of supervisors. The most successful organizations come those people are good at saying here is what a good job looks like when it is finished, when it is done it looks like this. Not just the steps, what it looks like when it is finished. Research shows that people are not as teachable as they used to be. They've got Google. When you have instant information around you, you're not so teachable. That means you have to say here is what I need and here is what we want it to look like when it is done. Here are the steps, maybe you've got better steps. Here are the steps we recommend to get this result. But here is the result, very clear. Clarity is king. It doesn't matter how smart you are, if nobody knows what you're talking about, it doesn't matter. There is this idea about quality time. My spending quality time with my people. They don't want that. They want your time at 3:00 on Friday. When you deal with remote workers and students, they need to know exactly when something is going to happen. They need to know you're going to be there at a certain time and how regular that time is going to be. Anonymous survey of remote workers done in the last five months, that was one of the big complaints -- I don't know when I'm supposed to engage with the people monitoring me. I don't know when my boss is going to call, when my teacher provides new information. To reiterate, trust -- they've got to believe that you believe they are doing something, and clarity is huge, and when are you going to communicate? It leads us back to something else, and it is a big deal. For you guys out there working hard, and I know you are, there are some big deals out there when it comes to stress and it comes to change. That is in the circumstances we are dealing with now, they are different. But it is not brand-new. So in other words, this is the 20th pandemic in 500 years that we can record. Pandemics have something in common. They last about 30 months max, historically. We have a track record of what they are like, and we've gotten through all of them. That is why we are still here. The chances are things will be fine. You talk about the new normal. Things are never new and they are not than normal to begin with. Mostly good things come from it. So this idea that stresses people out that

somehow the world is going to shift in some way we cannot manage and we cannot get through it, there is no evidence that supports that at all. Just a believe we hold that causes me to freak out and be stressed out. Statistically we are going to get through this just fine, and you out there are going to be OK. Statistically that is what we see. Also statistically, about 90% of everything everybody worries about never happens. 90% never happens. 10% you can do anything about anyway, and you embrace it and threw it important to understand that stress really is one of those things that it is a belief that we actually hold. It leads me to the that is you cannot lead by example if you are a bad example. My shop teacher in high school had three fingers. Talking about safety, saws. To everybody pick up your salt. The relationship between stewardship and leadership -- it is following somebody because they want to, not because they have to. That is how you lead people. Also understand that change is not the issue. Was. It is our resistance to change that is the issue. My dad is 85 years old. On the computer every Sigel day. 12 years ago my dad sent his very first email. Just said damn it, two words. My dad knows that action and adaptability create opportunity. Are you about the weight of the goal. The survivors and the people who thrive are not always the best, the fastest, the smartest. They are the most bookable, 100 we believe we will be OK. Sometimes we just have to take a look at the obstacles and plan a path through them and keep the faith. That is what the most successful people do in times of change. Remember, heroes and coward experience the same fear. It is the action that they take. Knowing it and doing it has nothing in common. You have to say hey, I'm going to do this next right thing and I will think about my next step. Let me do what I know is right and I can think about things, taking that first right step is important. You can think about things and not do anything. Thinking is great and is wonderful. Action is something else. The action takers are the most successful. As we come down to the end, it is important. I talk to lots of groups out there. I am someone who got helped from schools like yours. I got important training and instrumentation back in the day and learned to do some things that maybe I did not have all the opportunity in the world. But I got opportunity from people like you, that's a fact. I would not be here talking to you if that were not the case. It is important to understand the value of what you bring. There are people out there that without you, they don't have the future. Without you, they don't have the opportunity. Right now the things that you're doing, some of the most valuable things in the future. Some of the jobs that are going to be there forever, they have the most impact. That makes what you do part of the foundation of civilization. Never forget your value. If you believe in your own value. It is easier to show it to others. Also, when you believe in your own value, the students and the people around you know that. Everybody loves the instructor, everybody of the workforce person, the administrator who believes in what they are doing, and it is real clear that they like it and they believe it is important. And when they see that apartment, they are more willing to be committed to what you have to offer. I'm Garrison Wynn. Thank you so much and keep up the good work. Thank you.

Claudia: Thank you for that motivational and informational session on change. We will take a break, and when we come back at 1:00 Eastern, we will hear from the business industry panel.

>> WELCOME BACK, HER NEXT SESSION FEATURES THE EXECUTIVE DIRECTOR OF THE NATIONAL CENTER FOR CONVERGENCE TECHNOLOGY ALONG WITH A GREAT PANEL OF BUSINESS AND INDUSTRY LEADERS. ANN IS THE CREATOR OF THE BUSINESS AND INDUSTRY LEADERSHIP TEAM FOR ENGAGING EMPLOYERS AT THE PROGRAM LEVEL. SHE WILL GIVE US A BRIEF OVERVIEW OF THE BUILT MODEL AND INTRODUCER PANELISTS.

>> THANK YOU, I APPRECIATE BEING ABLE TO BE HERE TODAY TO TALK TO YOU ABOUT BILT BUT I'M EXCITED TO HEAR ABOUT -- HEAR FROM SOME OF OUR BILT MEMBERS FROM ACROSS THE NATION. I WILL SET CONTEXT BUT I WANT TO GET ONTO THE PANELIST AS SOON AS WE CAN, SLIDE PLEASE. BY WAY OF BACKGROUND, THE NATIONAL SCIENCE FOUNDATION CONVERGENCE TECHNOLOGY CENTER IS BASED AT COLLEN COLLEGE IN FRISCO, TEXAS AND THAT'S EXACTLY WHERE BILT ORIGINATED. WE WORK WITH A WIDE RANGE OF BUSINESSES ACROSS THE NATION AND TO FIGURE OUT -- WHAT KIND OF KNOWLEDGE, SKILLS AND ABILITIES THEY WANT FROM OUR GRADUATES THAT ARE WORKFORCE READY FOR THE FUTURE. YOU WILL HEAR ME TALK ABOUT WORKFORCE READY FAIRLY OFTEN BECAUSE OUR GRADUATES WHO ARE WORKFORCE READY ARE HIGHLY SOUGHT AFTER BY BUSINESS AND HAVE LITTLE DIFFICULTY FINDING JOBS. THE INFORMATION WE CREATE A NATIONAL LEVEL IS DISSEMINATED TO ABOUT 80 COLLEGES OFFICIALLY AND WHEN THOSE COLLEGES GET THAT INFORMATION, THEY ACTUALLY LOCALIZE IT AT THEIR CAMPUS. NEXT SLIDE -- I THINK WE CAN ALL AGREE THAT WE WANT OUR STUDENTS TO ACTUALLY COMPLETE THEIR CERTIFICATES AND DEGREES AND WE WANT THEM TO BE WELL-QUALIFIED FOR WORK AND WE WANT OUR EMPLOYERS TO BE HIGHLY ENGAGED TO HIRE OUR STUDENTS. THE BILT SUPPORTS THESE GOALS AND IS PROVEN EFFECTIVE. NEXT SLIDE. I COULD GIVE YOU A VERY LONG PRESENTATION ON ALL THE VARIOUS DETAILS OF WHAT IS INVOLVED IN THE MODEL BUT HERE ARE THE ESSENTIAL ELEMENTS -- BUSINESSES NEED TO BE PUT INTO A COLEADERSHIP ROLE, NOT FOR ALL DEPARTMENTS OR DIVISIONS BUT A PARTICULAR TECHNICAL DISCIPLINE AND THEY'RE GOING TO MEET QUARTERLY, ONE TIME A YEAR, THEY to determine the knowledge, skills and ability they want graduates to possess and that's an annual meeting and they predict the labor market. It's not so good if we create great programs but then there is no demand for graduate so we want to have both of those going in parallel. We also want to talk about trends and we do that and the other three quarterly meetings, I don't know about your institution but most colleges are not really quick to modify curriculum to be able to address the needs of the employers. Once this is prioritize, the faculty must cross reference of those ksa'S to the existing curriculum to identify gaps and those gaps may be whole courses or they may in fact just be a module or two here and there for the existing courses. Very important is to provide feedback to the businesses regarding . Faculty does not have to do every single thing the businesses want they should really try to do everything the businesses want but sometimes, we don't have the equipment or perhaps we don't have an adjunct faculty member to teach on emerging technology and we need help from the BILT to get that resolved. Next slide -- Employers will do the coleadership role or adopt the role rather readily and they are likely to hire our graduates from

our programs if that curricular leadership. The employers want their time to be respected. They don't want our meetings to drone on and on. They also want to know that what they advise us to do that we seriously consider it and try to implement it and they want feedback. Next slide -- These next two slides come from our BILT chairperson, Matt. He differentiates between the advisory committees and the business BILT led BILTs by these particular items. They will be on the recording and you can go back and look at the details. Essentially, it's the difference between industry advising us or industry leading us or co-leading us. It's the difference between them suggesting knowledge, skills and ability that you need to cover. Essentially, expecting us to very seriously consider all of the KSA's that are prioritized and do our best to implement them. What's in it for them? They have the opportunity to minimize their expense and on-the-job training they also have the ability to get back -- to give back over several years. Some people have their advisory Council people wrote Tate off every two years but we have people on her team that have been there for 16 years and there's no way I would let them go because they own the programs with us. Next slide -- Why do we do this? We want our students to become employees and we want businesses and industries to hire our employees -- our students as employees and professors always want to teach relevant skills, how do you find out those skills when you are teaching? Getting information from businesses as a way to do it. The business leader can save some money if in fact they are in a position where they are high read is not require as much on-the-job training before they are productive and they are also very excited to tap into eager talent, people on the BILT get to see the students before others do because we typically do bring out the students on some of our meetings and have them present to the BILT. Next slide -- Here are some resources you can get plus there will be a resource that is put into the chat window before we are through that get you to all of these so you don't have to hurry and write these down. Next slide -- OK, it's time for the main event. I would like to introduce our panelists and ask them to turn on their microphones and their video. First is Chelsea Wright. She is someone who is near and dear to my heart. She was a student at Collin College and she was someone that I got to mentor during her time at the college and since she has graduated, she has become a very integral portion of our BILT team on a natural -- national basis. Aaron is the senior director of artificial intelligence at ECS technology and he has been on the BILT for several years and helps with our I.T. skills standard project which is determining the future skills and knowledge skills and abilities for the topmost I.T. and cybersecurity -- cybersecurity rosters. Sean is in North Carolina and he is on the BILT team for foresight tech. Welcome all and we appreciate you and we are glad you are here. I have some questions and we will converse more than just ask questions. I will address each question to one of you but after that person finishes speaking, I would like to hear from anyone else who has something to add. I will start with Chelsea. How did you get involved in the BILT? And why do you value being involved?

Chelsea: I got involved while I was a student. I met you through one of my professors and I was in some of the tech courses that were available at collin College and it was through you that I met a BILT

member, Matt Glover and he was my first employer. It was very exciting. I'm happy to be part of this program as well.

Ann: thank you. Aaron and Shawn?

Aaron: I got involved by bumping into ann. We were presenting together on future skills and what future work would look like and sharing a passion like ann does for national security and national prosperity. You wrote me and to be a member of the BILT and it's been a pleasure since then, I think it's two years.

Ann: is that all? I thought it was longer. Aaron has been quite a contributor to all we do.

Aaron: even marriage feels like more than 15 years.

Ann: Sean, would you like to see how you got involved in the BILT ?

Sean: I was originally on the advisory board team at Forsyth Tech community College for advanced manufacturing. I was on that for four years. One day, David Dinkins approached me with the BILT model, reviewed it with me, and at the end of the review, I was told that I would be the coleader for the BILT team. I looked at it and it seemed like a great opportunity but there were couple of things that stood out and I thought this would be a good endeavor, seeing how industry takes a lead in the whole program. I felt that was different than what the advisory board is so maybe we, the industry, can push for results because we are the ones who usually ask for things are why don't we take the lead rather than put all the onus on the college? I thought that was interesting and something I was excited about. The second thing is, I felt advisory boards did not really have a purpose, vision, what do they want to be when they grow up? I mentioned to David that as long as we start the process knowing what we want to be, I felt it was a great opportunity. We will probably talk more, one thing we started with was an actual vision and a mission and strategy so that the team had guideposts, so to speak, as they put their tactical plans together. That is how I got involved. The short answer is, I was told, how is that?

Ann: you had to say yes.

Sean: absolutely.

Ann: that leads to the next question -- since you were on the advisory board BILT BILT and now you are on the team, how do you see the BILT team being more effective?

Sean: a couple of things, advisory board meetings, I'm sure they are not all like this but the ones I was on for over 20 years, you meet maybe three times a year, the same people from the same businesses show up at every meeting and they always have food which is a good thing. They always had something to eat. You sit there and the college will talk about things they are doing which is important. But a lot of it is the same thing. Then the industry will basically ask for the same things they asked for the meeting before and in some cases, multiple meetings before. Long story short, grab a doughnut on the way out

and wait for the next meeting. The difference again is industry has a need so industry takes the lead of the BILT. Me as the chair, I led the team again with a vision, mission and a strategy going into it. I think that direction gives you the purpose and the rest of the team a purpose to build again the tactical plans that you will put together to achieve that vision. I think those are two main things that helped us get off the ground and really achieve a lot of good results.

Ann: I will jump in here before someone else enters. It is very nice that Sean had the business perspective and was willing to be the chairperson right off. I will say that in the beginning of BILT, they don't necessarily have a strong business lead but it is always very important to talk about the value proposition to the business people for being involved. That is my word for basically saying, here is what we as educators want from you and here's how you can participate and here's why it matters. It's kind of the same thing. It was probably a couple of years before we had a chairperson but it did work out very well once we had one. If I had had to have one at the beginning, it would have been tough. Chelsea or Aaron, would you like to weigh in?

Chelsea: something else is different perspectives from different organizations and even you can have someone in oil and gas or security or all of these different types of things. You get different viewpoints. That is something that can be really difficult to get if you don't have a good group of leaders, a diverse group of leaders as well.

Aaron: serving on the BILT is a wonderful service that I've enjoyed and it's important to frame out the future of the workforce. It has been rewarding for me to have the ideas and epiphanies and you hear people say things outside the industries and expenses I have had in new and novel ways which enables me to take that into my industry and my work. It has been surprising. It's been rewarding how the payback has been.

Ann: thank you so much. That leads into something else, Aaron you have had KSA analysis meetings. From your perspective, what happens and why is that important? Are you hearing me? Uh oh Would you please address what happens at an annual ksa meeting and why that is important?

SeAaron: I have been part of two or four KSA's. I want to assure those folks who were downstream from the KSA's is that they are put together extremely thoughtfully. Ann and her team to an amazing amount of research. They fight and hunt not only in their own directions but they engage the members of the Council to see what other documents they should be looking at. It was a pleasure of mind that as Ann framed out the first analytics cluster that I was able to turn her towards some professional documents that I believe the Kennedy colleges, universities were not aware of yet and that formed a firm foundation. I want to take my hat off to Ann and her team and how we are bringing the best-of-breed, nomenclature, taxonomies into what these meetings are so I've great confidence. What happens upstream can be sometimes slow and tedious but we have refined ways. The first meeting I went to, we

voted with our hands and it was a very long and arduous process and it went the full day. Since then, they have implemented the Delphi method and streamlined it. It's very quantitative we look at basically freedoms, significant variation in the answers and discuss those and discuss those impressed past the ones where there was uniform acceptance. It's actually somewhat scientific for the science we are trying to help with.

Ann: OK, Chelsea, you have participated in a KASA meeting. Do you have something to add?

Chelsea: I have been attending those for quite a few years and it's crazy because when I first started attending them, we voted on the KASA's and you would see something that is vitally important that is vitally important everyone needs this. Several years later, that's old technology, get rid of it. It moves so quickly. I think that's important to be able to provide to educators. You may not realize how quickly something is becoming obsolete. New things get added. We will talk about wire we talking about this, we need to bring out something else or whatever needs to the and those types of things get added. You do a lot of prep work with providing KSA's to us and you can pick up your phone or laptop and click on a scale of one-four as to which is more important and those metrics just get uploaded, it so much quicker now. Yeah, it's really great. I find those meetings very interesting.

Ann: OK, Sean's group has still to do the KSA so I will not ask for feedback at this point. This is what you will get to see.

Sean: we have a meeting scheduled in January to do that and my role is to make sure my business partners supply people and input to that process.

Ann: that's great.

Aaron: the hard hat and shovel behind you will come in handy.

Ann: it's not that rough.

Sean: there you go.

Ann: I am going to circle back around to Chelsea. What to faculty do in prioritizing KSA's and what is their role?

Ann:

Chelsea: I typically get sent in email or KSA KSA a list of the's and a lot of times, you guys will say if you do it virtually it will be OK and if you can attend in person it's great but you guys provide options for us as well. You really consider what's going on in the business leaders world on a day-to-day basis. We are able to take those meetings wherever. You also keep us informed. You guys send out notifications and let us know what is going on. I find that's very helpful. It also brings about what's important and we are

participating in some Ann: thing that's important.

Ann: The faculty are in the room. How do they participate in the meeting and what do you expect them to do afterwards?

Chelsea: there is a lot of faculty in the room and we are able -- they are able to ask questions and asked to clarify things or they bring a different objective. Many times, when students can do something like a project, maybe a project for a portfolio and a lot of the professors in the room wonder how you expect us to do that. What do you need to see for that and how can we go about creating that type of structure in education? It's really cool because it makes us think about it. How would I educate someone well enough to get them to document this in a certain way? Is it even possible? Are there restrictions that maybe don't make that possible for students at this time? Things of that nature -- it's very interesting that's nice to get the feedback from the professors. Sometimes they will say we are already teaching that and that is great, we want to hear that.

Aaron: what you are trying to expose with this line of questioning is what it is like in the room. I think Chelsea said educators in the room is value added. Every single time, both virtual and personal, educators are very quiet for two hours of the meeting. They are talking about weird terms and weird experiences and perhaps we don't know each other the educators are quick studies and listen to what we are saying and it gets exciting for the second half because that's exactly when they start throwing out serious questions and revisiting things we said. It's like when the meeting just kind of blossoms and becomes all the more interesting. We go through the first round of questions from the educators and it is to work as a team. Good choice there, Chelsea.

Ann: the educators actually prioritize the KSA's to determine how they can apply that to the curriculum, to identify the gaps and those gaps may be whole courses or they may be modules in existing courses. Then they feed that back to you.

Aaron: you have the most amazing people leaving and teaching. Some people call me afterwards and even on a Saturday to discuss the ways in which they tailor content, shouts out to places like San Jose State and others. They call me up afterwards after these panels.

Ann: OK, what occurs at the other two or three meetings if you have one KSA Sean, you may want to jump in here. What happens at the meetings that KSA are not focusing on KSA 's?

Sean: BILT how a focus around recruitment because we had a huge need in North Carolina for advanced manufacturing skill trades. What we are focusing on is recruiting people, showing them a career opportunity and a pathway through the committee college to fulfill those -- through the community college to fulfill those needs. We focus on recruiting technical planning, communication planning, figuring out who the audiences will be, how do we get in front of them and now COVID has made that

difficult. This too shall pass and we will be ready to get back out on the street again. We are really focusing again on the recruiting portion. We have an apprenticeship program we have championed at the college. We are obviously putting plans behind that. We also have a thing called and explore post -- and explore post where we reach out to the high schools and get people to come to our facilities we have hands-on workshops with them so they understand what advanced manufacturing means, what the new manufacturing facilities look like and see the broad opportunities that manufacturing has to offer. COVID makes those difficult right now but we still plan around those events once this thing breaks loose and we get back doing things like that.

Ann: for those of you on the CTC BILT, the other three meetings we have annually focus on trends. Chelsea, would you like to comment about what you learn from the trends discussion or what you provide for the trends discussion?

Chelsea: it goes back to -- it's interesting when you were talking to people from all sorts of different companies. Some people, for instance, Matt's company is remote. What he is focusing on is everything they can do remote and a lot of it is outpaced. A lot of companies I worked for is not -- are not remote so it's a lot of infrastructure. It's what's important in those types of environments we need to focus on and we come together on that. We try and figure out where we need to be in five years. It's important now but the students aren't graduating today. They are graduating two or four years from now. What do they need to be ready for them? I think that is so important. As I said earlier, we look at KSA's that were important at the beginning but a couple of years later, they don't matter that much. Just looking into the future and saying, who are we looking to hire for five years from now, who do we need to pick from? I think that is something that is great about us working together because you guys educate those students and we get to hire them. What we are asking for is what you are providing so -- it's very important to us to focus the on 12-36 months in the future because that's what's seen through the crystal ball pretty well by the employers. It's also very important to us as educators to hear what they see way out there. Our group started saying, you've got to handle software defined networking probably five years before it was real. That is very good for us because, as I mentioned, we not really that fast for implementing things. We also use those meetings that we have between the KSA meetings to provide feedback BILT to the members we use those meetings to get their input if we want to apply for another grant. That's another possibility. Let's move on and I will ask the next question. of Aaron and anybody else can jump in. I would like to know how the BILT approach helps keep us abreast of emerging technologies better than advisory boards? How does it work?

Aaron: that's a great question. We've got an excellent model. There are birds of common feather and almost every feather. Whether you are in consulting federal, commercial, industrial equipment work medications, media, technology, we all come together. As we sit around that table, we all have a different emerging concept of innovative technology whether it's block chain or quantum computing or

ai or someone says there's a new thing called business intelligence. Whatever it is, everyone tells us what's new when we put them on the table and discuss it. Because it's a true council that function so well.

Chelsea: educators are letting us know what they are teaching and they're asking us how they could teach better and we are getting a lot of feedback. Where getting the information. -- we are getting the information. We don't just show up and give you information and see you next year. We are actively involved. I think that's really important.

Ann: I will make one point here -- We always have involvement but -- via a web meeting so when COVID happened, it was a blip on the screen. We just kept on keeping on. It worked very well. It was nice.

Aaron: there is a fascinating question in the chat from Eileen. She asked about sample work issue problem projects and real-life examples. I want to answer that because I did it in the chat a little bit but Chelsea, Sean and ann, I think that's always been where we end the day. You derive the actual business and use case so let me turn around and ask you.

Chelsea: for me, I was a student so I had classes where I had to provide a network and have a network diagram and had to prove it was working. I had to have all of that documented and even present it to the class. It didn't just improve my skill sets from the standpoint of technical but also presenting. You have to talk to your classmates. Because of that experience I had in that class, I can say let's look at what other capstone projects we can create. Collin has more technology these days than they did back then. It's pretty exciting. How can we practice using potentially as your - azure. Many companies are going to the cloud so what type of capstone projects could we create that students could prove they had those skill sets a new how to use them and they can communicate that effectively in an interview because that's very important.

Ann: OK, I will address a question that just came in out of sequence. I know hope will give us questions from the audience at the end. I saw it flashed by. Someone says what you do when there is a difference of opinion in the BILT? I would say when do we ever have a total concurrence? There are differences of opinion on everything. The question is how you resolve it. The voting shows what everybody voted. However, that's the real time that we really discuss the range of votes and if a particular item has votes going from kick it out of the curriculum although he up to this is most valuable, then that is something we first should be going to discuss and what we do is discuss it until we resolve it. Very often, the issues are semantics and then if we can't resolve it, sometimes we can't, we have what's called a Tiger team does a sub team at the BILT that works on and brings it back to the BILT. We do not expect any of these folks to be pushovers and agree with everybody else in the room, not at all. I will close at this point with a final question which is -- what is your wifum? I believe everybody ends up performing best if they are

addressing something that is in it for them, something that is important to them, something they are passionate about. I will start with Sean. What is your WIFM?

Sean: myself and the other industries in the area around advanced manufacturing, we have a real need so from a business side, what's in it for me? It's obviously to come up with a mechanism to recruit students into Forsyth Tech so that when they come out, they are part of the skilled workforce pool that the rest of my business team can pull from. Obviously, the personal side is to be a part of something that would impact the community greatly. With this pool of skilled people large enough that does not drive competition between the businesses, it makes all the businesses feel a little at ease, so to speak, and it also allows -- they are more willing to get on board. If they understand there is more competition on the way to get rid of the competition is to have an ample pool of people, that really sets the stage well. To me, that's why I do this.

Ann: OK, Aaron and Chelsea, I want to hear from both of you?

Aaron: I turned off my background to answer the question. I was in the Marines for a couple of years. For me, it's the sense of service. The bottom line, our country, our freedom is important work for us in the preservation of our freedom and our security and our prosperity by digging in together, we will all enjoy the fruits at the end of the day. It's that sense of duty and joy of outcome.

Ann: thank you, Aaron. You have done an awful lot for us. Typically, these BILT members, if I want them to do today's conference or working on one of the subject matter expert meetings we have for our school standards, I asked them about the day and then they asked me what we will do. They will be there to help you and help us in everything we try to do and if they possibly can, they will do it. Chelsea, what's your wifm?

Chelsea: a big part of it was that I was a student and it impacted me with this program. It was crucial in the education I was receiving. I want to make sure that the students who are there now are also getting education that pertains to the current environment. They don't need to be learning the exact same things I was learning seven years ago. The other thing is when the students graduate, they are ready. That's awesome. When I graduated, I felt like I was very ready in a lot of areas. Matt also helped me once I was hired underneath him. The BILT really provided that for me as a student and I want to provide that back to current students.

Ann: thank you. I will summarize by saying I think most of the people on our BILT are there because of similar reasons that have been discussed because they want to make that proverbial difference in our society. This is an opportunity to do that. However, if someone wants to join our BILT and that is not their motive, that's fine, that's perfectly fine. Sometimes I find the smaller businesses that are on our national team really want to hear the trends from the big businesses. Over time, they will get the sense of service that Aaron was talking about, that Sean has been talking about, that Chelsea has been talking

about. But the ultimate winner is the student. The student is well prepared because the curriculum they are going through is aligned with what the employers want and that makes the difference. It's very good. I'm going to turn it over to hope since you have so many questions and let's finish out with some of those.

Hope: all right, if we don't get all the questions answered before the session is over, I promise ann and I will answer the questions and post them to the website. You mentioned how the BILT at co llin meets virtually during the year except when they do the KSA . A few folks have said what about other meetings. When you do this online versus face to face, how has the group dynamic changed when you have to do everything virtually?

Ann: it really hasn't changed much at all. Typically, we will have the KSA meeting. That's our longer meeting that will be three or four hours. Typically, we will have maybe 12 or 15 in the room and there is an equal number that are on the web meeting that is occurring simultaneously. It's just a matter of the people in the room changing to being on the web meeting site but they have been working with others on the web meeting the whole time. We started originally with just phone calls. At that point, we actually needed to have people physically in the room to be able to do the KSA announcements because it's got a lot of moving parts. It's very doable and we have all sorts of information on how to get it set up and how to make it happen. We didn't even skip a beat, it was fine.

Hope: Aaron, did you have something to add to that?

Aaron: I miss my trips to Fresno. It has been seamless and when we could uniformly turn on our video cameras and have an experience like this, it's much more doable. Folks come and turn their cameras on and there is great conviviality and I don't think we have lost a beat.

Ann: it's really not Fresno but it's an airport, it's Frisco. I don't want to confuse the audience.

Aaron: I'm sorry, Frisco. it'sDFW.

Ann: whatever.

Hope: next question, do BILT employer members recruit other employer members to the BILT? Sean probably has an answer to this one?

Sean: there is nothing like pure pressure across the businesses. Nobody wants to be left out especially if someone steps up so we recruit through the team members. We challenge team members to bring one individual, one new individual back to the original meeting. That's for the industry led, it's easier for me to peer pressure apeer rather than the college to drive action so yes, we absolutely recruit through our team members.

Hope: next question -- Do you limit the number of faculty and college employees who attend the BILT meetings?

Ann: no, we just get a bigger room if we need. We typically use kind of a bigger classroom and we set the business people up before doing face-to-face. We set them up around a 'U' and because we are national, local teams don't have to do this, we are going to have both faculty and employers on the web meeting portion of it. Sometimes, we even have 90 people on the call. In addition to whoever is the room. BILT BILT we have the members and are u and we fill the rest of the room theaters style or around tables with faculty and staff.

Hope: thank you. When you talk about the KSA's and the ability of your institution and your facilities and equipment to be able to keep up with evolving technology, how do you and list the BILT's help in addressing those needs and how do you prioritize what you invest in when you can't predict the future?

Ann: they can predict the future better than we can. It may not be totally accurate but it's utter than what we can do. We talk to them, we have a dialogue. We meet four times per year but if I want to ask a question, I called them up and ask or I will actually call one of the Tiger team meetings, a sub meeting of the group and if I want them to do something else on campus, sometimes we want to do something at collin College specifically for them and I will involve the national members that happen to be in theDFW area and they will do employer panels . There will also be speakers during classes in all sorts of other things like that. What we have focused on today is the four key meetings per year but there are lots of other opportunities for service. Some people, like Aaron, have gotten involved in another grant we are doing which is the I.T. skills grant and we have so far have had about a dozen face-to-face meetings but face is sometimes via web meeting to identify the knowledge skills and abilities for some of the emerging clusters. He has been involved in that as well.

Hope: there you said it, the emerging clusters, emerging skills. How do you prioritize? Chelsea described earlier about something that wasn't important any longer. What does the trends discussion look like?

Ann: I will let Aaron or Chelsea talk about that because that is the coolest thing going. It's wonderful.

Aaron:

Chelsea first. Chelsea: oh boy. I think a big part of it when we talk about the KSA because these conversations come up due to the voting. Many times, we will look at how the boats turned out. If something is important, it probably is for a long time. If something is a 2.8, maybe not as much as a priority. We have these discussions, you can tell what people are passionate about. And where the vast majority of the business leaders think things are going. If you have an outlier, you may not focus on investing as much into that particular technology or whatever it may be. Whereas, you can see with the

masses are going towards. I think that's kind of a big portion or a big way to structure how to prioritize those things.

Aaron: it's in the way in which we approach this so it's very much as a counsel. We employ techniques like the Delphi method that allow people to say their opinion without feeling like they will face social repercussions. There are people who really cleave to an idea but usually, I not only showing the scores and how it worked out, they are able to sometimes see that perhaps there is a wiser idea held by the Council and the group that perhaps their own. Some folks want to take it to the ground and have a fight. But that's infrequent. I think that's the beauty and the wisdom of how this is constructed -- of how this is structured.

Ann: part of it has to do with the facilitator. We had a chairperson probably two years into this and we ended up with a chairperson but I started the thing. I had just come out of industry. I was kind of sort of, industry as well as an educator. I had my mission and vision inside and I knew what I wanted out of the group at the facilitator has to set the tone. All opinions are welcome. All are welcome and we also have to set the expectations that we are not going to agree on everything. We also need to set the expectation we need to focus on whatever is the common denominator that we can do to make these students most employable across all businesses. One of the problems can be, if you have a major business in the area and they want it to be in a training program for them, that can leave out some of the other opportunities for students for employment. It's a give-and-take, a friendly give and take, and after these meetings start occurring or have occurred for a year or two, these people are fast friends. They will call each other up. If someone is out of a job, they will call someone else and say I am unemployed and I wanted job. It all works. It just works.

Hope: fabulous. I will circle back to something Chelsea mentioned earlier, portfolios. We have a question related to that. It can be for all of you. Do you ever bring example projects from your place of business to the BILT meetings and share with the faculty is a great opportunity for students to dig their heels into an authentic workplace experience?

Ann: they do. I will say that much.

Chelsea: Beck when I started, when I got hired under Matt and I was starting in the BILT, I was still actually attending college. I hadn't fully graduated but I was working and going to school. It was interesting because I would go into the classrooms and talk to some of the students there. Hey, guys, here's a problem, solve it. This is a real-world problem that I faced, how would you guys go about this? That's not something a lot of us can do because we don't all continue going to college after we are employed. I brought in portfolios and talk to some of the teachers about them and my professor was attending several of the meetings and we talked about my capstone and how we could improve that or change it to reflect things that are happening today and things of that nature. I think it could be

something if an employer -- not an employer, if an educator wants to bring a potential capstone project one of those meetings show the employer's and ask if this would be relevant. Do you have suggestions? We absolutely would get in on that, pros and cons.

Hope: thank you. We've got another question about return on investment. I'm keeping my eye on the time because I know we are getting close. Sean mentioned the apprenticeship program and activities related to other types of work and maybe you can share about how you measure that return on investment or those outcomes of your engagement with the BILT.

Sean: the most tangible is ramp up training of new employees. Obviously, if they are an apprenticeship candidate, they are getting education along with OJT at the facility. While there getting train, their learning curve to get to a fully trained asset is much shorter. We measure it in time to get a new employee from hire to fully capable. That's how we measure it but it's very difficult to get an absolute number. We do know by a leap of faith that if they are educated properly OJT in parallel, that time is shortened. That's how we measure it.

Hope: that's great. Unfortunately, we are on time for our break. I think these additional questions that have come up in the chat, we promised our audience that we will answer them off-line and provide answers and frequently asked questions in addition to these on the NCPN website. If you'd like more information about the BILT model, we posted a link in the chat when the session started and I compose that again in a moment. I want to thank all of the panelists, Sean, Chelsea, Aaron and Ann for bringing your perspectives, we cannot thank you enough. We will take a break now and when we come back at 2 p.m. Eastern, we will hear from Todd and Brian on living and working in the transformative world. You don't want to miss that. New Please Stand By.

Hope: welcome back for our final session of the day. Next up is an interactive conversation focused on the future of work and learning. Living and working a transformative world. I would like to welcome Brian Albrecht, president of Gateway College to kick off our discussion.

Brian -- Bryan: Thank you. I've had a chance to listen into some of the sessions and they've been inspiring and informative. I know many of our audience participants have been a lot of the webinars like this and this was first-class. I am super excited to host this general session because I have a guest that is familiar -- Mr. Todd Buckley's -- Mr. Todd Mc Lees. They help and expenditure rate of change to find their market advantage. And many of you might recognize Todd because he was a key, instrumental person on the future of work and last year's presentation. Inspiring to say the least, but a visionary and someone I've come to admire and a very good friend of all of us in career and technical education. So thank you for joining us today. A pleasure to have you with us. I want to start off by acknowledging the fact your company focuses on this idea of exponential rate of change and I don't know anyone of us

could have been imagining anyone of us would be delivering this conference in a virtual environment. Tell me how life is going with you.

Todd: Thank you for having me. It's great to speak with an audience of educators in workforce development folks as we hit a crucial time headed into this year of work, this next era of innovation. Like everybody, the world is different. I miss people. I used to spend a lot of time on airplanes. The last time I spoke to this group was in Louisville and since then, somebody suggested i.e. at a chicken and waffle place and the airport. I miss food. I've tried chicken and waffles 10 times since then. When I think about NCPN, life is different. The first few months it was disruptive, certainly if you make a portion of your living traveling around speaking in front of audiences and the kids are being homeschooled and everything is different, but the last four to six months, the last three or four months for me , opportunities have opened up. The accessibility to women arrays and plot leaders around the world is better than ever, so there is an opportunity for those of us learning every day.

Bryan: Absolutely and I know that is a passion of yours. Your guidance and support to help collaborate between two-year colleges and four-year diversities and our K-12 partners. I reflect on last six months of life and how I've had to adapt to learn new systems of technology and our work together, we have been working with manufacturers to talk about this concept around the future of work called the digital technician. And I'm sitting here today going when did all of this happen? When did we switch to digital lifestyles?

Todd: I've been thinking about this. In 2003, William Gibson said the future is already here, it's just not evenly distributed. Digital technology is part of the fourth Industrial Revolution, so it has a long history dating back to the 40's. But it wasn't until the 80's or so when awareness and adoption rates for technology began to accelerate stop that coincides with what we referred to as the information age. In the 90's, we all became familiar with the World Wide Web. Remember when you use give addresses out and it would start with WWW? We talked about this in Louisville, the confluence of technologies like cheap bandwidth, cheap storage, greater access to mobile technologies, the iPhone was born in 2007 and all of that led to the proliferation of the cloud, e-commerce, etc.. Even though approximately seven out of eight companies recognize the importance of digital maturity in their country, less than half are actually taking action or believe they are taking enough action. Even today, 80 years after all of this began, think 1945, there's still a huge chasm between knowing and doing. It's a two to one ratio, and that's a significant issue as we see companies separate themselves from their competitors by leveraging digital.

Bryan: Remind me of how our career paths crossed -- it was because of transformation or amplification items that happened in our own community. Our discussion around industry 4.0 -- now you could move machines around and place products in different locations and not have to be so dependent on the national environment and that was a key amplifier. Most recently in our home community, the landing

of Foxconn in our community and this concept around 5G technology. You mentioned the iPhone in 2007 and Apple just announced their new 5G phone this week. The iPhone has probably quadrupled its technology capacity in those short years. Now I look at this concept of amplification and I'm certain we can all sit back and think we would have never guessed we were on a virtual platform for a national conference like this but the coronavirus has been an amplifier for us to move more rapidly into the digital environment. Could you provide examples of virtual technologies and how industry has been moving down this path and maybe was because of this pandemic that an education we are starting to see it happen real time in our world?

Todd: Before I do that, I want to talk about something you mention when you talk about 5G and the new iPhone announcement and so forth. I was listening to the pivot podcast, which is a professor from NYU, a marketing professor -- she is a Silicon Valley magnate. They were talking about this strategy that correlates the availability of bandwidth. It correlates directly to GDP. As you talk about Forex power and capabilities and the iPhone in the short time of 13 years, it took 42 years for Apple to get to a trillion dollars in valuation and just the last several months, it's gone to 2 trillion dollars. That's the sort of value and business value we can achieve and assigned to those types of technologies. But it is completely true we are already live in -- we are already living in a time of disruption. If you will remember, there were these three significant drivers at the time and those three are still with us in spades today. There is the exponential rate of change in technology. There is impact of globalization. Some of that starts with shipping containers being shipped over from manufacturing companies in Asia, for instance, but think about in terms of digital globalization and the availability of the Internet for people where there is significant expertise and true genius bottled up inside of these countries in Eastern Asia and Africa and as we go from 4 billion people with Internet connectivity today to 8 billion people by 2030, those digital skills are going to come to the surface. Then the acceleration of the concern around climate change. That was just coming into this year. I've been talking about those things for three years. Now, sprinkle in the 1918 Spanish flu, a financial crisis more significant than the one we faced in the recession of 2008 and 2009. A labor market crisis that in terms of the unemployed and underemployed compares to the era of the Great Depression and the social justice and equity movement that we are living in right now as well. What that has done has completely change the way we think about things, the way we make decisions in the value that we used to guide those. Where we work and learn, we are working remotely right now. It changes our thinking about the systems we have in place to achieve the things we need to achieve. In most people's eyes, 2020 is the most memorable year of disruption in our lifetime and what most of us struggle to see is we were already living here. I think it is in some ways one little silver lining of all the confusion and pain and real issues we are experiencing, this recognition and acceleration of the technology. The opportunity in front of us is to come together and find ways, like Bryan was talking about with K-12's working to deliver new solutions for the next-generation workforce.

Bryan: You raise a lot of questions and that response. In the world of education, we have over 300 participants on this conference call today thinking about their future world and what is it like to deliver education and we are seeing a lot of children at home, else are at home learning, trying to compete with different job skills and employment skills and it is getting more and more blurred or integrated on that pathway. I reflect a little on this concept of how quickly do we need to become more digital, but certainly digital is more than e-commerce. It's a combination of a lot of factors that play into the way we live our lives socially, through work, through education. There are some a factors coming together but how would you describe the concept of digital?

Todd: I think digital is about people. We are going to find that more and more as we go through the many changes in technology and the way we apply technology in the workplace. Digital is a process of adopting new or different processes and that comes down to people to do that. It is about ways of thinking and ways we can help the organization reimagine, adapt, and compete in a world that is increasingly filled with digital technologies causing these competitive gaps that have never existed before. The hard part is to understand this is all about change. So when you think about cultural change, any change your experience during your career, there's so much anxiety that comes along with that, especially when we are talking about people who have built a career out of particular skills that can be automated or augmented with technology. I have a signed personal value to those skills. This is the importance of like lot -- of lifelong learning. If I'm going to be expected to shed skills that are automated, how can I be valuable to my organization or a new organization? That's learning new skills. And sit of thinking of this as digital transformation which is a great industry buzzword, let's think of it as digital maturity and that is our measure of our ability to take advantage of opportunities offered by the new technology. That said a personal level and an organizational level. Many companies implement new digital tools and platforms only to find they go unused or don't deliver the intended business results. Look no further than things like the industry and Salesforce.com. I've talked to many CEOs over the last decade about their sales processes, the way they are going to grow and they think they are outsourcing that to technology in Salesforce.com or any other management software, but the reality is the work just begins there. It can make matters worse if we only rely on technology. M.I.T.'s loan and Deloitte uncovered in the research that challenges companies face adjusting to the faster pace of digital business indicates transformation requires a mindset shift and that's where we are focused is rethinking technology that happens further down the line. Right now, whether you are embracing technology in the classroom, within workforce of element, upscaling people in the company, it's about understanding what impact that will have on people.

Bryan: If digital is about people, you can digitally ask questions in the chat right now. At the end of the program, I want everyone to have a chance to pick your brain on some of the futuristic thoughts you have around this concept of the interaction of technology and impact. We've used telemedicine in the past and now it's more prevalent because you can't really get to the doctor or there is a waitlist to get

there and we've seen it in the way we drive our cars. I get excited when I have remote start and you can see sensors in your car to tell you if you are off-track. There's so many applications. Recently, just going to a department store where you no longer have people checking you out and you have to do it yourself. You automatically scan and it ducks from your bank account. All of those technologies are emerging at a rapid pace because of people, so I appreciate that. That's having a dynamic change on the way we think about human characteristics. Are we creating more gaps for people who are not digitally literate and how do they become more engaged in this new form of society?

Todd: I had to gather myself and you talked about remote start. My first experience was I went to an NBA basketball game and I was outside with a couple of friends I went to the game with. One -- should be a former friend had the remote start in her pocket and kept telling her car to start and turn off. I thought it was voice control and I was on the phone the next day looking for that option but obviously it didn't exist quite yet.

Bryan: It's probably not far away today.

Todd: As we think about skills for the next era of innovation, there are six areas we need to focus on. The first of those is it doesn't matter if it's a digital world or analog world. We'd find ways to help people understand what they are passionate about, what their purpose is. You will find something a little more innate. This is the Japanese version of purpose -- what we love to do, what the world needs and values and what we are good at. It is one tool, but there are many that can help people discover what their true passion and purpose are and that such an important piece. The next pieces around how we make decisions. This is important. To be a part of those organizations, whether as an employee or partner, whatever the case may be, it is referred to as values matching. Do my values match yours? If they do come we've got a better chance of creating success together. The next piece, the four areas where I focus are around lifelong learning. I'm such a passionate believer and I think our audience today, this is our key role, to convince the world the front and loaded model of education is gone. Those days are well gone and at this point, we have to be lifelong learners. The next piece is around truly understanding, in a world filled with intelligent technologies, true cognitive technology -- HR processing tax returns, accounting, artificial intelligence running drive-thru's -- those sorts of things are here and so we have to understand what can be automated easily, what machines are great at, how we can leverage machines in the work that is augmented and the work that is uniquely human because we can only unlock and maximize our own human potential when we understand what work is human and less at risk of being replaced by intelligent machines. The next piece is an imperative around impactful human to human collaboration. Working on teams. We have seen that skill bubble up to the top right below critical thinking and emotional intelligence in a post-pandemic world. We have seen the ability to collaborate on teams really important skill set. Lastly, there is an inevitability that machines are going to come into our jobs -- think about oncologist relying on intelligent machines to make diagnoses for cancer results

and so forth. The tremendous improvement in accuracy that happens when you combine the skills of that oncologist, radiologist, and the research wrapped up inside of an intelligent technology. That's an inevitable piece, so our ability to develop skills that allow us to work seamlessly with machines and rely on machines for what they are great at, that will become increasingly important piece of determining success in the future.

Bryan: A fascinating discussion because the concept can seem so futuristic, yet we see them every day. I like to try to validate some of these things by watching television commercials. I don't know if you've seen the new commercial where they are promoting a smartwatch and they say someday, we will have a smartwatch that will monitor our heart rate -- a woman rolls over and says they already have it. Someday, we'll have a watch that monitors your oxygen level in the astronaut says that I already have it. And the astronaut going to the space station is going to vote from the space station. If you Inc. about how do we prepare young people for that, that is our big challenge. I don't know if you remember this, that I graduated college and apply for my first teaching job, I had to go down to a convenience store and I bought stationary that matched, an envelope that match the stationary that matched the return letter, and you typed it all out and it was a big deal. You only bought as much as you could afford. It was like a 30 five cents. Today, our graduates from our college have no idea what that process was like because we are unlike a purple briefcase, and handshake, everything is digital, credentials are recorded. When you think about all you are experiencing and what you are hearing, what do you tell young people about the future and how they could begin to prepare themselves for it?

Todd: I want to be clear in underscoring something you said after the last piece of the conversation. This is going on right now. There is a large manufacturing defense contractor in our state of Wisconsin where they will automate 100,000 hours of human tests this year. That is their 2020 goal. So you can think of that as 50 people, 2000 hours times 50 people, being automated out, but that's not really how it works. It happens is 8% of your job gets automated, 11% of mine, etc.. It impacts many, many people. It's not just at the multibillion-dollar level. There's a \$10 million company here in Wisconsin who is family owned, the daughter comes home from the University of Virginia -- this is a precision machine shop and the 19-year-old comes home from the University of Virginia for the summer, goes to work at her dad's \$10 million company, not big, not \$10 billion, \$10 million. By the time she leaves, she has learned a tool from scratch which is a robotic automation tool and she has automated a thousand hours of management tasks, just the mundane, repetitive work that we do in Microsoft Excel every day. The really important piece is may be that 1000 hours at a smaller manufacturer is more valuable than 100,000 hours at a very large company. The question rests on this point. What are you going to do with that 1000 hours? Nobody is saying we are going to get rid of those people. It's all about upscale repurposed thing. This will continue throughout our careers. To your point about HR and stationery and resumes, I lived through that same experience. Now, HR departments around the world are increasingly relying on tools like handshake and purple briefcase, but they are also using social media service -- social

media searches and machine learning to identify the candidates most likely to be successful in their culture, in their country, in that specific role. Just using comparative results from other people in the company. There is a big push toward skilled base hiring and we will need to develop and sharpen skills throughout our career. How many of us -- you made the point earlier, here we are on this huge, virtual conference. A few hundred people all on at the same time, all learning from one another and how many of us do you think are better at virtual collaboration, the skill in the upper right-hand quadrant, then we were six months ago? Room number how disruptive it was six months ago to jump on a teams call or zoom conference? Those are the tools, but what had to happen is this little change kept coming in. Every day, we got better and better at it and virtual collaboration is an important piece. There will be new skills tomorrow. This model developing with people around the country is an adaptive model and I expect the skills will look a little different in 2021 or 2022 than they did today. For each of the imperatives, there are two mindsets and skills that can be correlated and we can work around this map and matrix with employers to say which of these six skills do you value when you are making decisions? These are not the digital skills, it is not stem focused, these are all important things, but these are the human skills that transcend industry. These are the skills that are going to become increasingly important. Skills, I've said that word 30 times. They are important, but they will not be enough to sustain a career journey. We need to focus on building skills into capabilities. The ability to apply a skill in multiple contexts. That's where we have a distinct advantage over the digital content that can be found on YouTube, LinkedIn learning, the massive open online campuses, this is not just about content, it is about sharing knowledge, sharing educators that can help learners. It takes a collection of capabilities and advanced capabilities, the next level of competency to learn organizational capacity. The reason companies hire individuals to build organizational capacity.

Bryan: I wonder if I can put you on the spot and go back to that slide for a minute because it's fascinating. A generation ago, maybe elementary or middle school, there is a separation of the concept around the socialization, being nice outside, respecting your family, the community involvement. We talked about employability skills. You want to be able to work in the team. The team is way beyond just work. What we have signed up here is this whole idea that there is a tighter and tighter relationship between our life's work and that work is not necessarily separated out or the social impact we have in our work is not necessarily defined by the eight hour day or, in this case, the location of our service. That is the transformation people are just starting to wrap their head around. At Gateway technical College, when we first shifted to we are going to be working at home, that was panic time because people are like I don't know if we can do that. We've never figure out a way to supervise people that way. Same thing when we are teaching young people. What are your thoughts around are these separate and distinct skills or we just need to teach life skills about life's work?

Todd: Take a look at this chart. The young people entering the workforce today are expected to have an average of 17 jobs in five different industries. I don't know how important it is to learn Python today for

the sake of Python. It's a quarter of the language for people in software development. It is important today -- important technologies may be doing it in three to five years, but where the wind lies is with the mindset that goes into becoming a software developer, to choose the right language to build that tool and so forth. If you look around here, we have to find ways to ignite the engine within people as the digital divide closes. The next gap that will exist is the self-motivation gap. We need to develop agency, develop and cultivate the skills throughout the rest of our lives and finding new ways to identify the aspects that make us human. The aspects that help us realize our human potential, the aspects that machines cannot do and we need to do that together. That's the right side of the graphic -- the sandbox skills is how I think about them.

Bryan: What's fascinating about that -- reflecting on the questions that came up in the chat early in the presentation, this concept of mind shift and how do we communicate that to young people in the classroom and I'm looking at this thinking about the role and responsibility of counselors, those providing career guidance, advice, teachers in the classroom as students come and say how can I apply this in my life and my work life? So I think about it's less than how much we can pack into a school day or school year and more about how do we continue to inspire the concept of lifelong learning, life's work, and the integration of these new thoughts and ideas and systems of change?

Todd: And exploration. You still see passion and purpose at the center of this model, which is about as human as it gets. It's so important for educators -- I spent a lot of time with higher Ed and you talk to the average for your liberal arts school and you are likely to hear -- and I'm a product of a liberal arts college in California -- you are likely to hear that by the time somebody graduates from our university, they have good critical thinking skills because of the way we teach every class. That might be very well true, but I'm not sure that means the graduate can sit in front of an interviewer and articulate what critical thinking is, which might be like many companies, the number one in demand skill. If I'm not in a position to give where I had to apply that bill, if I don't understand where it is, it's the college piece. That, we can get from tremendous collaboration or curated content. But other than that, it comes down to the experience. When I think about the center at Gateway technical College in the experiential learning and social learning that can take place from Industrial Revolution 12 Industrial Revolution four, we have two give people these experiences so they can understand what they are great at, what they should be continuing to develop, and find their ways into organizations that prioritize these same strengths.

Bryan: I can reflect on our own personal experiences and we see that in our own lives. The day of the 40 year employee has pretty much gone. We are fortunate if we have an employee at our college and we get to recognize them for 20 years of experience and now we see the rapid change of pace and people moving, more flexibility or more ability to move in two different locations based on the types of interests they have, geographic location, and these fabulous skills we are delivering to people. What are

your thoughts about this concept of the 40 year employee and once we teach something, we think they've got the knowledge and they will be set for life?

Todd: You know what I think about that. Today, the norm is the four year employee, not the 40 year employee. The average employee stays for 4.1 year. In high-tech, it's 2.3 years. So imagine the struggle employers see in investing in the development of people if they are going to take those skills, pack up their bags, and go apply that to the next place. The concept of working in one place throughout your entire career, getting that gold watch, I remember seeing advertisements in his this magazines during my childhood that literally were advertising the gold watch for retirement ceremonies. That's part of history now. The new gold watch, the new social contract between employers and employees is learning and development. What investment will the employer make and me to grow my skill set, whether I apply it here or somewhere else? Think about AT&T -- higher 6000, I hear \$8,000 a year invested in each employee to be used on learning. If you don't leverage that 6000 dollars provided as an employee benefit, it reflects negatively on your performance. You have a campus at Amazon, Gateway has a campus on Amazon, and what they are doing is taking that front-line worker and distribution center and saying we have an issue if we are turning people over every six or eight months. So we are going to invest in their associate degree for whatever associate degree they want to pursue because we are about helping people grow and we know they are not going to be here forever. What I see is this tour of duty model that Heather McGowan talks about. I can't stop reading the things Heather McGowan writes. She's incredible author. She and Chris Shipley just released in April of this year the adaptation advantage. I had her on a virtual conference where I was playing host and if you look at the right side of the graphic, what they talk about is this need to accept the fact that we are going to have to shed skills. Think about all the things you did for your job in 1998 that you don't have to do any more. It's because those things are being outsourced or automated. They are being done in some other ways that doesn't need your skill set anymore. But in order to do that, to be comfortable with shedding skills I have assigned some personal value to, my company has assigned value to, they've paid me to do those things, I need new skills and new knowledge that I can apply to prove I can be valuable and that's my next job. If you think about that at every four years or so in 55 to 60 years, because of life extension, people are expected to continue to work later and later on their career path, what we are talking about 17 stops across five different industries. So what we need to do as educators and workforce developers is arm people with the foundation and skills that are multidisciplinary and transcend industry, they stick with them throughout. Because machines are coming for percentages of jobs, especially low skill jobs. So all we can continue to do is help people recognize that is what's coming. This is how that correlates to the digital transformation plan. Where you are right now, if you did this and this from a gaining skills standpoint, here are your three options down the path. Very few companies have done the work to be so elemental about how a job breaks down. The work that can be automated, augmented by intelligent technologies and the work that is uniquely human.

Bryan: That is happening more and more, even in education. Those 300 plus people on this particular webinar, it's being recorded. If they each share with one person, that's 600 people that will get the message. A portion of what you have said will be used in a way to leverage performance in varying ways. One question that just came through on the chat with can we teach or train critical thinking ? I will answer at first and I will say yes. Here's my context. You mentioned the average work span is 4.1 years, 2.3 years in a technological field. Every other year or so, that job is going to change or that person is going to leave that particular job. How do you as an employer manage that? People change jobs because as you invest in people and their knowledge and experience and they apply critical thinking, and through that experience, that job has changed, so they are building a future for themselves as opposed to waiting for something to happen, they get sent to a conference and are trained, they are constantly evolving that way. You work with global companies on this strategy, trying to identify how you build a supply chain, how do you measure the supply chain, how do you evaluate high-performing companies. You made this comment about unicorn companies, the fastest growing companies. Can you tell us about your research and what you are doing to apply this critical thinking model to the concept of supply chain or in our case, the concept of education.

Todd: I am on a mission right now -- and I think you and I have talked about this once or twice. When you look back at the previous chart on the 24 skills, I'm on a mission to find the luminaries on the planet Earth to talk to about these topics. If you think about emotional intelligence, immediately who comes to mind is Daniel Goldman who wrote the book on emotional intelligence in 1985. Travis Advair -- Travis Bradberry, Richie Davidson, their are people who understand emotional intelligence are the most of us. Same is true of critical thinking and every other skill listed there. I'm launching an effort to go capture that knowledge that people can understand not only what the basic definition is of those skills, how we turn those skills into capabilities, but how to teach it. In my mind, dealing way to achieve the types of re-skilling it up-skilling is we have to enlist the help of higher education and workforce development. It's the only system in place that scales properly. When we think about supply chain, whether that's the supply of talent or supply chain and manufactured goods, we have witnessed the importance of the global supply chain in months -- in recent months as it has been completely broken. The importance of managing it properly to manage it differently in the future. The least expensive alternatives often make the most sense until late don't. We found that with PPE and all sorts of materials, the food supply chain, etc. But let's think about digital globalization in this context. You can map this to the accessibility to the Internet and we know the availability of bandwidth as I mentioned before can be correlated to GDP. Considering the growth of people connected to the Internet in the last 25 years where in 1995, it was like 100,000 people. Today, it's roughly 4 billion people and there are roughly 7 billion people on the planet. By 2030 we will be at eight oh you and people and nearly everybody will be connected. That unleashes genius throughout the world that we don't see as accessible today. So there is this opportunity to create a more global learning environment as we continue to draw on the true thought

leaders and give access to more people and develop experiences where they can cultivate at into skills that transcend and stray lines and experiences that help them grow to a point where they can mentor others and lead others, to your point about sharing content. We need the effective multiples here to achieve the level of scale required for what we are going through.

Bryan: I look at it like this -- sometimes it's your vantage point. Depending on where you are looking, there is this digital gap that is real. We know what neighborhoods do not have access to the Internet which means it's a disadvantage for some students to work virtually. We're going to give you a laptop, we are going to expand mobile access by putting links to the busing service, all of those are good, short-term fixes but as we continue to build this out, there's a satellite train this summer -- 60 satellites launched at the same time with the concept of having satellites linked all along the universe. It's an amazing process that is happening in our lifetime. I think about the size and scope of the digital services and large school districts can respond differently than others. Same thing in industry. Large-company versus small company, how do you think about this and the way it is shrinking the world to keep us competitive at all levels?

Todd: That takes us back to 5G and your comment about the commercials. If you take a look at the T-Mobile commercials with access to the Internet for 10 million students -- digital services has made the world more competitive and put us in a place, especially with cognitive technologies, they can act as disruptors in an economy filled with laggards. This is the importance of the knowing and doing gap where seven out of eight believe it's going to be disruptive. Less than half are doing enough about it in their own mind, which means it's probably an inflated figure. Sometimes, previous success, what got us here, that can lead to complacency or what researchers refer to as the complacency trap. Here's why we are successful, so let's keep doing that. What that does is open a door for small or medium-sized companies to find an advantage that can disrupt an entire industry. There's lots of great examples -- Huber is one of those. Not having experienced success at such scale before, they don't have a massive infrastructure. They don't have a massive team or organization where they have to create change and don't have the same level of biases where they can prevent people from acting with the nimbleness required.

Bryan: You have given us a lot to think about and I'm watching the chat box and the questions coming in. A question came in that gave us how do you bridge this if you are not a career element specialist? Maybe they haven't had all the success in education that some have and where -- how you build this conversation? It gets to this concept, are there crossover concept we can use in workforce develop in an education to help old some stabilized conversation with future workers?

Todd: Sure. I'm going to go back to lifelong learning for a moment and suggest my 10-year-old who is a fifth grader, she just announced at the beginning of the school year that she was almost done with school. My -- had my 24-year-old said that, I probably would have said there is 11 years left to go until

you have your bachelors degree and that it. Today, it's a very different conversation in my household, where it's like OK, you are 10, so you have a little ways to go on the education but even if you stop going to school after high school, your generation, my generation, the ones after us, they will have to continue to learn throughout. So we have to redefine the role of the various stakeholders here. This is this model of hierarchical education versus lifelong learning. When we think about that, and what we do today, we have this focus on the learning conditions, but it's not very explicit. We help people build foundational skills that are measurable, the standards-based stuff, and my focus is on helping you, regardless of what level of education we are talking about prepare for your first job. That has been completely disrupted and this is more work from Heather McGowan that I have built on. We have to focus on helping people learn how to learn. Learn the way they most effectively learn to build an active mindset, a growth mindset because that is going to be with them for the rest of their lives. Alvin Toffler said the illiterate of the 21st century won't just be those who can't read and write, it will be the people who cannot unlearn, learn, and relearn the new things coming as quickly as they are. And they are. As we sit here and talk about digital, I am urged, I find urgency inside to raise the fact that we are in the cognitive era, the intelligent technologies, quantum computing is there right now. Technology is out pacing us by a lot. We have to help people find purpose, be focused and explicit about learning conditions. We still need to develop foundational knowledge and literacies, but we need to put people in a position where they accept the fact that they will be shedding skills that are now automated. Some of that in terms of career development and workforce development is helping the people, let's start with the lowest skilled people, the reality is those are the skills most likely to be automated. So we have to help build optional pathways for them to new careers and they have to accept the fact that is coming because even if they leave the place where they are right now and find gainful employment at a technological laggard, that job is going to go away, that company is going to go away. We are in this horrendous Catch-22 and the only way to think about this is to continue to help people hold those skills and build those skills into capabilities.

Bryan: I'm going to challenge you here because I think you are onto something that can help us as educators and our future role. We are doing everything to build a knowledge base and help our young people or adults who are displaced, but we should be thinking that same way about educators. When I first started teaching, we had a separate classroom for keyboarding and we would teach young people how to type. Then we had a separate classroom for computers and we could learn a software package. Down the hall, we had a class where we used a computer able design. Separate teacher, separate credential all the way through. And I'm looking at this chart and I'm thinking what's the future of education because at our college, and working with some of the universities, we are just starting to experiment with this concept of badging. Once you earn knowledge and skill, you don't have to wait until the class is finished or you are a certain age and move on to another raid level. Let's say you are a 10-year-old, are they always going to be structured in a friend classroom model? Because of what's

experienced in a virtual model, do we see people's knowledge progressing at a different level and can we give them more so they can progress in this lifelong learning model in a different format?

Todd: My daughter is a normal reader and an extraordinary math student. So this is identifying strengths. We encourage her to read an hour a day, I go through the same struggle every parent goes through with a child who announced they don't like to read. But then she ends up in a robotics class, and extra math class, a programming class, stem focused curriculum because you have to get their young. We have to get to the young learners. Right now, it feels like we are running as fast as we can with virtual education and so forth, but we are really just beginning to get going. We are still crawling. We are not walking or running yet. We are still teaching classes away that closely resembles the way we always have just buy a new virtual tool. Some art -- just via a new virtual tool. Some are moving toward a flipped classroom -- synchronous and asynchronous learning. We are using more of that. The role of teachers will evolve from what it has always been to one that is more facilitative and will grab great content, but then let's make sure you understand it. Let's press the pause button and talk about it. Let's encourage these new skills that transcend industry and that's going to make its way throughout education. I honestly believe that through education is the only way to get this done. We need education to be leaders, not always just responsive to industries acute needs. Industry truly doesn't know what they are going to need in most cases three to five years from now. Education is who we have to look to to get out in front and help us understand what we should be learning today to serve our companies tomorrow and that requires a sense of partnership and ongoing dialogue between industry and education.

Bryan: I think you have left us with a very inspirational thought in that through all of this change and challenge we face every day, it is going to be through education we come out on the other and a more knowledgeable, more inclusive society and a better prepared workforce. On behalf of everyone on the call today, I want to thank you for your inspiration, for the concepts you have shared to help us grow in our learning environment and to congratulate you on the success you already have and keep you connected to our partnership with NCPN because we need your vision to continue this because to educate youth and adults. Thank you all very much. I'm going to turn the program back over to hope.

Hope: thank you for leading us on this very important session and challenging how we think about digital transformation lifelong learning.

>> I want to thank you for attending NCPN virtual today. Hope you enjoyed our program. Have a great rest of the day and we will see you back here tomorrow at noon Eastern.