Ivory Toldson:

Hello everyone, and welcome to another episode of Collaborative Strategies for Inclusive Change. This is a podcast series from the NSF INCLUDES Coordination Hub, and we highlight projects and partnerships that are shifting inequitable systems to improve accessibility in industry and inclusivity in STEM education and careers. My name is Ivory Toldson, I represent the QEM Network. I'm also a professor at Howard University and the national director of Education, Innovation and Research for the NAACP. I'm very excited today to be here with Chike Aguh. Chike is the chief innovation officer for the Department of Labor. His office sets the department's research and development agenda for open government, digital products and the introduction of new technologies intended to improve the workforce system agency consumer service and data sharing.

Ivory Toldson:

Mr. Aguh's career has had an emphasis on the future of work, as well as his impact on opportunities for nations' organizations, workers, and underserved communities. He is a recipient of various awards and has served in a variety of different roles that directly impact workforce equity. We're so excited to have you here, Mr. Aguh. Do you prefer Chike or Mr. Aguh?

Chike Aguh:

Oh, Chike. We're having a conversation here.

Ivory Toldson:

All right. Chike, you can call me Ivory. Very impressive background. And a lot of people probably don't know that the Department of Labor has a chief innovation officer. A lot of times we associate the chief innovation officer with big tech companies. Talk to us a little bit about how you got this role and what you see are the priorities for this position.

Chike Aguh:

Sure. No, first of all, thank you all for having me, just thank you for creating this space to have this conversation longitudinally. This is a really important conversation, not just for, I think the competitiveness of our economy, but I think also the equity of our economy and making sure that it's one that delivers for everyone in many ways the STEM professions. And we need to define STEM really, I think broadly and precisely, is a really a pathway to wealth, particularly for communities that have been excluded from it for a really long time. Just to give a quick kind of overview of the Department of Labor, the Department of Labor has been around for over a hundred years. And if you think about what the Department of Labor does, we really do three things. First thing is we gather copious amounts of research and data on the American workforce through the Bureau of Labor Statistics, but also all the other agencies of the Department of Labor, all 23 to 28 of them, depending on how you count them.

Chike Aguh:

Secondly, we invest in the American worker through training, through benefits like unemployment insurance or trade adjustment assistance. And then thirdly, we protect workers once they're on the job, that is places like OSHA who’s looking at workplace safety or the Mine Safety Health Administration, which inspects every mine in this country four times a year. And this is the Employee Benefit Security Administration, which regulates pensions and health plans over 11 trillion of wealth for 150 million Americans, so that’s what we do. And my role was created relatively recently in the first term of the
Obama administration by the deputy secretary of labor at the time. And that’s who I answer to currently and really just to think about how do we use innovation across all of these domains that I just talked about to improve and advance the American worker.

Chike Aguh:
And when we say innovation, I define innovation as a new way of doing something done at scale for a purpose. I do a lot with data and technology, but at times the biggest innovation is super analog. It's simply a different way of doing something or something that's been done one way and a totally different space for a long time that we're bringing to the workforce space for the first time.

Ivory Toldson:
So what NSF includes, the primary thing that we're interested in is making sure that people from communities that are historically underrepresented in STEM are fairly represented in the STEM workforce. Can you talk a little bit about the Department of Labor strategy in helping to make sure that there's opportunities for underrepresented people in stem?

Chike Aguh:
So I think the first thing is we have to realize that this is such an important challenge as there's no one agency who can get this done. And so when we think about this question of STEM jobs and jobs and the kind with the innovation sectors of our economy or the innovation jobs and all sectors in our economy, this is us and the White House Office of Science and Tech Policy. This is NASA, this is the Department of Education. We have to work in tandem to make sure that we do this. And at times in government, we don't do that as often as we should, but this is a challenge that absolutely requires it. So I think that's one. I think, secondly, we don't even know how we define STEM jobs. And I think traditionally we just define STEM jobs as I call them kind of the small core of white coats, folks who do ones and zeros.

Chike Aguh:
And I think what we've seen over the last completely 10 years is that STEM really has to be defined broadly. And I think cybersecurity really is a place where that's a really great example for that. I think cybersecurity if you looked at it 15 years ago as thought of, again, has kind of hackers behind computer screens doing ones and zeros, but now cybersecurity is a really big field. Yes, there are those folks who have masters and PhDs in computer science doing that high level hacking, but you also have folks who are now in jobs that require less than a bachelor's degree, who are doing things like network and data security, who are doing jobs that we can define at times as middle skill. And so it's really important to understand that STEM is defined broadly. And let me just say one more thing, almost all jobs have STEM skills required in them.

Chike Aguh:
And so if you think about, for example, retail, think about the person who has to restock shelves in the grocery store. They are usually using some type of mobile device which has a proprietary type of software that allows them to do that restocking. You need technology and STEM skills to be able to use that thing and use it effectively. And in fact, if you can't, you can't necessarily do that job. And so I think what we can do at the Department of Labor and we do on a regular basis is really be expansive and precise about exactly how we define a STEM job. We're seeing a trend in the economy of folks really examining what are the credentials and skills required to do a job? I think reflexively in the past, we required college degrees for everything. And there's a place for college degrees.
Chike Aguh:

We are not against college degrees. There's a huge place for it within our economy. But you've seen a lot of jobs that are requiring college degrees that don't necessarily need them. And I think this is a place where the Department of Labor, we want to be really clear about that and basically figure out how do we make sure that if someone can do the job, they can get the job. Secondly, how do we think about what we broadly call skills-based hiring. There's a reason that the president talked about that during the state of the union. When you hire based on skills, you get a more diverse, more equitable workforce that reflects the diversity of America. A third, the president also talked about registered apprenticeship, which basically is in a 12 to 24 month pathway for a person to go on the job, learn a job and at the end of it, if they've done well, actually get a job.

Ivory Toldson:

Yeah. Yeah. That's really interesting. And I want to ask more about the skills-based hiring. I know that you spoke about that at the Wharton Future of Work conference. And yeah, I know that with different institutions of higher education, a lot of them have predominantly Black populations, including HBCUs and there's certainly a lot of minority serving institutions and there's a lot of community colleges out there. So some of the hiring practices that are creating inequities, it goes bigger than them looking at degrees. They're looking at degrees from a specific type of institution that typically have more white students. So how do we balance the skills-based hiring with looking at institutions that are our incubators of talent and color.

Chike Aguh:

I actually, I think this is a moment for exactly what you're talking about. I have never met a technology CEO who has had all the talent that they need. You just said that technology space is one example. I think that is now really large across the economy. You are seeing gaps in labor. And I think this is a time when companies can't afford to frankly execute the biases that potentially they've executed before. And that I'm only going to hire from a certain type of school that looks a certain type of way. It is no longer acceptable to have a purely monochromatic workforce that somebody looks one way. It's not tenable anymore from a brand point of view, but there's a lot to be said for what companies can do better. And to be blunt, we need companies to really think about, for every job, what are the skills and competencies required to do that job?

Chike Aguh:

And then how am I going to quickly and rigorously assess that? Not impute it based on what degree someone got or what credential, but actually, how do I actually assess it? If you're going to try out someone to be a point guard, you're not just going to look and say, "Oh, what teams were you on?" You're going to make them do a tryout and you're going to make them show how well they pass, how well they dribble? How well are the [inaudible 00:09:29] so on and so forth. And what's the equivalent of that in the workforce space for particular jobs?

Chike Aguh:

How can I quickly assess by actually hopefully having someone actually do a version of that job if they can do it or not. And so that's, I think where we can push. And I believe if you do that, companies are going to be able to see more talent in more places than they ever have before, whether that's in a minority serving institution, whether that's for someone who's never gone to college at all. But I think
really using that skills-based work or that skills-based framework to fill jobs is I think how we get to some of what you’re talking about, Ivory.

Ivory Toldson:
The institutions of higher education, do you think that they should also be looking at skills-based curriculum? Because a lot of the classes that you have to take to get a degree in engineering or computer science or things like that really don’t have anything to do with the skills that it take to actually do the work. Do you think higher education should be a part of that conversation?

Chike Aguh:
If you were going to be on a basketball team and you wanted to learn to do a jump shot, you can watch tape of someone doing a jump shot. You can read a book about doing a jump shot, but the only way to really learn how to do a jump shot is to do a jump shot on the court and to have someone watch you and critique you over and over again, until you get really good at it. How do we make sure that people who are learning skills get a chance to apply those skills under the tutelage of a master so they can get better? Again, that’s why the apprenticeship model is so powerful by research and by anecdote, but how do we have more of those experiences for more people? By the way, if you look at who has the most access or disproportionately less access to those experiences, it’s frankly folks from communities that we know we’ve overlooked for a long time; people of color, immigrants, women, workers with disabilities.

Chike Aguh:
We know that in communities that have a lot of resources, you have people who are 12, 13, 14 getting their first internship, being able to learn from a master, create those leaderships, learn how to potentially do a job or, and also explore. How do we make sure those experiences are available for everyone? That is an equity impairment. It’s also going to lead to two better workers. In many ways I think Ivory, a lot of the things that I think you and many of the folks who do the work that you do want for all communities they’re happening, but they’re not happening for everybody.

Chike Aguh:
And I think that’s what we have to figure out. How do we make sure that the things that are happening for some, which aren’t bad and we want those to be happening, we just want them to be happening for everyone. So I think hired has to be part of that conversation. We have to think through how do we make sure that everyone gets those experiences, where they get to do the jump shot, not just read about it and not just watch it? And then how do we make sure that everyone gets those no matter where they go to school or if they don’t go to school at all?

Ivory Toldson:
Yeah, that’s an excellent point. So the last question I have is, we’ve talked about a lot of excellent strategies to help to diversify the STEM workforce. But we also have to look at this issue of racism, the racial biases in hiring. We know that there’s a lot of organizations that just prefer not to hire people of color because of the biases that they have. And because we’re so far away from some of these government mandates like affirmative action that specified things that you need to do in order to reduce these prejudices, a lot of organizations just really aren’t dealing with it effectively. Do you think that we’ll see a time when the Department of Education and the federal government more broadly tackles racism a lot more directly than we’ve seen in the past?
Chike Aguh:
Let me answer. I think this way. And I think the first thing I say is, at least as someone who's been in industry, the type of bias that you describe is self defeating for a company. And self defeating meaning you will make less money if you are not getting talent from everywhere. The data proves it true. Since September of 2021, every month, more than 3.5 million people have voluntarily left their jobs, not fired, not laid off, left their job. And most of them got other jobs where they got paid more money. So this is a time when we have a tighter labor market than we have ever had before. I think unemployment is, I believe, at 3.6 or 3.7. Economically, some people would say that's full employment. So if you are having biases that stand your way from taking people who can do your jobs, you are not a good business person.

Chike Aguh:
Forget even it not being right. You're actually not running your business well. And I'm seeing more and more companies recognize that fact, what I more find is I find companies who they can see where they want to go. They can see that they want that talent. They are unclear potentially on how. And I think that's a place where we in the federal government and we in all parts of this system, I think can help. But I think what I more see, and this is just from where I sit, we have a lot of companies that want to do better but don't quite know how. And I think this is a place where some of the strategy we're talking about from apprenticeship to skills-based hiring and creating clear pipelines, is I think part of the path forward. And I also think getting those companies to look internally for, how can I be better?

Chike Aguh:
How can my HR actually recognize talent that doesn't necessarily come through whether it be degrees or [inaudible 00:15:00] or anything else? Let me name one more thing, which is more and more of the process of bringing on talent. It's not just an analog process of human beings, it's actually one that is increasingly leveraging technology, whether that's using AI to scan resume or so on and so forth. That's also a question that I think we have to look at for how technology at its best can help human beings overcome their biases and actually kind of scale our wisdom. Technology at its worst can actually just scale human bias. And so how do we make sure that technology ameliorates and doesn't exacerbate a bunch of the problems that I think that you're talking about?

Chike Aguh:
The last point that I'll make is you have companies who want to do better, but they may have a potentially a legacy of not being the most welcoming environment and workers talk, workers have choices. If a worker has a choice between a company that has a legacy of being an inclusive place where they can advance, and one that maybe is just coming to this later, they're going to make a certain choice.

Ivory Toldson:
We want to thank you for being a part of this podcast. And we want to thank everyone who is listening for being engaged in this. And as Chike said, no one can do this alone. This takes a collaboration. It takes multiple agencies working together like he said, and it takes multiple institutions and organizations working together like we are. So together, we can make some of these changes that we heard advance in this podcast. Thank you again, Chike. And we will continue to work with you and try to create change in our society.
Speaker 3:
The findings in this podcast are based upon work supported by the National Science Foundation under grant number 1818635. Any opinions, findings, and conclusions or recommendations expressed in this material are those are the authors and do not necessarily reflect the views of the National Science Foundation.