Ramona Schindelheim, WorkingNation editor-in-chief:

You are listening to Work in Progress. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Work in Progress explores the rapidly changing workplace through conversations with innovators, educators and decision makers, people with solutions to today's workforce challenges.

AI, I'm not sure if there are any other two letters in English language right now that have evoked such discussion, debate, or concern. As more and more businesses integrate artificial intelligence into daily work, is our current workforce ready to handle the change and are we doing enough to prepare them and future workers for AI? A new report released by Washington State University's Carson College of Business addresses those questions and more. Carson College of Business interim dean, Debbie Compeau joins me to share the findings. Debbie, thanks for joining the Work in Progress Podcast.

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Thanks for having me. It's a pleasure to be here.

Ramona Schindelheim, WorkingNation editor-in-chief:

AI is not new and your research bears that out, finding that over half of American professionals say they already use AI in their jobs today. What are some of the tasks or type of work being done based on your own research?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

So the tasks that we found people using range from data analysis to predict trends would be one example. About 30% of our respondents said they're using data analytics tools to predict trends. 24% are using generative AI to produce content or communications. Interestingly, 44% of professionals are not using it at all.

Ramona Schindelheim, WorkingNation editor-in-chief:

That is interesting because it has... As we just said, it's been around and I know a lot of knowledge-based work is around some of these tasks that you mentioned, data analytics, etc. Did you get a sense on why it's not being used yet in 44% of those jobs?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

We did not ask about that, but I could speculate on a couple of things. One, it's possible that some people don't know they're using AI, where AI tools are built into the platforms that they've been using, they may not be aware that they're actually using an AI tool. People may have given the timing of our survey. People may have been especially focused on generative AI because that's where we see the most discussion today. So there could be a reporting issue, but certainly when I talk to senior leaders through my interactions day to day, we often see people who aren't making a lot of use of it. It is moving very quickly and figuring out how to incorporate AI tools into the workplace is very much a work in progress.

Ramona Schindelheim, WorkingNation editor-in-chief:

The idea that it is moving quickly and it's growing is concerning some of the people who already are working out there. Some of the professionals that you spoke to that they feel like they're going to be left behind. What is some of the that you got around that, that feeling of being left behind?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

One of the earliest quotes that I saw around generative AI was generative AI is not going to take your job. People who know how to use generative AI are going to take your job. And I think that, that reflects the sentiment that we saw in our data. People are pretty positive about what AI tools can do for them in the workplace, but they are also concerned. We didn't find in our data, only 4% of our respondents conveyed fear and pessimism about AI's potential in the workforce. So overall, people were seeing things in a positive light, but their approach is measured because they see the positives, but they see the negatives. And I don't know how to do this, and if I don't know how to do this, I might lose my job is very much on people's minds.

Ramona Schindelheim, WorkingNation editor-in-chief:

So some of that concern is that they're not seeing the opportunities maybe from their employers to learn how to use it. Is that correct?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Yes, that's correct. Only 32% of our professionals have received general news and resources on AI. Only 31% have received specific training on how they would use AI tools in their job, and 26% have received information on risks. One in four, almost one in four 22% say that their organization hasn't provided any resources to them to learn how to use this. So I think in that kind of an environment, people are feeling a little bit lost.

Ramona Schindelheim, WorkingNation editor-in-chief:

And the people that you're talking to, these are professionals who work with computers. Is that who you talk to?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

So we talk to 1,200 professional workers across the United States. And so they are professional workers who, yes, who would use technology in their job, typical white collar workers across a wide range of industries and job roles.

Ramona Schindelheim, WorkingNation editor-in-chief:

So you would think with all this interest in from employers and integrating it more into the workforce that they would start talking to the current employees they have because we've said this on this podcast many times, it's more cost-effective to train the people you have than to hire and onboard more people.

Debbie Compeau, Washington State University's Carson College of Business interim dean:

I think the challenge today specifically around training is what would you train people to do? We are still trying to figure out the use cases for particularly generative AI in the workforce. Some of the more advanced AI tools. Again, I think there probably is more training around, but when we think about generative AI, if we're all still trying to figure out where do we want to use it, where do we not want to use it, what challenges do we have? It's pretty hard to know what to train people with.

So you tend to see more general discussions, general resources, "Hey, you should be aware of this that isn't providing the comfort that the employees want to see yet."

Ramona Schindelheim, WorkingNation editor-in-chief:

Do you think the current worker really understands what AI is, given what you just said? Do you think they know what to even expect?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Absolutely not. I think many senior leaders don't know what to expect, particularly the what to expect. We are moving at breakneck speed with these technologies. We see some opportunities that are pretty clear using generative AI to create first drafts of communications. Pretty obvious application, probably not one that is going to fundamentally transform the workplace. But when we start to think about, for example, service robots in hospitality settings, then we start to think about much bigger transformations of work and of life.

But it's hard to imagine what those are right now because the tools aren't quite developed enough to be there. They're still a little awkward. You can see the potential out there, but the actual vision of, "Wait, where am I really going to see that?" Day to day, what we see is still when we make calls, we get the voice recognition, but it's not very AI driven. It's pretty press one to go to this menu driven. And that doesn't create the kind of sense of where will this take us?

Ramona Schindelheim, WorkingNation editor-in-chief:

Did the professional workers that you spoke to, did they express any concerns about the ethical implications of AI and what it might mean in their jobs, but just in society in general?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

They did, and I think that's very consistent with what we see across the board. We know there is great opportunity that comes from the use of AI. But we also know that there are ethical issues, privacy issues. One of the ones that I look at and worry about a lot is the biases that become built into AI tools. AI tools are not intelligent. Artificial intelligence has always been a misnomer. They're not intelligent. They are rules-based systems or they are systems that learn, in air quotes, from looking at reams and reams of data and they identify patterns.

But anytime you're looking at patterns in existing data, all you are doing is repeating whatever biases were inherent in those prior patterns. A speaker I heard a number of years ago referred to artificial intelligence as money laundering for bias. That quote has stuck with me over the years because the tool seems to be very unbiased, right?

Computers can't be biased against women or particular groups, but if they're looking at resumes, for example, some of the research that's looked at using artificial intelligence tools to review resumes. If you're putting in resumes where the candidate that was selected for the job in 90% of the instances was a male, one of the things the tool is going to find in patterns is names that look like men's names.

So no, they're not selecting for men, but they're selecting for the pattern that seems to have worked in the past, which may have been men. And if that's the case, then we're going to see a perpetuation of potential bias in hiring through no intentionality. We often tend to think about bias as being intentional, whereas here it's just bias based on data history.

Ramona Schindelheim, WorkingNation editor-in-chief:

Just the output is only as good as the input.

Debbie Compeau, Washington State University's Carson College of Business interim dean:

The output is only as good as the input. Certainly, I think other ethical concerns that people have expressed is oversight over how it's being used. Can we start to use artificial intelligence in ways that is not good for society? The potential for misinformation and disinformation that is much harder to surface in a world, again, of generative AI where we can create video, deep fake videos that look like me saying things I would never say. Those are things we don't know how to sort out yet. And until we know how to sort those out, we need to be very cognizant of the risks and the threats and make sure we're paying attention to them. I don't think those should stop us from moving forward, but they better be in our minds as we're moving forward.

Ramona Schindelheim, WorkingNation editor-in-chief:

So shifting to this idea that the current workforce is a little bit concerned because they don't think they're ready makes me think a lot about what about the people we're preparing now for the workforce. So as the dean of a higher education institute, a business school, college, a business college, what role do you think you should be playing in that preparation?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

I think we have an incredibly important role to play. If I go back to that quote, AI is not going to take your job. People who know how to use AI are going to take your job. That means we have to be preparing people who know how to use AI, and that means the technical skills to know how to use AI. What are the different tools available? How does one interact with those tools? How does one get good results, whatever that means out of those tools, so the technical skills. But then also the skills to know is this a task that I should be applying AI to? What might be the negative unintended consequences of applying AI to this task? So looking at some of those ethical issues and concerning issues about when and how we should be applying AI.

Ramona Schindelheim, WorkingNation editor-in-chief:

Are those discussions that you're already having at Carson with your students?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Absolutely. I've been very distressed to see the attitudes that I see in some places in higher education, not everywhere, but in some places that refer to students using generative AI tools as plagiarism. It's not plagiarism. For me, the problem is not that students are using AI to cheat. The problem is generative AI tools have invalidated the way that we assess whether students have learned what they need to learn. We have an assessment problem. Students don't have a cheating problem.

We now live in a world where if you are asked a question about conceptual knowledge, what's the difference between X and Y, we live in a world where we have pretty good tools to go and ask that question. So why do I need to have that information in my head anymore? I now have a place that I can go and get reliable answers. I will come back to reliability in a bit, because we know we have some issues there.

So those questions aren't necessarily meaningful questions anymore, but that's largely how we test whether our students know what they need to know. And that doesn't work anymore because as we've seen in study after study, generative AI tools can pass graduate management admission test, the medical school admission test. Apparently they can pass most of the MIT, MBA curriculum. We have an assessment problem because employers rely on us being able to certify that our students know some things and we can't do that anymore. So at the same time as we have to teach students about these

tools and how they can work, we have to figure out how to change our business to respond to the environment that these tools create.

Ramona Schindelheim, WorkingNation editor-in-chief:

Do you think there's a movement toward that? Because that's a very important point that you're making there, I think because I hadn't thought of it that way, is I recall all the times that I've been tested on the knowledge that I have, whether I get an A in a class or an F in a class, et cetera. Are you seeing anything in the higher ed field now to address those issues?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Higher ed is struggling, and I don't think we have real easy answers, but we are doing a number of things to work with this. One of my colleagues who teaches the marketing strategy class. So this is for seniors in the college of business who are majoring in marketing. He decided that his students needed to know about generative AI tools and how they would affect the practice of marketing strategy. So he has built his entire class around the use of those tools. Before class, he gives his students an assignment where they are to go out and do some very specific things with a generative AI tool.

Typically, he picks a different tool in every class. So through the course of doing this, the students are picking up the technical skills and he might say, "I want you to go out and take this video and download the transcript from the video." Or if the video transcript isn't available online, use this AI tool to generate the transcript from the video. Now, use a different AI tool to assess the themes that are present within that video and surface the core themes from whatever is being presented in that video and answer two or three questions.

That's something the students are doing on their own time. They're being directly asked to use generative AI tools, so they're not cheating in any way to do it. It's like, "Nope, go see what the tool says." Now we're going to come to class and we're going to build on that. And so the questions that they're dealing with in class can become more difficult, right? We're not saying what are the important themes in these three advertisements or saying, "All right. Tool says these are the important themes in these advertisements. Do you agree or disagree?" That's a reasonable question to ask.

But if that is the themes, what do we do about that? How do we use that in building our marketing strategy? How do we use that to make our business better? What that means, I believe from an educational standpoint is that we can spend more time on what we refer to as the higher level learning goals, the ability to apply knowledge, the ability to synthesize knowledge, the ability to critically evaluate knowledge than on simply the knowledge acquisition. And so if we can spend more time at those higher levels, we have the potential to produce graduates who are even better than they have ever been.

Ramona Schindelheim, WorkingNation editor-in-chief:

Do you think today's student walks into a classroom having some experience in this in their everyday life?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

Not necessarily. They're still struggling. And one of the reasons they're struggling is they hear messages that this is cheating. So in another example, I have another colleague who is teaching a special topics class on generative AI. And so the first class, the marketing management class is, I'm going to teach a marketing, but I'm going to use a lot of the tools to do that. This one is I'm going to teach you about

generative AI. And so this is the class where they learn about the ethical issues, about the different ways that you can apply the tools. And each week the professor assigns the students some kind of a problem area.

The first week it was, "What jobs do you think are going to be most affected by generative AI?" And the students were asked to go out and do some research on that and come back and he gave them the assignment on Monday. On Wednesday, they worked on it in their teams in class. And on Friday they presented. And one team was presenting and he started asking them about, "Well, where did you get that information?" And the students started hemming and hawing and edging. And he finally said, "Well, did you use ChatGPT?" And the student is like, "Well, yeah." And they were very nervous because they've been hearing that that's..." And he's like, "Well, you're in the generative AI class. I want you using that."

But he still sees it, even in week four and five, the students are a little hesitant to engage because they keep hearing all the reasons they shouldn't. And we do have to change that mindset because they need to learn to use it. They need to learn to use it appropriately. They need to learn not to just put in one prompt and accept the answer as the best answer they can get. One of the skills they need to learn is prompt engineering. How do you actually create a series of prompts designed to find an answer? That's an incredibly important skill that employers are looking for, but they also need to learn to do some fact-checking because we definitely are at a place right now where, again, in the world of generative AI, we're getting a lot of wrong answers.

Ramona Schindelheim, WorkingNation editor-in-chief:

I think it's a big task to ask all of higher education to set a level playing field for this because you're doing it where you are, but what are other schools doing? What are other colleges doing? I think that's going to be a bigger question. I mean, how do you get your colleagues to be on the same page?

Debbie Compeau, Washington State University’s Carson College of Business interim dean:

I think the first thing I would say is that situation is no different than the situation of every business. We are still in the world of taking baby steps. I read a report from a consulting firm in the Seattle area that was looking at where firms are. And most firms are in the world of baby steps of experimentation, testing things out. That's where I would describe higher ed right now. So you're not going to have a level playing field right now, but I do think we need to start to move pretty quickly to understand this. I think the first thing people need to do is they need to put the questions they ask on exams and assignments into a tool and see what the answer is and see just how well it can do.

We did an interesting experiment a little over a year ago when we were just starting to hear about this and just starting to think about it. We had a lunch and learn for our faculty. So a training session, much like people are looking for where a few people could share what they'd been doing. In that lunch and learn, a couple of faculty put together some questions and answers, some of which were produced by generative AI, some of which were produced by our students.

For the most part, people can't differentiate which one is the AI and which one is the student. Or if they can, the reason they can differentiate it is the AI one was better written, which is its own problem if the AI writes better than our students. Again, student writing is something we've complained about for years and that employers have complained about that, the skill of writing that many of us of my generation graduated with our students don't have today. Well, maybe they don't need that skill in the same way today because they can rely on generative AI to help them with their writing.

But in any case, you need to be able to look at your answers and go, "Yeah, this actually would get a B in my class." And if that would get a B and it can be produced by the worst generative AI we're ever going to work with because it's only going to get better from here. Why do students need to be able to answer that question anymore? And there are some good reasons for that, right? We say, why do students need that kind of rote, low-level knowledge?

Well, they need it to be able to find information and to be able to interpret information, right? I need to know what something is called if I'm going to search for it or I need to know how people refer to it if I'm going to read an answer. That's probably less of that kind of what we call declarative knowledge now than we needed 20 years ago. But there is still some, and if there is still some, students will be motivated to learn it. They aren't going to be motivated to learn things that they no longer need to know how to do or write.

Ramona Schindelheim, WorkingNation editor-in-chief:

So that brings me to the idea that two things, one, that this needs to start at the K-12 level. I think we need to start talking about a lot of this ahead of time. So how can we prepare that? Because you were talking about writing. I agree with you. I think that there was a lot of emphasis on being able to write well when I was younger, but now there's ways around it. So how do we integrate some if we need to, some of that, but also how do we start getting the conversation around AI and its implications into that K-12 space?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

I think we need teachers to have some opportunities to learn about the tools and how they can be used and how they can help them as educators. The first thing you see as an educator is how this is going to mess up everything I do. And I remember when my husband, who is also a professor, called me one day. I was upstairs in the evening watching television, and from downstairs I hear, "Can you come here a minute?" And it was kind of in that tone of voice that says, "Uh-oh, something bad is going on." I go downstairs and he's putting in some of the questions from his online class.

We're watching the answers come out in real time. And it's like, "That's a pretty good answer." So the first reaction was, "Oh man, this is really going to mess things up." But very quickly, both he and I started to say, "But wait, if we can do that, what else can we do?" And so we very quickly went, I teach with case studies a fair bit. I like students to be solving realistic if not real world business problems. And having a fresh supply of case studies that students can look at is hard. And having small cases that work for lower division students is hard.

It turns out I can use generative AI tools to help me write those case studies. I can say, "Write me a three-page case study about an organization trying to implement a new point of sale technology." It'll do a pretty good job. I do have to go through and edit it. I have to do a fair bit of work, but it takes a task that would've taken me a week and helps me do it in an hour.

Ramona Schindelheim, WorkingNation editor-in-chief:

There's obvious good ways to use AI, and we've seen it, we've done it, but there's a lot to learn now. But there are implications for our overall economy and our overall US competitiveness if we don't act now. What could happen if we don't start addressing this issue right now?

Debbie Compeau, Washington State University's Carson College of Business interim dean:

If I look at the history of new technology implementation, particularly these kind of big disruptive technologies where the real value in organizations and then by extension economies comes from is people who learn to experiment with it and learn to use it to reinforce what they do. So in the context of higher education, how do I take what I'm really good at in higher education and use this tool to make that even more valuable, or how to help it mitigate something I'm really bad at? You can look at it that way.

And that only comes through practice and through experimentation. And so we have to start now so that we have a learning advantage in using these tools in our organizations, in our schools, throughout our economy, to be able to keep pace with the change that's happening. And in doing that to learn how to mitigate some of the really big downsides that we know are out there.

Ramona Schindelheim, WorkingNation editor-in-chief:

Thank you very much for your insight in that. I really appreciate it. And I read all the way through the report, and there's a lot more in there that I just think is very interesting and will link to it on our website. So I appreciate you taking the time to talk about it.

Debbie Compeau, Washington State University’s Carson College of Business interim dean:

My pleasure. Thank you so much for having me.

Ramona Schindelheim, WorkingNation editor-in-chief:

I've been speaking with Washington State University's Carson College of Business interim dean, Debbie Compeau. I'm Ramona Schindelheim, editor-in-chief of WorkingNation. Thank you for listening.