

THE CONNECTED WORKER

Reimagining the Workforce with Anglo American

We sat down with **Jennifer Rogers**, Head of Learning at Anglo American to discuss their '*Reimagine Learning*' programme and how the organization is transforming their workforce in order to remain competitive in an evolving and changing industry.



Jennifer Rogers

Head of Learning at
Anglo American



“My professional background is quite diverse, and I think it plays a large part in the work that I do today. I spent the first decade of my career doing public school reform in large school systems. In those early years I focused a lot on how to take somebody’s existing skills, abilities, and attributes and use those to propel them forward in their careers and companies. Not everybody comes to the table with the same skills and experiences, and we need to work with them to help them and the company succeed.

After that, I moved to the corporate world and spent a few years working at an oil and gas company. I used the same principles around personalizing the learning experience for diverse groups of people and was able to see significant transformation in the industry. I went on to do some consulting for numerous industries, and eventually, I landed in my current position as Head of Learning at Anglo American.

At Anglo American, I’m responsible for putting together a learning strategy that acknowledges where people are and where they are going, it leverages the right strategies to allow us to personalize the learning experience and accelerate the operational and professional development of our employees.”

At last year’s IQPC Operational Excellence Summit, you discussed Anglo American’s efforts to ‘reimagine learning.’ Can you elaborate on this initiative?

“At Anglo-American, we’re really focused on finding the best ways to attract the most talented people in the industry and effectively equipping our existing workforce based on what they need today and what the future will mean for their careers. We’re also committed to providing learning opportunities that lead to growth and development in the communities in which we operate.

Our people are a strategic advantage. We want to ensure that continues to be the case as the mining industry evolves and faces more disruption. The programme as it

exists now is based on the concept that people’s skills and capabilities need to shift in a fundamentally different way to achieve different outcomes. Some are the outcomes we know today and some are hypotheses as to what will be needed in 2030, 2040 and so on.

In order to make this happen, we are looking at a few different things. We acknowledge that, as a global organization, one size doesn’t necessarily fit all. We have employees and community members in all kinds of environments, all over the world, who come to the table with different backgrounds and expertise. We need to differentiate the learning experience for each one of them in order to achieve the outcomes they need.

So how are we doing this? We’re using design thinking to shape how we design and develop learning experiences whereby we can look at how people can best interact with learning pieces and how those best fit into their flow of work. For example, we can take a learning piece and make it available in print format or digitally on a desktop or mobile device.

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We’re getting to a point where, in appropriate environments and settings, we can take away the need for computers and mobile devices completely. We’re beginning to make learning available via augmented reality headsets that give people the opportunity to interact with subject matter experts in real time, as they’re physically doing work. We can also deploy learning in a virtual reality type of experience. As the technology continues to evolve and the equipment that we use gets more and more automated, we can actually surface learning experiences on the equipment, in real time; as opposed to having them stop work and go somewhere to learn. We feel this is one of the best ways to get that real transfer and application of knowledge that actually helps people to improve in their jobs.

One of the things that is so important about this particular programme is that it is very flexible. Our industry and the world around us is changing so rapidly, and it’s our commitment to empower our people and communities to be on the right side of this change. Our approach allows us to make learning experiences available in different ways and then to go back and compile analytics to see if it’s working. Can we correlate that back to actual business



objectives? If we're not meeting the mark with the learning types that we have, we can go back and optimize them in order to reach that target."

Digital transformation and automation are rapidly changing the way we work. How are essential skills changing? How are you preparing your workforce for the future of work, and proactively building skills ahead of the pace of technology change?

"No one knows exactly what the specific impacts will be, but we do know there will be material changes in our work, not only in mining but across all industries. New and different skills will be required to perform certain roles and, in other cases, certain tasks will likely be replaced by automated and digital processes. Some national economies may change significantly, with each country facing a different set of opportunities and challenges. What is clear is that the picture will be different in different countries, between sectors, and disciplines.

We believe, however, that this technology-led evolution can, and should, create a new social contract between mines, employees and communities, in which opportunities to develop new skills will flourish.

From a skills perspective, a static learning model isn't agile enough. Through traditional methods, it would take years and years to map out all the skills we need in our organization, and by the time we were done we would have to start all over again without having the opportunity to actually use that knowledge. Instead, we're building artificial intelligence and human validation capabilities to run models that enable us to form rapid insights around job architecture and the skills that are required for those jobs today and in the future.

This gives us the ability to constantly build, test, and retire models that keep our people ahead of the curve from an upskilling perspective, and it helps us deal with scenarios we haven't thought of yet. One of the things I am particularly excited about is the ability to visualise the skills that our people already have, regardless of whether or not it is part of their job function. The program can identify skill gaps in the organization, and using AI and human validation it can show us related skills that our workers already have that would allow us to accelerate their development and fill those gaps sooner."

How are you using technology and analytics to transform your workforce?

"Like I mentioned before, a static model is simply not agile enough, and consistency and scale really matters because there is a high degree of variability in people and environments all over the world. There is absolutely no way we could scale this across the organization without using automation in our own practices.

Currently, we're visualizing the different skills that need to exist in the organization both now and in the future and giving people the opportunity and ownership to develop themselves for what lies ahead. By visualizing the full capability profiles that exist within individuals and the organization as a whole, we can continue to grow and shape our organization for our employees, for our communities and, for our shareholders.

We use artificial intelligence to surface the right learning experiences for the right people. With that, there is a lot of analytics on the back-end that show us the experiences a person is having. Every learning experience, be it in a classroom or on a computer or on the job, is logged and brought back into one common 'record store' where all of the experience information is in one place.

At that point we can start to see what experiences are helping the most with skill development, and also how that individual has improved over time. Because there are multiple interaction points, we can also see a person's individual growth compared to other members of the team or those in similar job functions.

In doing that, we can measure progress against performance and business outcomes, like safety, operational and production statistics. This helps us to stay on track and constantly gain new insights, adjusting the learning experiences we are offering people to reflect their changing skills and overall business outcomes. We are beginning to be able to see, in real-time, how people are growing from a learning perspective and how that impacts our operations, and should be rolling these visualizations out to the business itself in coming months."

How has the Reimagine Learning programme impacted your operations so far?

"One of the key things is how we are using augmented reality to connect people to experts who can provide instruction while they are actually working. This means we're not having to deal with down-time or stoppages to help people upskill. This is significant as it not only reduces costs, but it makes learning way more accessible. We've also seen a reduction in basic travel costs that would normally come with bringing an expert to the field.

Generally speaking, we've seen an overall acceleration of peoples' development and on-boarding as we're able to tailor learning based on who they are and what they need. We can stop spending time on things that a person is already good at and focus on skills that they

actually need to work on. This gets our workforce to a higher level of performance faster, which helps everyone in the end."

What is the next step in the Reimagine Learning programme at Anglo American?

"We've spent a lot of time building the foundations to help us rapidly accelerate the programme. In terms of our next step, it's really just continuing to optimize things, and utilize the data that's coming back to get closer to our targets. We will continue pushing the boundaries around the physical infrastructure associated with learning. We want to find more opportunities to reach people within the flow of their work so learning no longer means stopping work and going to a classroom etc.

We're also looking at using artificial intelligence to help us predict the best ways to upskill groups of individuals to optimise performance and create the best case scenario. We're looking at the pockets of excellence within the organization and how those people are learning and growing. We hope to be able to replicate that, scale it, and spread operational excellence across the organization as a whole."

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