SPOTLIGHT ON APPRENTICESHIPS IN STRUCTURAL STEEL





Steel Construction New Zealand's (SCNZ's) Apprentice of the Year award debuted in 2016. Its purpose was clear: to demonstrate the career opportunities that a start in the structural steel industry can offer and to shine a spotlight on the high calibre of tradespeople the apprenticeship scheme produces each year.

The award celebrates those whose skills, drive and willingness to learn have helped them to achieve outstanding outcomes. It recognises well-rounded individuals who demonstrate not only talent, but display traits important to the industry - commitment, innovation and agility.

David Moore, Grayson Engineering Managing Director, has been a judge for the award for the past five years. "Year after year I'm struck by the apprentices' level of maturity and their ambition. They have aspirations to go further."

Importantly, the award is also a nod to the industry's drive to safeguard its future, which is backed up by the numbers: more than 10 percent of the total workforce employed by local structural steel contractors is in a training programme, and 70 percent of structural steel contractors employ an average of five apprentices.

"Hats off to the employers that are training and mentoring these young people, and getting them ready for better things," says Moore. "It's heartening to know that they have employers that not only look at them as a trade apprentice, but also consider them a part of their business' future succession. With support from management, they can take on roles that are above and beyond what they've been trained to do."

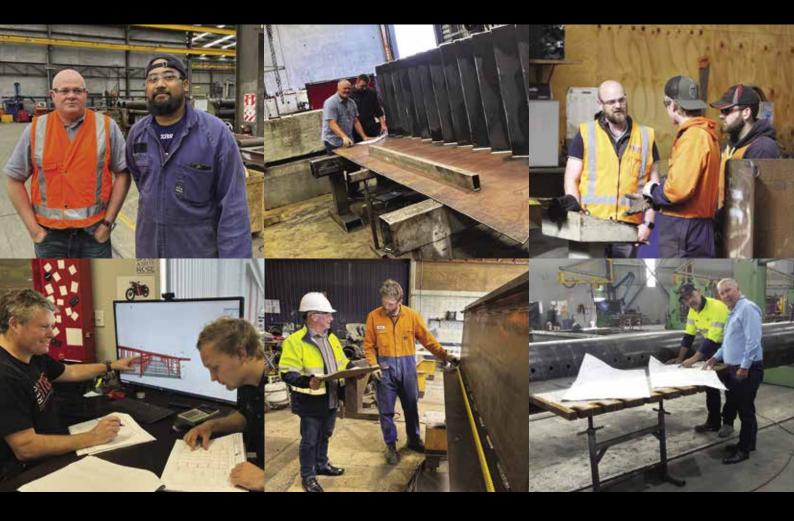
For the companies that have supported these apprentices to develop and hone their skills to such

a high standard, the success is an endorsement of their commitment and their approach to training. They are being recognised for something that they have been doing for a long time

Moore says it is pleasing to see that increasingly more young people are choosing a trade as a career path. "People have come to realise that there are many successful careers in the trades, which can be attributed to New Zealand's strong construction sector, and increased demand for high levels of performance and delivery capability."

An apprenticeship in structural steel opens doors to many avenues of engineering, says Moore. "There are ample opportunities to branch into a different parts of the business if an apprentice wants to change direction. It's also a place to 'earn while you learn'."

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WHY TRAIN AN APPRENTICE?

Ultimately, apprenticeships provide a pipeline for tomorrow's skilled workforce.

"IT'S THE DUTY OF EVERYONE, LARGE AND SMALL, TO CONTRIBUTE TO TRAINING. NOW THAT THERE ARE FREE FEES AND GOVERNMENT HELP, THERE AREN'T A LOT OF EXCUSES. IF YOU'RE A VERY SMALL OPERATOR, YOU MIGHT ONLY HAVE ONE APPRENTICE, BUT IT'S ONE MORE APPRENTICE THAN NOT HAVING ONE AT ALL."

DAVID MOORE, MANAGING DIRECTOR, GRAYSON ENGINEERING

"IT'S A MUST-DO. YOU CAN'T JUST LEAVE IT UP TO OTHER COMPANIES TO TRAIN [APPRENTICES]. WE'RE ALL COMPLAINING THAT WE CAN'T GET LABOUR."

BOB HAWLEY, MANAGING DIRECTOR, RED STEEL

"WE'VE ALWAYS HAD THE FUNDAMENTAL VIEW THAT YOU MUST CONTRIBUTE TO THE INDUSTRY IF YOU ARE INDEED PASSIONATE ABOUT IT. BY TRAINING [APPRENTICES], WE'RE CONTRIBUTING TO THE INDUSTRY'S RESOURCE POOL."

ANDREW JACKSON, DIRECTOR, GLOBAL ENGINEERING

"EVERYONE SHOULD GET ON BOARD. THEY OWE IT TO THE INDUSTRY, THEY OWE IT TO THEMSELVES AND THEY ALSO OWE IT TO THESE YOUNG KIDS."

GARY LIGHTFOOT, MANAGING DIRECTOR, WAIKATO STEEL FABRICATORS

"IT COMES DOWN TO YOUR
BUSINESS STRATEGY. IF YOU WANT
TO GROW, YOU NEED TO TRAIN. IF
YOU WANT TO DEVELOP, YOU NEED
TO TRAIN. IF YOU WANT TO BE
AROUND IN 10 YEARS' TIME, YOU
NEED TO TRAIN."

JEREMY MIKOZ, HR MANAGER, MJH ENGINEERING

"AS A WELL-ESTABLISHED INDUSTRY, WE HAVE A RESPONSIBILITY TO ENSURE WE PASS ON OUR SKILLS AND EXPERIENCE TO THE NEXT GENERATION OF STRUCTURAL STEEL SPECIALISTS TO SAFEGUARD THE FUTURE OF THE SECTOR."

FRANK VAN SCHAIJIK, MANAGING DIRECTOR, JOHN JONES STEEL

SECRET SAUCE

There are two typical apprentice frameworks. One is where the structural steel contractor employs the apprentice directly and provides the training, while a third-party such as Competenz provides the tertiary study element.

Organisations like Apprentice Training NZ (ATNZ) offer a different model whereby it employs and manages the apprentice while the structural steel contractor serves as a host company. ATNZ oversees all the apprentices' paperwork, their training, payroll and pastoral care.

Both options have yielded winners and finalists for the SCNZ Apprentice of the Year. But what's the underlying recipe for success? While there is no single ingredient, several shared measures do come into play.

First and foremost, all of the employers of these high-performing apprentices are enthusiastic about training – from the senior leadership team to the workshop supervisors to the site foremen. They all play a part in ensuring the apprentice develops the knowledge, skills and behaviours required to become a good tradesperson.

"We're all pretty passionate people that have been in the industry a long time, and most of us have done it from the ground up," says Frank Van Schaijik, Managing Director of John Jones Steel. "We are committed to the industry and to training. We know what to expect and we know what things our apprentices need to learn."

Arguably, most candidates find the paperwork aspect one of the toughest

components of their apprenticeship. Even putting aside the time to complete it can be a struggle. To address this, some companies schedule time in the work week for their apprentices to sit down in the office and work through their assignments. They're encouraged to ask for help and, when they do, they get it.

"That's the big thing we push with the apprentices. You will not get any help unless you ask, and there's no shame in asking," says Jeremy Mikoz, HR Manager of MJH Engineering. "It means that when they become tradespeople, they're not going to be afraid to ask the PM [project manager] a question or discuss an issue with the client."

Variety is another common theme. The companies training high-calibre apprentices are mindful of exposing them to all areas of their operations and ensuring that they get the experience they need. In the process, they open their eyes to the diverse opportunities the structural steel industry has to offer.

Gary Lightfoot, Managing Director of Waikato Steel Fabricators, has some simple advice for those training apprentices: communicate, be patient and encourage. "It's about kicking their bums when needed but it's also about encouraging them. Make them feel loved. Good coaches don't kick people when they're down; they pick people up and guide them."

The hardest part about training an apprentice is often finding the right candidate in the first place. There are several feeders: polytechnics, local high schools, labour companies. Sometimes it's word of mouth.

Wherever they are sourced from, it's common to trial candidates first to make sure the fit is right before offering them an apprenticeship. Employers want people with a healthy attitude - eager to learn, able to follow instructions and a good work ethic.

"It's always good to have some time where they're working as an employee before you lead them into a fully fledged apprenticeship training scheme," says Andrew Jackson, Director of Global Engineering. "It's a good time to get to know each other and provide some vision for the candidate as to what they're signing up for."

Malcolm Hammond, Managing Director of MJH Engineering, says that classroom learning simply doesn't suit everyone. "They [apprentices] often don't fit the box at school." He says that it's not until they can apply their knowledge to a real-world situation that they begin to 'get' the academic side and they find their stride. "As soon as you can put a career path in there it really changes the dynamics. They just light up when they're doing an apprenticeship."

No matter the approach, those who do complete an apprenticeship scheme are coming out skilled, says Bob Hawley, Managing Director of Red Steel. "It's not a lightweight qualification, it's full on."

WHERE ARE THEY NOW?

Since the SCNZ Apprentice of the Year competition launched, there have been multiple high-performing finalists and winners. SCNZ tracked a few of them down for a chat. Here are their stories.



ABOVE: MALCOLM HAMMOND (R).
OPPOSITE, CLOCKWISE FROM TOP LEFT: DAVID
MOORE (L), ANDREW JACKSON (L), JEREMY MIKOZ
(L), FRANK VAN SCHAIJIK (R), GARY LIGHTFOOT (L),
BOB HAWLEY (L).



2016 WINNER

THOMAS FORBES RED STEEL

Thomas Forbes was the inaugural winner of SCNZ's prestigious Apprentice of the Year Award in 2016. The Red Steel trainee impressed with his capacity to learn, and his exceptional ability to both fabricate and weld. He rapidly became proficient at interpreting drawings and planning jobs, and was soon given projects traditionally reserved for long-serving tradesmen. Forbes was given a long leash with projects and soon became one of Red Steel's go-to men for difficult jobs.

Forbes served Red Steel well for more than six years before venturing out to try his hand in other industries. He worked in the agriculture and marine industries before starting his own business, Grand Designs Landscaping, in 2022. It's grown rapidly: today, the business boasts 10 staff and four trucks, two large commercial chippers, four skid steers and eight excavators.

SCNZ: Describe your apprenticeship.

TF: After I did my yearlong pretrade course focused on steel fabrication at EIT [Eastern Institute of Technology], I picked up work experience with Red Steel. That's where my career began. I started my apprenticeship and I was lucky to have a couple of outstanding guys - who had been in the industry for a long, long time - take me under their wing. They taught me the ropes. The more senior guys always had time for the apprentices. I thoroughly enjoyed it.

What led you to do an apprenticeship?

I was never an academic at school. I was always more hands-on and I learnt best that way. If I could physically do it, that definitely helped me to retain information.



What were some of the highlights?

Definitely the diversity and the opportunity to work on statement structures. We got some awesome projects during my time and I got to do some big, exciting stuff. I enjoyed heavy fab. With a nineinch grinder, big overhead gantry cranes, big beams and sledge hammers, you got me. And I had an awesome crew. I loved every bit of my apprenticeship, even doing my time in the old cleat room.

What impact did the apprenticeship have on your career?

When I look back, it definitely had a big impact on where I am today. It gave me confidence and a direction. Doing the apprenticeship reinforced for me that there are other shapes and forms of learning; it taught me that you don't necessarily need a degree to get somewhere. It also taught me good practice like health and safety, and how to treat your staff.

2017 RUNNER UP

BRONSON PINE JOHN JONES STEEL

Bronson Pine started his journey with John Jones Steel as "a labourer on a paintbrush" around the age of 20. Fast forward 10 years and he was working on site for the company rigging structural steel. It was shortly after the Canterbury earthquakes and, with the amount of work coming in, Pine saw an opportunity to upskill. He chose to do a steel fabrication apprenticeship, like his older brother.

In his 30s, and with no prior experience in workshop-based steel construction, Pine was a little apprehensive. But he soon overcame his doubts and went on to become runner up for the SCNZ Apprentice of the Year in 2017. Today, Pine is a workshop foreman with John Jones Steel. He is also a valued mentor to the new apprentices.

SCNZ: Describe your apprenticeship.

BP: I went through Competenz for the apprenticeship and did my learning hours at the Ara [Institute of Canterbury] campus. Meeting with the tutors who took us for the two-hour night classes once a week was really interesting, helpful and super motivational. For anything I was struggling with, I could get a step-by-step way of working through the problems. So I liked the night courses.

What were some of the highlights?

One job came in; it was big. There was a lot of work in it. The workshop foreman allowed me to take control of the job for the very first time. I had a small team around me. He probably wouldn't have called it a lead, but to me, it felt like I was taking a lead on that job. Being given a task like that, and having the confidence from the other guys to do that, it really stands out. I used to second guess myself a lot over what's correct and always playing back what I'd done to make sure it was correct and up to task. I'm pretty sure it wasn't too bad for the site guys. So I called that a win.



How has your career progressed since completing your apprenticeship?

The apprenticeship gave me the confidence to take what I'd learnt and progress through different roles. After completing my apprenticeship, I started doing maintenance around our new workshop, then I became the workshop QA for fabrication.

Recently, I moved into the workshop foreman role and for the last few months I was able to fill the gap left by our workshop manager [until our new manager started]. I'm currently also mentoring our new apprentices coming through. It's been really good to give back and to help out.

Any advice for an older candidate considering an apprenticeship?

Your age doesn't matter; it's never too late to learn something new. Once you start learning, it all starts coming back; your brain starts firing where it hasn't fired like that in years.

2018 WINNER

SEAN CARROLL WAIKATO STEEL FABRICATORS

Sean Carroll was awarded the Apprentice of the Year title in 2018. Carroll's positive attitude, skill and adaptability made him an asset to his employer, Waikato Steel Fabricators.

Carroll's career has continued to develop since winning the award. When he left Waikato Steel Fabricators, Carroll moved to a supervisory role in general engineering and maintenance. He grew his leadership skills and his knowledge of engineering, and learnt about preventative and reactive maintenance in mechanical engineering and plant upkeep. It was a big step away from steel construction, but his apprenticeship taught him a wide range of skills so he wasn't confined to one field.

Today, Carroll works as a fabricator welder and he is still involved in steel construction. He is also passionate about imparting his knowledge to the young apprentices that he works with. Looking ahead, Carroll has ambitions to establish his own workshop.

SCNZ: What led you to do an apprenticeship?

SC: I started my career at 15 years old; school wasn't really for me. I started as a labourer in a sheet metal workshop. After about two years I joined Waikato Steel Fabricators. Before I got my apprenticeship, I had to serve as a trades assistant for about a year; I had to prove that I was able to do the basics. Once I got into the apprenticeship, it was interesting to learn the ins and outs of structural steel.

Describe your apprenticeship.

You had to learn and think on your feet, which was great. I progressed through the workshop across a range of projects and skills. There



was always something new to learn; a few good life lessons as well. Fortunately for me, I was paired up with a couple of tradesmen. Where my tradesmen went, I'd follow; I'd participate on the same jobs and that's how I learnt. I got to know my tradesmen, my tradesmen got to know me. And they could explain things in ways that I understood. So I built interpersonal skills and connections.

What were some of the highlights?

The guys I worked with made the work great. So even if I was buffing steel or painting, doing the real mundane jobs, I had a good team with me and we could talk and joke. There was an understanding that we had to get the job done by the Friday and, sure, we're going to have to work late, but the guys I was working with were so cool that it wasn't a bad thing.

Any advice for those just starting their apprenticeship journey?

Don't limit yourself to learning off one person because what you learn from one will be different to another. Be open minded and give everything a go.

2020 WINNER

JOSHUA JACKSON

ENGINEERING

Global Engineering's Joshua Jackson was named Apprentice of the Year in 2020. Jackson credits his success to being surrounded by highly skilled and committed mentors in the workshop.

Global is divided into two distinct workshops: heavy fabrication and metalwork. Jackson has been leading the latter since he completed his apprenticeship. Today, he's actively honing his skills as a foreman and developing his behind-the-scenes skills such as quoting and ordering. He's the first to arrive in the morning, the last to leave at night and is a go-to guy for troubleshooting.

SCNZ: Describe your apprenticeship.

JJ: Leaving school, I thought, "I'm getting out of paperwork". But coming into the apprenticeship, I realised there's actually still a lot to learn. So I was a bit slow with some of the paperwork. It used to daunt me because I'd leave it for so long and then it was a scramble to get it all done. It took me a little bit to get used to actually, not leaving things to the last minute and trying to attack it in a more organised way.

When I needed to study I would just grab one assessment at a time and nut it out, using all the knowledge that I picked up from the workshop. I found the practical ones good, but for the theory it was a matter of getting help from the guys in the workshop.

What did you enjoy most?

I enjoyed learning things that I wouldn't really do in the workshop, but I had to do them for the apprenticeship, like the drawing [units]. A lot of the stuff we had to do was quite diverse. And it was a tightknit workshop with really good and highly skilled guys. It was a



great team and I learnt a lot off each guy. I found such a great passion for engineering.

Any advice for someone considering an apprenticeship?

If you're keen, don't make money the main focus; focus on learning and getting a better skillset, then everything else will fall into place. Maintain a 'student mind-set'; this will allow you to learn new things and expand your skillset.

Keep working hard, keep studying hard and don't give up because structural steel is a great industry to be in.

What's next?

I haven't stopped learning; I don't think it ever stops. I've got a few guys underneath me and I've been learning how to be 'Mister Supervisor' and teaching people. So my role hasn't changed since I won the award but I've become better at managing different people.

goal is to keep teaching vounger generation and start learning skills in business development, growth and leadership.

2021 WINNER

CONNOR STEWART

MJH ENGINEERING

Connor Stewart took out the Apprentice of the Year title in 2021, having completed his training at MJH Engineering. Stewart puts his success down to his drive to be better and to work hard, which didn't go unnoticed.

Stewart began his career with MJH in 2015 as a welder. He had a few hiccups to begin but, after a reality check, he quickly started showing the attributes that MJH requires from its trainees. Stewart was offered his apprenticeship in 2016 and quickly went from strength to strength.

Stewart moved to Australia with his partner in 2022 and is now a site manager for a company that services the outdoor advertising industry, erecting steel structural frames for LED billboards on buildings.

SCNZ: Why steel?

CS: My passion for working with steel started in the metal shop at high school in Taranaki. After leaving school quite young, I enrolled in a pre-apprenticeship welding course then went on to complete a welding certification. After a few years bouncing around, I landed in The Hutt in 2016 and took up an opportunity with MJH. After a year, the company offered me an apprenticeship, which I took three years to complete.

Describe your apprenticeship.

It was daunting to start with. I'd never had so much paperwork in my life. MJH offered a very supportive environment while I learnt the ropes. If I asked a question, all of the MJH team, from the foremen to the production managers, gave up their time to sit with me and explain thinas.



What was your approach to the coursework?

I had my nose to the grindstone. Every day after work I'd spend four hours doing my paperwork and during my spare time I made sure I was banging out my welding electives and documenting everything. Come the weekend, it meant I still had time to play.

What value did you gain from your apprenticeship?

My knowledge of steel construction became second nature; it's like muscle memory when you do it long enough. I was fortunate to have a great company back me throughout my apprenticeship. MJH would never give you the easy path, they always challenge and push their apprentices to new heights. I owe a lot of my success to the training, development and time that MJH put into me.

What impact did the award win have on your career?

Winning the award helped me 'stand out' in the crowd of steel construction; it really got me noticed when I was applying for jobs in Australia. It was like a big sign saying 'this guy really knows his stuff!'

2022 WINNER

ZAYNE PULLAN RED STEEL

Zayne Pullan claimed the SCNZ Apprentice of the Year Award in 2022. He started his apprenticeship with Red Steel in 2019 and promptly impressed with his can-do attitude, and his ability to learn and grow. Pullan quickly became proficient at interpreting drawings and ensuring the safe handling of structural steel components.

His positive and reliable attitude towards work, coupled with his ability to bring fresh ideas to the table, make him a valuable employee. He credits the support he received from the team at Red Steel for his success.

Pullan is climbing through the business. He is one of Red Steel's leading fabricators and completes with ease some of the most challenging fabrication and welding projects the company has to tackle. Currently, Pullan is learning about pricing and he's being primed to move into an estimating role where his experience in the workshop will be invaluable.

SCNZ: Describe your apprenticeship.

ZP: You have to complete 8,000 hours of work. Red Steel is really good because you do get a lot of variety. You'd get a job, you'd fabricate it, you'd weld it and then you'd get another job, which was a bit different and you'd have to think about how you're going to do it a different way. And then out on site, you'd learn how things go up.

There was a lot of support with the guys in the workshop if I was stuck. But they also throw you in the deep end, opposed to your hand being held every step, so you learn fast. They put a lot of trust in you to complete the job.



What did you find most challenging?

Doing something I hadn't done before. There are jobs that are actually quite complicated that you have to think five steps ahead, otherwise there might be a clash or you might miss things. So some of the jobs were quite hard, but there was support there to help if I needed it.

And there was the paperwork too, it was a little challenging to make time for it. But I got through it all. I quite enjoyed doing my apprenticeship.

What was your motivation?

Just knowing that it's furthering my career, that I'm doing something for my future and that I'm not just going to be a labourer for the rest of my life. A trade is a good thing to have behind you; you're more valuable to your employer.

Any advice for someone considering an apprenticeship?

Give it your all; the structural steel industry is a great industry to be in. And try to get an apprenticeship with a good company that cares about their employees and will look after you. That's important.



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"KEEP WORKING HARD, KEEP STUDYING HARD AND DON'T GIVE UP [ON YOUR APPRENTICESHIP] BECAUSE STRUCTURAL STEEL IS A GREAT **INDUSTRY TO BE IN."**

JOSHUA JACKSON



