Tec-NQ introduced a block-based learning model that better prepares students for the realities and expectations of working life, while responding to industry needs.

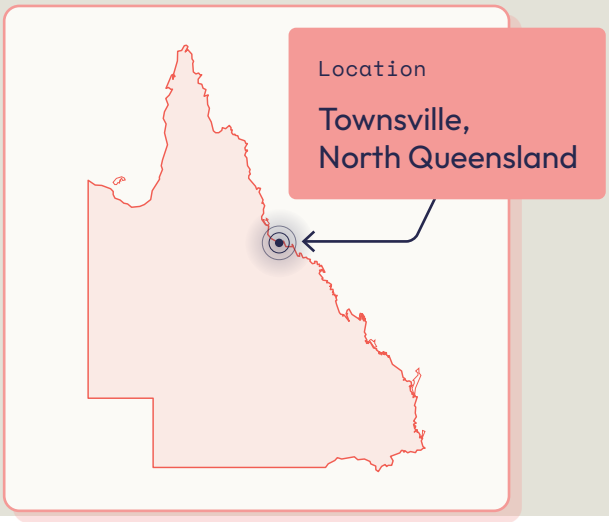
Learning in blocks, not periods.

School
Tec-NQ

Type
Years 10–12 school + RTO

Size
~325 students
1,000 apprentices





01. Context

What features of the school shaped the opportunity and constraints?

Tec-NQ is both a private trade-focused independent senior secondary school and a privately operated, not-for-profit Registered Training Organisation (RTO), established in 2007 by industry to address regional skills shortages. The Townsville campus includes more than 4,000 m² of workshop space, reflecting the scale of its trade-training model. Tec-NQ also operates a separate boarding campus, and its RTO operations extend to sites in Mackay and Cairns.

Of Tec-NQ's staff of approximately 90, only 12 are registered schoolteachers; most are tradespeople delivering vocational education, with many bringing direct industry experience to the learning environment. This mix supports Tec-NQ's "one provider, one pathway" model, which creates a continuous learning experience where students can enter Year 10, progress through senior schooling into a school-based apprenticeship, transition into full-time employment, and continue their apprenticeship training with Tec-NQ through to completion.

Timetabling brings together three program domains: academic learning; trade learning; and work placement. The structure across the three is locked in over the year, but the staffing model must remain responsive to learner progression, industry demand, apprentice training demand and staff capacity. Workforce deployment can then flex in response.



02. Challenge or opportunity

Why did flexibility become relevant at this point?

Tec-NQ's block-based model emerged because the conventional schooling approach simply didn't fit the realities of trade learning, work placement or vocational skills development. Sixty-minute lessons and double periods weren't well suited to this context, where students benefit from taking the time to complete their work (similarly to how they would in the workplaces they aspire to enter) and consolidate their learning, rather than stopping periodically and returning to it days later.

For staff, constantly switching between preparation for different subjects and fragmented teaching sessions made it harder to build momentum with fundamental academic and foundational trade concepts. Work placement logistics add further complexity, reinforcing the need for a different approach.

For the school to align learning with industry, its structure and timetable needed to work differently. As a private, independent school, it had the freedom to rethink its operational design. Flexibility became an outcome of that design.

03. Design response

What flexible work arrangement or set of practices was considered or introduced?

Under Tec-NQ's block learning model, Year 10 operates under a separate structure, including try-a-trade immersion weeks, while the Years 11 and 12 model uses alternating trade and academic weeks in industry class cohorts aligned to specific employment pathways. Over time, five key design choices were introduced:

1. A deliberately narrow selection of subjects aligned to Tec-NQ's target outcomes;
2. Full-day subjects rather than short periods;
3. For Years 11 and 12, trade and academic learning in week-based blocks depending on program structure;
4. Year 10 teachers focused on one subject and one year level only; and
5. Years 11 and 12 teachers focused on one subject only across both year levels.

This design has created one of the school's key flexibility outcomes: academic teachers have one full non-contact day per week, rather than release time scattered across the timetable. Similarly, RTO facilitators deliver blocks of training (either with school classes or apprenticeship classes), followed by a full week of non-contact time for planning, preparation, validation and follow-up. Staff can also request to complete part of their working day from home, recording the work and completing a timesheet of hours worked.

Alternatives, including combining school trade-group classes across academic streams and having teachers work across multiple subjects, were considered but ruled out on the basis that doing so would undermine the timetable design, the learning culture that Tec-NQ was building and, ultimately, the identity and learner experience it was seeking to create.

PEOPLE BENCH

> We're trying to fix a design problem that has resulted in a flexible outcome.
>
> - Principal

04. Implementation

How was it designed, communicated, governed and adapted?

The school started with a traditional lesson structure and moved towards the block-based model it has today, trying different iterations along the way.

What has been clear throughout is what Tec-NQ is trying to achieve: a relevant, engaging and authentic learning experience that reflects industry, creates real pathways to employment, and places equal value on academic learning, trade learning and work placement. Just as importantly, the teaching model needed to give staff the time and conditions to help students succeed across all three areas.

That clarity of purpose is key. The model is widely understood, embedded and openly discussed.

Staff joining from traditional school environments, however, sometimes require time to understand the logic of the block model, particularly the full-day teaching, single-subject focus, and the interaction between school, RTO, work placement and apprenticeship delivery. Once they're established, however, staff know how their work contributes to student outcomes, and why Tec-NQ operates differently. They can tell the story of what it is setting out to achieve.

The model has now been stable for approximately 11 years, with the timetable, staffing and pathways all designed to work together to balance academic learning, trade learning and work placement.

05. Impact

What changed, for whom, and what remains uncertain?

Tec-NQ is delivering on its purpose: employment outcomes data indicates that nearly all students are in full-time employment in the industry area they studied within six months of graduation.

With this model, Tec-NQ provides students with substantially more face-to-face learning and time with employers than is typical in other trade pathways. Students also benefit from continuity of teachers and mentors, with those relationships extending beyond Year 12 and into their apprenticeship.

For students and teachers, block-based learning also helps with identifying learning needs and support requirements faster, so they can be addressed more directly. In longer blocks, students are less able to 'coast' through learning, and teachers have more opportunity to build momentum through explicit teaching techniques that create better learner experiences.

For families, the model provides a clear and credible pathway from school into employment, whilst still maintaining the value of learning. For employers and industry, it creates a more connected model where young people have already been exposed to a variety of workplaces, equipping them with an understanding of employer expectations and trade learning within their chosen industry field.

For staff, recent survey results show that few experience high levels of work intensity, and most feel they have access to flexibility at work. These benefits have offset the potential risks of teaching a single subject (e.g. risk of boredom or perceived limited professional growth options), though there are specific contextual factors that enable this trade-off.

No other school in Queensland delivers apprenticeship training to its enrolled students, making Tec-NQ unique. Being different also creates challenges, particularly when it comes to how students are classified and funded across their academic and apprenticeship journey.



> Most of what we do is only hard because you've got to be prepared to do something different.
>
> - Principal

06. Learnings

What should another school take from this case?

Clarity of purpose is a key enabler and, importantly, it's shared across Tec-NQ. Everyone understands what Tec-NQ is there to do and why; it isn't dependent on one leader.

The block-based learning model may be difficult to replicate in schools with a broader range of student needs and pathways or working within tighter industrial constraints, but there is something to learn from the mindset behind it. The transferable lesson is not necessarily the specific timetable structure, but the willingness to design from purpose: starting with the student outcome, understanding the context, and then shaping curriculum, staffing, timetable and workplace practices around that purpose. Tec-NQ's flexibility is the result of a deliberately contextualised model where the learning environment, staffing model, timetable, workshop spaces, uniforms, pathways and industry connections are all in alignment with the same purpose.