

# School Based Research Project

## Final Report

Reframing  
the learning environment

Trades Norwest Anglican Senior College





**trades**  
**norwest**  
ANGLICAN SENIOR COLLEGE



## reframing the learning environment

How is the pedagogy at Trades Norwest Anglican Senior College reframing the learning environment for students whose needs have not been addressed in a previous educational environment?

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Working together  
Building the right foundation

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## executive summary

Knowles (1975, p. 18) describes self-directed learning as 'a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes'.

Trades Norwest Anglican Senior College is a senior (Year 10, Year 11 and Year 12) College where students are encouraged to take responsibility for their learning.

The principles of self-directed learning as described by Knowles help to form the basis of the self-paced learning program used at Trades Norwest.

Many students joining the College have a history of disconnection from schooling. Options to motivate students to complete their education are therefore of primary concern. The second concern is to nurture young people to become employable, contributing citizens. The self-paced education program encourages both proactive engagement and simultaneously prepares students for the workforce. This has shown to be effective in reinforcing positive student behaviours.

Changing the way traditional schools are organised will assist those students who want to successfully pursue an SBAT and concurrently achieve an HSC.

At Trades Norwest students can start a School Based Apprenticeship or Traineeship (SBAT), begin their vocational training and concurrently complete their Higher School Certificate (HSC).

The project intent was to identify and analyse the aspects of the Trades Norwest approach to senior education that is seen to be having significant success in re-engaging students previously disengaged or in the process of disengaging from senior education.

As the College grows in enrolments and with a forecast of further growth in ensuing years, this research project is also concerned with identifying ways to refine the College's vocational project-based program in order to assist the individuality of its students and their self-guided projects.

The College was originally established as the Australian Technical College Western Sydney (ATCWS) and developed as one of 24 Australian Technical Colleges established by the Commonwealth government in 2005, and this college in western Sydney was operated by the Sydney Anglican Schools Corporation. By the end of 2009, following a change in government, the Australian Technical College program was closed and the Sydney Anglican Schools Corporation became the owner, renaming the College as Anglican Technical College Western Sydney (still ATCWS). The withdrawal of Commonwealth funding created an uncertain operating environment for ATCWS and by 2012 there was a move to close the College. However, recognising the value of the educational entity, the Board of the Corporation requested an investigation into possible options for continuing the operation of the College in a financially sustainable manner. As a result of that investigation and the subsequent implementation of a new program, the College now operates as Trades Norwest Anglican Senior College (Trades Norwest).

In 2015, seeking to extend educational opportunities for younger students considering a trade career, Trades Norwest applied to the current governing body at the time, the Board of Studies Teaching and Educational Standards NSW (BOSTES) - now NSW Educational Standards Authority (NESA) - for registration for Year 10 to commence in 2016. Approval was subsequently given for this extension to the program on offer at the College. The additional year group was seen to help consolidate the viability of the College as well as to provide a better foundation for young people looking for a non-traditional education leading to a trade career.

A non-traditional model of education was conceived to enable school completion for students who would have been highly likely to disengage from the education system. This unique approach emphasises building students' practical employment and business skills while also improving literacy and numeracy.

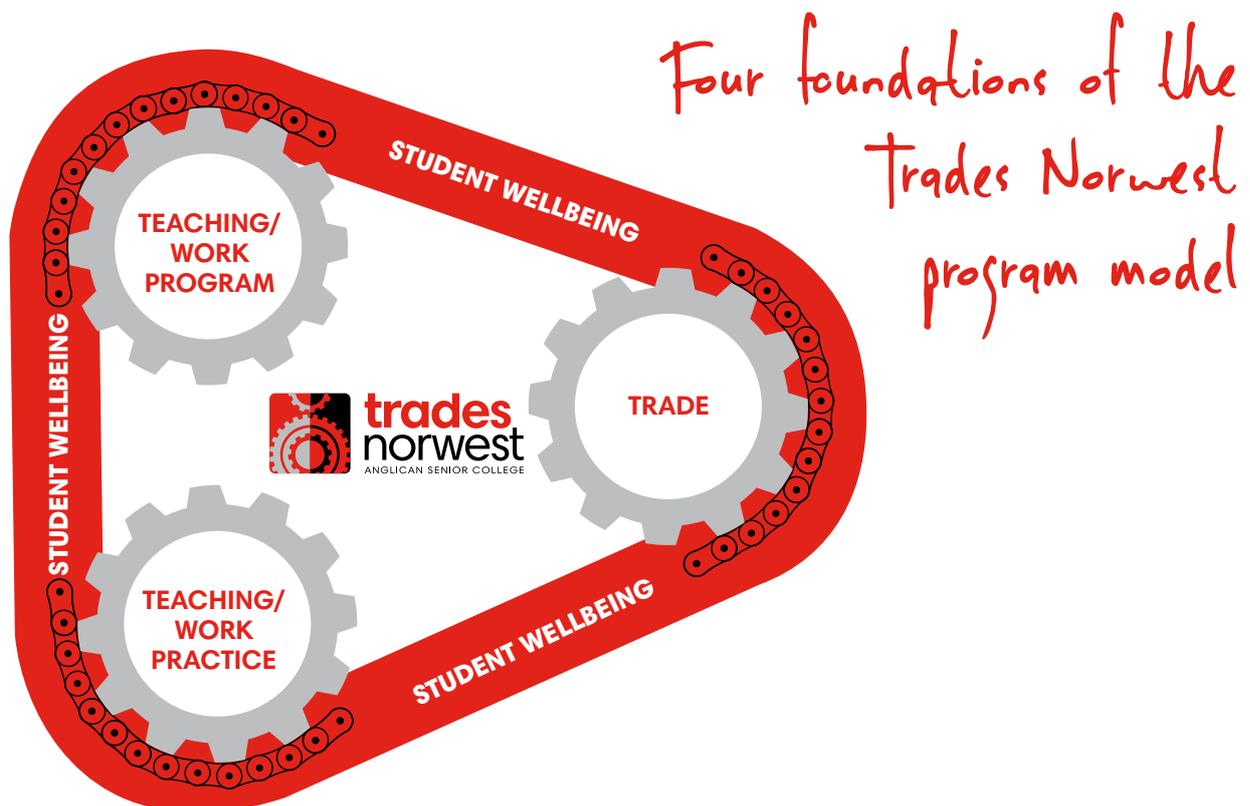
An important point of difference from traditional schools is that all assessments would have a practical focus and students would not be required to sit for formal exams. HSC study is integrated within a strong vocational environment with all students expected to complete their HSC and the first stage of their chosen vocation or trade.



# foundational components

The Trades Norwest education model that was conceived involved focussing on four themes that would eventually become the foundations of the Trades Norwest program -- Trade, Teaching Practice, Teaching Program and Student Wellbeing. These four components are interrelated and interdependent.

In essence, each element plays a critical role in enabling the program to succeed in achieving the College aims:



## trade

- provides a career relevant trade-focussed College atmosphere. Each project is developed from a trade or vocational focus which helps to provide a relevant and practical reason for undertaking the project

## teaching program

- is the project-based integrated subject approach to programming of teaching which allows students to attend work placement or TAFE and to access and work towards completing their tasks on the days they are at College. This helps to create a more accommodating study/classroom environment and an informal, more casual and non-threatening atmosphere

## teaching practice

- is the student self-paced, teacher facilitated learning. The classroom teacher acts more as a learning facilitator than as a 'teacher' in the more traditional sense. Students' needs are addressed on an individual basis rather than as a class group. The facilitator also acts as a student Mentor.

## student wellbeing

- is an overarching premise and outcome and works to provide emotional support in an empathetic and compassionate environment. Student wellbeing is paramount and a more personal approach is taken to know and understand each student - this is the role of the Mentor teacher who is responsible for a year-based group of students.

# beginnings of an adventure in programming

The Board of the Anglican Schools Corporation agreed to trial the newly developed Trades Norwest model of senior education in 2014, starting with a small class of continuing students from the 2013 Year 11 cohort progressing into Year 12 as well as the introduction of a small enrolment into Year 11.

## What are you hoping for your child to achieve at Trades Norwest?

Education Gain Skills Practice Complete  
Chosen Field Apprenticeship HSC Future Trade  
Year Experience Achieve Learning

The HSC program that was developed is a flexible project-based education model designed to accommodate greater relevance and responsiveness to the work obligations of the students. The program is based around the HSC curriculum subjects:

- English Studies
- Computing Applications
- Work Studies
- General Mathematics 1
- Certificate II or Certificate III in Business Services

Students also complete Industry Based Learning as a course component of their program of study as well as undertaking their trade studies at the level of Certificate III. This program meets the requirements for a non-ATAR (Australian Tertiary Achievement Rank) Higher School Certificate qualification which does not require students to sit for HSC examinations.

The Year 10 program operates in a similar way to the HSC program. Students undertake subjects:

- English
- Mathematics
- Science
- HSIE (Human Society in its Environment) including Commerce
- PDHPE
- TAS (Technological and Applied Studies) achieved through “trade tasters” programs such as Carpentry and Electrotechnology. By doing so, students are able to learn about some of the practicalities and theory involved in various trades.

These subjects fulfil registration requirements for a Year 10 program. However, students who leave prior to the completion of Year 12 would not be eligible for a Record of School Achievement (ROSA), though this does not seem to be a barrier for families considering moving students to Trades Norwest during Year 10.



### THE TRADES NORWEST PROGRAM IS INFLUENCED BY THE FOLLOWING EDUCATIONAL PREMISES:

- Alongside completion of the HSC, it is critical that students are prepared for work (Education Council, 2014).
- The Core Skills for Work Developmental Framework (Department of Industry, Innovation, Science, Research and Tertiary Education [DIISRTE] 2013) is embedded in the curriculum. This is done to help students develop non-technical competencies such as Navigate the World of Work, Interact with Others and Get the Work Done through their integrated units of work.
- Recognition that participation in practical apprenticeships and traineeships is a valuable way of making relevant pathways for learning. This also helps enable the building of successful careers post-school, particularly so for students with low academic orientation (Karmel & Liu, 2011).
- Inclusion of simulated work environments in VET courses (NCVER, 2014) to help create an authentic and meaningful learning atmosphere which can enhance self-directed learning and assist in developing vocational competencies (Jossburger, et. al 2010).

### INCREASING ENROLMENTS

2015 saw the first year of enrolment of a large Year 11 cohort and since then the enrolment numbers have continued to grow. The significance of being able to offer an alternative option for senior schooling was seen to be highly desirable for both students and parents.

Many students at Trades Norwest have a history of disconnection from schooling, especially at the secondary level. They often have poor attendance records, a lack of academic success and some minor behavioural or emotional issues that have been exacerbated through the lack of engagement in learning. Alongside this they may also experience high levels of anxiety as the result of negative school experiences. Many students present at enrolment with learning difficulties for which they have been receiving support at their previous school, although this is often focussed on providing support to enable participation in examination style assessments. For this diverse group of young people the individuality the College's vocational project-based model of education enables them to engage, succeed and develop as learners.

How is the pedagogy at Trades Norwest Anglican Senior College reframing the learning environment for students whose needs have not been addressed in a previous educational environment?

The increasing number of students enrolling at Trades Norwest provides clear evidence that the College is meeting the needs of many students who have disengaged from a traditional education environment. This current research project aims to examine the reasons underlying this achievement as well as being able to establish how the College can continue to be effective in offering individually tailored programs to a growing number of students.

Research is to be conducted through various surveys in order to collect quantitative and qualitative data that will enable an informed evaluation of the efficacy of the overall Trades Norwest education program and College environment.



## development of a new educational environment

At the end of 2013 the former entity of Anglican Technical College Western Sydney ceased to function in the traditional academic structure of a senior school, which included a full range of subjects and specialist teachers. 2014 was to begin with a totally new education model without any overriding preconceptions of exactly what would be involved in both developing and implementing the program. However, the paramount purpose of the program was the building of an education model that would help educate young people to become ready for working in a trade career.

When developing the new Trades Norwest program, it was clear that the College needed to address the learning needs of students who were wanting to begin vocational training as well as the needs of students who were quite likely to be disengaged from a traditional academic and structured approach to learning. Also, to be addressed were issues disclosed by students at enrolment. Common issues were a lack of engagement with a formal academic approach to learning, with lock-step approaches to teaching programs and continued lack of success in examinations. The subjects most students had difficulty with were History, Geography, English and Mathematics.

Several skill and knowledge areas were identified as being necessary to help students on the path to a successful trade career: literacy, numeracy, digital technology skills and business understanding. All could be addressed through existing subjects from the many offered by the BOSTES (now NESA NSW Educational Standards Authority). These were selected for a program of study that would satisfy requirements leading to the award of the HSC.

The new program was developed to encompass:

- Literacy - English Studies
- Numeracy - General Mathematics
- Digital Technology - Computing Applications
- Business Understanding - Business Services, Work Studies, Industry Based Learning

Because these subjects do not have a compulsory HSC examination, it was decided that assessments during Years 11 and 12 would not involve examinations. In discussion with BOSTES, the projects students completed each term would serve as a suitable assessment tool. Thus a non-examination culture would become the norm at Trades Norwest. As many students suffer from examination anxiety, not having to sit exams is a very positive step in helping to reframe their perceptions of a learning environment.

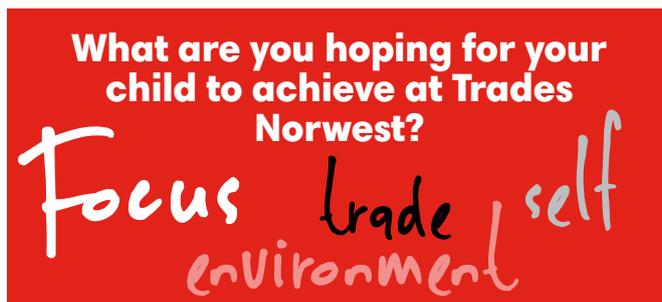


**trades  
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# work, tafe, school – making it happen

Because the College has a trade focus, all students would be training in a trade or vocational learning area that could be combined with a school-based apprenticeship or a traineeship pathway. This would be the only elective stream for students to choose and this was seen as a positive move as it is often difficult for some students to choose senior elective courses from a list of options that have little relevance to their career focus.



It is important to note that the term “trade course” refers to any vocational course that can be undertaken at TAFE or an accredited training organisation.

These courses could include those such as Beauty Therapy and Nursing as well as the traditional trade courses such as Carpentry and Electrotechnology.



When employed as a school-based apprentice at Trades Norwest, students work for their employer two days each week during term time and work full-time during school holidays. Workdays are nominated by the individual employer.

During term time in a traditionally structured school setting this would normally impact on the daily school timetable inasmuch as each class cohort would be different each day and absent students would miss out on any direct instruction. This situation would make it almost

impossible to deliver lessons in a teacher directed classroom environment as in each lesson there would be students absent at either TAFE or work and who would consequently miss given classwork. Therefore, a direct instruction approach to lesson delivery would not be possible.

## programming obstacles

Creating a new school program and essentially a radically different educational format was always going to present obstacles. However, we soon realised there were more issues than we had originally foreseen.

Some of these issues were:

- Having different students in class each day
- Students will be in college between two and four days per week
- Ability for employers to nominate and change student workdays at short notice
- Not being able to give directions to and teach students as a class group
- Having Year 11 and Year 12 in the same class doing the same or very similar work
- Which subjects should be taught
- Being able to achieve the required minimum indicative hours
- How will the classroom function each day?
- How to keep track of individual student progress

## meeting the need

The most efficient way to meet the needs of students engaged in school-based apprenticeships is to have a flexible self-paced approach to delivery of learning materials. This would enable students to pick up their learning tasks when they were in the classroom rather than having to catch up on classwork they would miss while they were at work.

In effect, the classroom would become like a workplace environment. There were no distinct lessons apart from the timetabled classes taken by the Business Services teacher. The rest of the day would be a working day where students could determine for themselves when and for how long they would work on either the integrated program covering English Studies/Computing Applications/Work Studies or on Mathematics or Business Services. The workplace nature of the day was also enhanced by not having bells to indicate end of lessons.

The program was developed by the generalist classroom teachers, with input from those with specialist subject skills. However, having these skills was not necessarily required in the classroom as each teacher acts as a facilitator and Mentor in the learning process rather than as a subject specialist. Teachers work with students on an individual basis to enable investigation, project completion and learning to occur.

### WHAT DOES THE PROJECT BASED LEARNING MODEL LOOK LIKE?

- Individual Work Booklets that can be assessed and continued when the student is at college
- Multiple subject outcomes addressed in each project
- Seven projects over Years 11 and 12 (and four in Year 10)
- Year A and B project tasks covering all syllabus outcomes each year
- Outcomes for all subjects are covered twice over Years 11 and 12
- Project can be continued when the student attends college
- Individual attention and direction from the teacher/mentor



Teaching and learning at Trades Norwest moves between the two educational concepts of andragogy (helping adults learn) and pedagogy (art and science of teaching). Students seek out Trades Norwest because they see the course content and delivery method of the content as being more adult.

The philosophy of Trades Norwest promotes the principles of adult learning identified by Knowles (1970):

- being internally motivated and self-directed
- bringing life experiences and knowledge to learning experiences
- being goal oriented
- being oriented towards the relevancy of the subject
- being practical and as learners
- wanting to be respected

Good teaching and learning includes all facets of both pedagogy and andragogy.

Teaching and learning at Trades Norwest includes many of the core skills associated with 21st century learning (Voogt et al., 2011), such as

- collaboration,
- communication,
- digital literacy,
- citizenship,
- problem solving,
- critical thinking,
- creativity and productivity.

The integrated program at Trades Norwest uses these components of 21st century learning and links them to current student “real world” experiences and to their future vocations. When assessing these core skills, Voogt et al (2011) argues students need to be examined using formative methods of assessment that allow for individual guidance. This is a core concept of teacher practice at Trades Norwest.

Assessment strategies used at the College are a mixture of activities for assessment for learning, assessment as learning and assessment of learning. Bruniges (2015) states, “our education system must equip young people with the capacity to think, solve problems and respond to and thrive within a changing society”. Content and processes of knowledge and skill acquisition within units of work strive to address the issues as prescribed by both Bruniges and Voogt.

Trades Norwest aims to assist students to gain a School Based Apprenticeship or Traineeship (SBAT) by the middle of Year 11. The curriculum structure is designed specifically to enable students to be off-site on different days to satisfy the vocational requirements of an apprenticeship or a traineeship. Research on Vocational Education and Training (VET) courses and subjects indicates they provide great benefit to students.

## **a trade training alternative**

Trades Norwest offers a very different alternative to the traditional model of TVET courses.

It is important to note that an SBAT as offered by Trades Norwest is quite different to a full-time apprenticeship or traineeship.

Trades Norwest endeavours to provide its students with work integrated learning practices. This is beneficial to students and (indirectly) employers as it provides students/apprentices/trainees with knowledge about a vocation outside the academic institution which they attend. Employers benefit because they can assist in the training of new people in their industry.



**tech west**  
**sydney**

The Registered Training Organisation (RTO) TechWest Sydney operates at the Trades Norwest college and provides the training to College students in Business Services(Certificate II

and Certificate III), Carpentry (Certificate III), Electrotechnology (Certificate III) and White Card and First Aid. Students will complete the Business Services qualification by the end of Year 12. Students in the Carpentry and Electrotechnology classes will continue at Trades Norwest after finishing Year 12 in order to complete the Certificate III qualification. A few recent school leavers also join the classes for Carpentry or Electrotechnology.

Trainers from the Motor Traders Association train students in Automotive in Years 11 and 12 at the College.

Having these trade classes happening on the College site, that are operating beyond the usual TVET scope of courses that only provide a statement of attainment towards a qualification, means that there is a pervading trade atmosphere around the campus that adds to the feeling that a student in Years 10, 11 or 12 are no longer in a traditional school environment.

Students respond well to this learning environment as it allows them to take the initiative in undertaking their learning projects in a manner that suits their learning style. This is proving to be a very effective in meeting the needs of students interested in starting their trade studies as well as those who have had difficulty embracing traditional classroom expectations and lesson delivery.

## introduction of the year 10 program

When the Trades Norwest program concept was expanded to include Year 10 students, new challenges had to be addressed. These primarily involved introducing younger and more immature students to a self-paced learning model. In the second year of the Year 10 cohort, the College continues to refine approaches to providing an appropriate learning environment for these students.

For Year 10, the decision was made to apply for registration only and not for accreditation as this would allow the College a much greater degree of flexibility in creating and delivering the Year 10 teaching programs.

**From your perspective, what would success look like for your child at the completion of his/her studies at TNW?**

happy understanding  
trade career life  
experience

This would mean that students leaving school before completing Year 12 would not be eligible for the award of a ROSA. However, this was overridden by the necessity of creating the most suitable and effective environment for the delivery of Year 10 integrated subject programs. These integrated units needed to cover 6 Key Learning Areas: English, Mathematics, Science, HSIE, TAS, PDHPE.

The recurring issues that have been disclosed at enrolment for students at the College were:

- a lack of engagement with a formal academic approach to learning
- lock-step approaches to teaching programs
- continued lack of success in examinations.
- particular difficulty with subjects - History, Geography, English and Mathematics.

# a very different learning environment

Students choosing to transfer to Trades Norwest in Year 10, 11 or 12 often present with a history of disengagement from traditional academic learning that has a heavy emphasis on university entry and with skill at success in examinations as the main form of assessment.

The revised Year 10 and HSC programs at Trades Norwest are flexible project-based programs designed to accommodate greater responsiveness to the part-time work obligations of the students engaged in school-based apprenticeships.

In the re-visioned model for the College which began operation in 2014, the following items were considered to be the baseline parameters for developing the new program:

- students enrol in the College to begin a trade or vocational career. Therefore, that area of study needed to begin at the commencement of the school year, having previously begun mid-Year 11
- students would need to gain a school-based apprenticeship as soon as possible in Year 11
- as employers had indicated that the previous model of releasing students to work in 5 week blocks was not successful, a more preferable and practical model would be for student release of 2 days per week during term time and full-time in holidays
- students would need a program of HSC subjects relevant to their trade career or trade aspirations
- a significant barrier to these students remaining in a mainstream school was their lack of success in formal examinations. Therefore, College assessment would not involve any form of examination
- the College would not have a program to prepare students for university entry
- an HSC program of subjects that had no mandatory HSC examinations would be preferable
- a selection of subjects to be able to meet the required number of Board Developed units in Year 11 and in Year 12 was essential

Considering the skills required for those entering a trade career, students studying at Trades Norwest would need good levels of:

- Literacy
- Numeracy
- Technology skills
- Business skills

In this regard, a major consideration was that of locating appropriate resources from which to develop the unit programs. The book, "From Tradesman to Businessman" by David Lee, is an example of the resources used to help insert the trade component into our programming.



*Trades Norwest Automotive class*

## working with the board of studies (bostes)

After research of available programming materials and in consultation with BOSTES (now NESAS) it was decided that the following subjects would meet the educational needs of students desiring a trade career:

### STAGE 6 SUBJECTS

EDUCATIONAL NEED (YEARS 11/12):	COVERED BY THE SUBJECT/ACTIVITY:
Literacy	<ul style="list-style-type: none"> <li>English Studies</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>General Maths 1</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Computing Applications</li> </ul>
Work Readiness	<ul style="list-style-type: none"> <li>VET Trade course (Cert III)</li> <li>Work Studies</li> <li>Industry Based Learning</li> </ul>
Business skills and understanding	<ul style="list-style-type: none"> <li>VET Business Services (Cert II or III)</li> </ul>
Lifestyle	<ul style="list-style-type: none"> <li>Sport, Lifestyle &amp; Recreation</li> <li>Fitness</li> </ul>

### STAGE 5 SUBJECTS

EDUCATIONAL NEED (YEARS 11/12):	COVERED BY THE SUBJECT/ACTIVITY:
Literacy	<ul style="list-style-type: none"> <li>English</li> <li>History/Geography</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Maths</li> </ul>
Science & Technology	<ul style="list-style-type: none"> <li>Science</li> <li>Trade Taster courses in Carpentry &amp; Electrotechnology</li> </ul>
Work Readiness	<ul style="list-style-type: none"> <li>Trade careers information sessions</li> </ul>
Business skills and understanding	<ul style="list-style-type: none"> <li>Commerce</li> </ul>
Lifestyle	<ul style="list-style-type: none"> <li>Personal Development and Health</li> <li>Fitness</li> </ul>



## subject choice

The only choice the students would need to make upon enrolment at Trades Norwest would be which trade course they would study. As long as this trade course aligned with a Framework VET course, the requirements for the award of the HSC would be met without having to sit for any external HSC examinations. For students who had chosen a trade course that was not a Framework VET course, additional studies in Business Services (provided in class at Trades Norwest would satisfy the HSC requirements.

From 2018 onwards the Mathematics General 1 course has been replaced by the new Mathematics Standard 1 course. This course includes an optional HSC exam and is now considered a Board Developed course. Therefore, this allows all students at Trades Norwest from 2018 onwards to confidently complete a pattern of study in Year 11 and Year 12 as below:

- English Studies (2 units Year 11 and 2 units Year 12)
- Mathematics Standard (2 units Year 11 and 2 units Year 12)
- Computing Applications (1 unit Year 11 and 1 unit Year 12)
- Work Studies (1 unit Year 11 and 1 unit Year 12)
- Business Services Certificate II or Certificate III (2 units Year 11 and 2 units Year 12)
- Trade or vocational studies (2 units Year 11 and 2 units Year 12)
- Industry Based Learning (2 units Year 11 and 2 units Year 12) OR Sport, Lifestyle Recreation (2 units Year 11)

## solving the timetabling dilemma

In a mainstream school students naturally miss out on classes while being at work or TAFE. Teaching occurs regardless of whether the student is at school or not and the SBAT apprentice then has to catch up on work missed during their own time -- usually in the form of homework. This is a significant difficulty since many students who choose to do an SBAT are those who are least capable of an academic catch-up regime.

*Catering for student work and TAFE days*

The plan at Trades Norwest was for students with an SBAT to work 2 days per week, on days specified by the employer, and the classroom program had to be flexible enough to ensure that students did not miss lessons. A paramount feature of the new program was the need of a 'timetable' that would fit around the student, rather than having the student fit into the timetable.

	Monday	Tuesday	Wednesday	Thursday	Friday
James B	Work	Work		Training	
Ki			Work	Training	Work
Richard			TAFE	Work Exp	Work Exp
Ben			Work/Training		
Gab		Work Exp	Work Exp	Training	
Jesse		Work	Work	Training	
Mitchell		Training	Work	Work	
Alex		Training		Work	Work
Tyler		Training	Work	Work	
Ryan		Training	Work	Work	
James K	Work	Work	Work	Training	Work
Suhail	Work	Work		Training	
Chesco		Training		Work	Work

Trades Norwest student timetable 2014



To keep student College fees at a reasonable level and to make study at Trades Norwest more attainable for students, the timetabling method needed to optimise the number of teachers engaged to deliver the program. This was achieved by the appointment of College teaching staff who are not necessarily specialists in any particular field: e.g. mathematics, science, history, etc. Rather, the role of Trades Norwest teachers is to be resourceful in helping students research and source the information required for their projects.

### **creating a workable program**

Establishing a program to accommodate frequent student absences was achieved through designing an integrated program which initially provided teaching/learning materials through work booklets that guided the students through a self-paced research project.

Student booklets did not depend on the classroom teacher providing direct instruction, but rather the teacher facilitated student learning for those in the room each day. The integrated units for Years 11 and 12 were based around the topics for the modules in English Studies and also included outcomes for Computing Applications and Work Studies.

The first task for the initial 2014 Trades Norwest student cohort was developed to help the newly enrolled students, as well as the continuing students from the ATCWS class, to realise that Trades Norwest was a school with a difference. Trades Norwest was a school actually focussed on having a trade related environment embedded into the task programs as well as into student classwork.

This first work unit asked students to consider the trade they were hoping to undertake -- and in the case of some of the Year 12 students, were already undertaking -- and in doing so create a resource booklet providing detailed information on the trade of your choice. At the completion of the task students printed their information booklets; having created an actual useful "product". The educational value of this first work unit was threefold -- it helped the students to realise that Trades Norwest has an overt focus on trade, that the classwork was framed in a relevant trade context and that the context was directly related to the students' chosen trade. Various subject outcomes were included on the notification to help students understand which subjects were being addressed. This work unit was complemented by an accompanying mathematics booklet developed to further enhance the trade focus of the task.

Below is the task notification for Task 1, 2014. It places the task in a relevant context and includes an overview of what was to be included in the completed project booklet and multimedia presentation.

Following the student task notification is the first page of the student work booklet. This booklet helped guide students through the task and enabled them to access their work on the days when they were at college. Throughout the booklet were completion dates for various components of the task. Students worked at their own pace to meet these completion deadlines.



# year 11/12 integrated program

## year a, term 1: trades and me

date due: week 10, term 1, 2014

### OUTCOMES ASSESSED

English: 1.1, 2.2, 3.1, 4.2

Work Studies: Outcomes 1, 2, 4

Computing Applications: 1.3, 3.2, 4.2

### SITUATION

Deciding on a career path can be difficult. Often, school leavers don't understand exactly what is involved in their desired trade or profession. Sometimes they take whatever job they can get and hope it will suit them. Even when having started work, the new employee can find it difficult to explain exactly what is involved in the job they are doing. For the potential trade person, accessing comprehensive information on trades is very important.

### TASK

You are to create a multimedia presentation suitable for inclusion in an expo on trade occupations in Australia. You will need to include general information on trades as well as more detailed information on the trade of your choice. The finished product will include both printed and audio visual components. Compilation of your presentation will involve the following:

- a) Research workplace practices and working conditions from both historical and current perspectives. Special consideration is to be given to the investigation of past WHS issues in relation to current WHS compliance.
- b) A typical job application submission
- c) Compilation of your own personal CV
- d) Typical trade related literature with explanation of contents
- e) Education necessary to enter the trade workforce
- f) Skills required
- g) Career pathway possibilities and opportunities including further education
- h) Necessary behavioural issues and social skills
- i) Typical plans/diagrams/charts/models used in trade situations
- j) Examples of relevant trade-related mathematics



### Presentation Considerations:

- To contain a range of multi-media displays
- To be presented attractively, logically and should create interest in trade careers
- Research, compilation, printing and presentation to be completed during college hours

# year a

## unit 1: trades and me

Your completed work will be presented in a booklet suitable for giving advice to potential tradespeople in your trade

### 1. open a new folder -- call it *Trades and Me*. In this folder, open and save TEN more folders and call them as below:

1. Workplace Practices and Working Conditions
2. Job Application
3. Personal CV
4. Trade Related Literature
5. Education
6. Skills
7. Career Pathways
8. Behaviour and Social Skills
9. Plans and Diagram
10. Trade Mathematics

**INSERT AT LEAST ONE PICTURE FOR EACH SECTION**

### 2. watch you tube movie: *Seven Wonders of the Industrial World: The Brooklyn Bridge*

**completed by: end week 2**

[https://www.youtube.com/watch?v=fTUaymy\\_bWM](https://www.youtube.com/watch?v=fTUaymy_bWM)

- a) While watching, make a list of
  - i) Injuries,
  - ii) WHS Issues,
  - iii) Working Conditions
- b) Open a new Word document, call it **Brooklyn Bridge**. Save it into your **Workplace Practices and Working Conditions** folder.

Write a review of the DVD. Using the list you have created while watching the DVD, construct sentences.

Remember: Your review will be used in your unit task portfolio to provide information on past bad WHS and working conditions.

#### **The Rules:**

1. Everything you copy from the internet must be referenced
2. Never insert a picture without a short text describing what is happening in the picture
3. Always add the picture URL to the picture (Make the URL small)
4. Give each document the correct name and put it in the correct folder
5. To Insert pictures: picture tools, format, wrap text, square. Then move pics.

## the value of self-assessment

Student assessment for each term involved the creation of an integrated subject project. In the case of the Trades and Me unit of work, students created a multimedia presentation incorporating both digital and printed media suitable for inclusion in a “Trade Expo”.

To enhance the core skills of the 21st century student, the concept of student self-assessment was evaluated and subsequently implemented into the assessment schedule. For each unit task students are presented with a reference to the required standard of work which gives them a criterion to follow in order to achieve each grade. Valid student self-assessment adds significantly to student learning.

When starting the unit of work, students consider the task and then, using the outcome criteria, decide on the grade they will attempt to achieve. At the completion of the task, self-assessment involves students reflecting on their own work and then judging how well they met the criteria as outlined in the learning program. The classroom teacher consults with the student and together negotiate a grade based on assessment of student work and how well it relates to the grade criteria.

Student self-assessment has the potential to contribute significantly to student learning and achievement. In their work on student self-assessment McMillan and Hearn (2008) argue that self-assessment “empowers students to guide their own learning and internalise the criteria for judging success”. Self-guidance is as much a learning exercise for the student as it is an assessment tool. A value of self-goal-setting and eventual self-assessment is that students feel more involved in setting their own task outcomes in a format that suits them and their own abilities. For example, they can choose to aim for a “C” grade if they think that is what they are able to achieve. There is a sense of ownership that helps to keep the task individually relevant. As students progress through each task, the role of the teacher/learning facilitator is to encourage individuals in challenge of raising the outcome achievement bar to gain a better grade.

Below is an example of a unit assessment criteria from which student can choose a grade they feel comfortable in aiming for.

### self-assessment criteria for the unit of work at week 8, term3.

#### ENGLISH STUDIES

- a) All questions are attempted correctly. Word limit is reached, sentence structure is near perfect, sentence flow and meaning is clear. With the exception of lists, answers are written in whole sentences
- b) Almost all questions are attempted correctly. Word limit is reached, sentence structure is mostly very good, sentence flow and meaning is usually clear with the exception of lists, answers are written in whole sentences.
- c) Most questions are attempted correctly. Word limit may be ignored, sentence structure may be an issue, sentence flow and meaning is not always clear. With the exception of lists, attempts are made to answer in whole sentences.
- d) Very few questions are attempted correctly. Word limit is ignored, sentence structure is poor, sentence flow and meaning is often not always clear. Seldom are there attempts to write answers in whole sentences.

#### WORK STUDIES

- a) All work related questions are attempted correctly. Research is detailed and directed to their chosen trade. Detailed personal reflection is evident where applicable and demonstrates a very strong interest and or passion for their chosen trade.
- b) All work related questions are attempted correctly. Research is thorough and directed to their chosen trade. Thorough personal reflection is sometimes evident where applicable and demonstrates an interest in their chosen trade.
- c) Most work-related questions are attempted correctly. Research is usually sound and directed to their chosen trade. Personal reflection is rarely evident where applicable.
- d) Whole work-related questions are not attempted. There is limited research or no research directed to their chosen trade. Personal reflection is not evident where applicable.

## COMPUTING APPLICATIONS

- a) All computer related aspects of the task are attempted very well. Research using google indicates a detailed effort to rewrite in their own words. All images are correctly referenced. I would advise having a minimum of six months is superb/creative. There is evidence of detailed knowledge of computer software, hardware and demonstrated computer skills.
- b) All computer related aspects of the task are attempted. Research using google indicates a thorough effort to rewrite in their own words. All images are correctly referenced. Presentation is quite good. There is evidence of thorough knowledge of computer software, hardware and demonstrated computer skills.
- c) Most computer related aspects of the task are attempted but not necessarily well. Research using google indicates a sound effort to rewrite in their own words. All images are correctly referenced. Presentation is ok. There is evidence of sound knowledge of computer software, hardware and demonstrated computer skills.
- d) Not all computer related aspects of the task are attempted. Research using google indicates a limited effort to rewrite in their own words. All images may not be correctly referenced. Presentation is questionable. There is evidence of limited knowledge of computer software, hardware and demonstrated computer skills.

## making mathematics relevant

As the unit tasks were being developed it became obvious that educationally robust mathematics outcomes was going to be difficult to include in the unit project work booklets. Therefore, it was decided to create a stand-alone booklet for mathematics that incorporated the mathematics outcomes with real life/trade scenarios. As many students find it difficult to understand the importance of mathematics, the separate booklets helped to place the mathematics outcomes in a relevant context for the students.

These booklets guided students through the General Mathematics syllabus with students assessed at the end of each term using an open book task which could be completed over one week during class time. All classwork was designed to be able to be completed during school hours so that students were not burdened by having to do homework after a strenuous on-site working day.



Following is a sample of a student Mathematics work booklet.

## mathematics work booklets



**trades**  
**norwest**  
ANGLICAN SENIOR COLLEGE

Building the Right Foundation

Name: \_\_\_\_\_

# YEAR 11 – TERM 1

*Material in this booklet is from New Century Maths 11 General Mathematics (Pathway 1) Preliminary Course by Sue Thomson and Judy Binns, 2013, Nelson Cengage Learning*

### YOU MIGHT USE THE THINGS YOU LEARN IN THIS UNIT

#### TO:

- Measure accurately for cooking, building & renovating, gardening & landscaping
- Mixing fertilizer, paint, hair colour dye
- Spread fertilizer, spraying for weed control, making travel plans

### AT THE END OF THE UNIT YOU SHOULD KNOW HOW

#### TO:

- Convert between units of the metric system
- Calculate the error in measurement
- Solve problems involving ratios and rates
- Calculate percentage change

PORTION IT !!

Due Friday 4<sup>th</sup> March, 2016

**1. FIND THE SIMPLEST RATIO FOR THE FOLLOWING:**

4g to 28g	30km to 0km	50 secs to 3 mins
250g to 1kg	130mL to 2L	15km to 800m

**DIVIDING A QUANTITY IN A GIVEN RATIO**

**Example**

Janet and Darryl own a small market garden, which made a profit this year of \$135 000. They share the profit in the ratio 2 : 3. How much does each person receive?



**Solution**  
 The profits are to be divided into 2 parts for Janet and 3 parts for Darryl.  
 Total number of parts = 2 + 3 = 5.  
 Janet's share =  $\frac{2}{5} \times \$135\ 000$   
                   = \$54 000  
 Darryl's share =  $\frac{3}{5} \times \$135\ 000$   
                   = \$81 000  
 Checking: \$54 000 + \$81 000 = \$135 000

**2. HAMISH NEEDS TO MIX 180KG OF CONCRETE. CONCRETE IS MADE USING CEMENT, SAND AND GRAVEL IN THE RATIO OF 1:2:3. HOW MUCH OF EACH PRODUCT WILL HAMISH NEED TO MIX TOGETHER?**

Cement	
Sand	
Gravel	

**the college day**

As the college day at Trades Norwest could not have a highly structured timetable, teachers were timetabled on to class time so that they had an appropriate release from face-to-face classroom work. When the College had only a small number of enrolments it was not necessary to provide a timetable. As the College grew, and with the introduction of Year 10, students were provided with a timetable so that they knew in which room they should be working and when they would have Business Services or the Fitness program.



Teaching materials were developed so that students did not need textbooks, therefore helping to remove another barrier to learning. With the adoption of the Canvas online learning management system in 2016, the integrated units became available online enabling students to complete their work anywhere, anytime. Each integrated subject work unit runs over one term with weekly goals for completion of relevant work. This is submitted online and marked with teacher feedback provided weekly.

The teaching team collaborate on the ongoing development of the integrated work units. This enables any teaching staff who may have experience in specialty areas to provide relevant input into these programs. As a result of the collaboration all teachers are readily able to support student regardless of student year level.

## what does the literature say?

The need to belong to a community has been a long held fundamental need for individuals. Schools and education precincts are a part of the community and hence, in order for students to succeed academically and emotionally, they must feel part of that community. When looking at alternative education sites and comparing them to mainstream education sites there are a number of common themes that account for student engagement with the learning process:

- Students want respect for themselves as young people and as students,
- Students have not outgrown the need to be “cared for”,
- Schools must respect the need for students to have a life outside school and after schooling has been completed,
- Students learn at different rates and come to school at different stages of development both academically and emotionally,
- Given appropriate support from the school and staff, students can achieve high expectations placed on them by the community and by themselves.

The Melbourne Declaration on Educational Goals for Young Australians (2008 - 2009) articulates two goals for the education of young people:

**GOAL 1** *Australian schooling promotes equity and excellence*

**GOAL 2** *All young Australians become successful learners, confident and creative individuals and active and informed citizens.*

These goals are broken down to eight statements for action that are more specific but still encompass the above themes:

1. developing stronger partnerships
2. supporting quality teaching and school leadership
3. strengthening early childhood education
4. enhancing middle years development
5. supporting senior years of schooling and youth transitions
6. promoting world-class curriculum and assessment
7. improving educational outcomes for Indigenous youth and disadvantaged young Australians, especially those from low socioeconomic backgrounds
8. strengthening accountability and transparency.

In particular, there is significant relevance for the program at Trades Norwest in Statement #5, “Supporting Senior Years of Schooling and Youth Transitions”:

*“The senior years of schooling should provide all students with the **high-quality education necessary to complete their secondary school education and make the transition to further education, training or employment.** Schooling should offer a range of pathways to meet the diverse needs and aspirations of all young Australians, encouraging them to pursue university or postsecondary vocational qualifications that increase their opportunities for rewarding and productive employment. This requires effective partnerships with other education and training providers, employers and communities. Schools need to provide information, advice and options to students so that they can make informed choices about their future. All governments and school sectors need to support young people’s transition from schooling into further study, training or employment and enable them to acquire the skills that support this, including an appetite for lifelong learning. Support may also be needed for young people returning to education and training after a period of employment.” (p12)*

The benchmark of completing secondary education is seen as a critical marker of achievement of these goals articulated in the Melbourne Declaration. The priority at Trades Norwest is to see students succeed in meeting learning outcomes:

- assisting students to make informed decisions about their future
- transitioning students from school-level education into the workforce
- a targeted and relevant vocational education while completing secondary education.

## the value of engagement

Sergiovanni (2000, p.158) states *“There is a growing consensus that whatever else is done, schools must also become places where it is easier for students and teachers to know one another well and for students to connect to the school and its purposes. Schools, in other words must be caring and learning communities.”* Warren (2012) adds that high levels of student wellbeing are important for students to identify with their learning environment and hence with their level of engagement.

Research indicates that student engagement and school connectedness underpin effective student learning. When students believe the school is not meeting these needs, they can become disengaged. McGregor and Mills (2011) argue this situation can see students become disengaged in the learning process and when schools or sites actively build relationships it becomes a key factor in re-engagement.

Fredricks, Blumenfeld and Paris (2004) believe that engagement is defined in three ways:

- **Behavioural engagement** - this draws on the concept of participation in academic and social or extracurricular activities. They believe this is crucial in promoting engagement.
- **Emotional engagement** - including both positive and negative reactions to teachers, other students and school. Also thought to influence willingness to work and promoting ties to schools.
- **Cognitive engagement** - this includes commitment to working through complex problems and skills.

## why the disengagement?

According to the Dusseldorp Skills Forum (2006), “disengagement occurs when students feel that school (and by inference, the curriculum) is not relevant to them”. Conversely, project based learning allows students to individualise their learning and to spend additional time on selected topics that are of interest to the student. This allows teacher Mentors to support the student with learning outcomes as prescribed in syllabuses and teaching learning programs, thus influencing and promoting the re-engagement of learners.



McGregor and Mills (2011) maintain that students learn at different paces and different rates and as a result of this there needs to be an evaluation of traditional types of assessment for students as well as for teaching practices. Further, they argue that when students fail to learn and grow the fault lies not necessarily with the students but often with the institution and institutional practices as well as the adults responsible for implementing those processes. McGregor and Mills (2010) outline some issues and barriers students encounter that might lead them to alternative schools where these issues can, at least in part, be addressed.

- The curriculum as offered
- Teaching practices where teachers control the pace, content and teaching strategies.
- Staff relationships with students
- Organisation of the school
- Size of the school/classes
- Disciplinary practices
- Uniform

## **the process of re-engagement**

Small classes and flexible courses allow teachers/mentors to provide individualised approaches that ultimately promote student engagement. “Curricular content that is vocational, practical and links to skill development for employment assist learner engagement”, Murray and Mitchell (2015).

The absolute importance of engagement is widely recognised by governments Australia wide. However, there appears to be very few (if any) documents that address strategies that actively help to re-engage learners in schools.

The individualisation of learning by students via Project Based Learning is supported by the varied strategies used by Trades Norwest in the adoption of adult learning or Andragogy which is defined as the art and science of helping adults learn. On the other hand, a common definition of pedagogy is that it is the art and science of teaching and therefore is about good teaching and learning. Adult learning and the teaching of adults, which includes all facets of teaching and learning, is more than adequately covered by the definition of pedagogy.

The terms andragogy and pedagogy can sometimes be used together by schools, TAFE, students and teachers. However, one of the major differences between these two concepts is the recognition of teaching children as opposed to assisting or helping adults to learn. One implies a direct teacher delivered input to assist in the arrival of an outcome (pedagogy) while andragogy acknowledges that adults learn for different reasons and so are assisted or helped in their learning. Malcolm Knowles (1970) has examined the process of pedagogy and has re-introduced andragogy into the terms of teaching when referring to adult learning. Some educational institutions who teach older students are moving towards andragogic concepts in their teaching method which is positively influencing student engagement and interaction with the learning process.

Teaching and learning at Trades Norwest moves between these two educational concepts. Students seek out Trades Norwest because they see the course content and delivery method of the content as being more adult.

Knowles identified six principles of adult learning:

- being internally motivated and self-directed
- bringing life experiences and knowledge to learning experiences
- being goal oriented
- being oriented towards the relevancy of the subject
- being practical and as learners
- wanting to be respected

The philosophy of Trades Norwest promotes these above principles. However, we defer to the term pedagogy when discussing teaching and learning. Good teaching and learning includes all facets of both pedagogy and andragogy.

Teaching and learning at Trades Norwest includes many of the core skills associated with 21st century learning.

Voogt et al (2011), recognises seven core skills necessary for 21st century learning:

- collaboration,
- communication,
- digital literacy,
- citizenship,
- problem solving,
- critical thinking,
- creativity and productivity.

The above issues have both formal and informal components. These core skills components are not confined to formal education settings - 21st century skills are often disconnected from core school subjects (Voogt et al 2011).

## doing the research

Our Question:

“How is the pedagogy at Trades Norwest Anglican Senior College reframing the learning environment for students whose needs have not been addressed in a previous educational environment?”

Our project was designed to examine efficacy of the pedagogy and curriculum pattern offered at Trades Norwest. Specifically, the authors analysed our pedagogy in the belief that it enables the students to re-engage in the learning process, given their previous experiences. As previously noted the authors issued surveys that addressed the foundations of the Trades Norwest curriculum in order to examine how students, parents and the staff view the College, its curriculum pattern, its flexibility and its ability to successfully have students engaged in a School Based Apprenticeship or Traineeship.

The primary method of collecting both qualitative and quantitative data was by conducting a series of parent, student and staff surveys. This was to enable the investigation of how the four foundations of the Trades Norwest Integrated Learning Model (project based learning model) is making a difference to the way students engage in the education process and why the model is successful in creating and maintaining an active participation in the learning process.



## Our Premise....

Changing the way traditional schools are organised will assist those students who want to successfully pursue a SBAT and concurrently achieve an HSC.

As the overall Trades Norwest program model is unique in its pedagogy and delivery, conducting surveys on each foundational aspect would give a clearer understanding of whether one particular aspect is more significant in achieving student engagement or if ongoing engagement is achieved and maintained through a combination of all four aspects.

A specific aim of the research project was to explore the importance of a trade-focussed educational environment in helping meet the educational needs of students.

### partner schools

Trades Norwest Anglican Senior College is part of the group of schools operated by the Anglican Schools Corporation. It was originally decided to partner this research with two other schools in the Corporation that were also involved in vocational education.

Nowra Anglican College with its main campus at Bomaderry operated a campus at Milton, Shoalhaven Anglican School, which had a Trade Training Centre where students could participate in studies in Hospitality, Construction, Primary Industries and Electrotechnology as TVET courses. They were in the early stages of piloting a similar trade-focussed non-ATAR program, "HSC Connect", with an integrated studies approach for the HSC.

Macquarie Anglican Grammar School at Dubbo has an Australian Technical College Construction centre built under the same program as the former ATCWS centre. However, classes have not been held there due to a breakdown in relations with the local TAFE college which was going to deliver the training. Macquarie Anglican Grammar School was brought into the Anglican Schools Corporation group in 2013 and, at the time, was in the process of training staff and planning for delivering training in 2017. In order to help with the establishment of this program they were interested in working with Trades Norwest to see if our program model could be implemented at their school. Initially, it was thought that this grouping of schools would provide an interesting insight into schools who were at different stages of developing an alternate programs to help enable engage students who were not on a university pathway or who were in danger of disengagement from their secondary education.

### asking questions

To address the aims of the project, students were asked to complete a number of surveys over an 18 month period. In general, the project examined:

- why students left their previous school to enrol at Trades Norwest
- the pedagogy operating at Trades Norwest and how it differs to the model at their previous school
- the way the students believed their well-being was being addressed at Trades Norwest
- how the individual units of work served to re-engage them in the learning process
- how the students perceived the availability of an SBAT within the College and how this impacts on their academic, emotional and social development/maturation.

Research was undertaken through a mixed method approach using both qualitative and quantitative methodologies.

**QUALITATIVE** research involved assessing responses from parents and students who completed an online extended response survey or a pen and paper survey to be completed during the school day.

**QUANTITATIVE** research was conducted with both parents and students through a series of Likert rating scale surveys.

## research design

Case study research was designed to enable data collection regarding various aspects of the Trades Norwest project based learning (Integrated Program) model. This included teaching practice, student wellbeing, trade focus, and the program model. Surveys were also issued that asked students about their perceptions of their immediate previous school and then a comparison of any noticeable perceptual changes.

This method was used to help evaluate and provide evidence for any positive effect and success, or otherwise, of the various foundations of the program in being able to re-engage disengaged students -- individually as well as a cohort.

The case study also gathered information on the impact of the program model on student home life. This included relationships with parents/guardians and siblings as well as the overall impact on family dynamics and stability. Data for this research aspect was collected through a parent/guardian survey.

By comparing individual and student cohort responses to each of the four program foundations (student wellbeing, trade focus, teaching practice and teaching program) we were able to gain a more informed appreciation of where the program is succeeding and on where it could be improved.

It was intended that by comparing individual and student cohort responses to each of the four program foundations we would be able to gain a more informed understanding of where the program is succeeding and on where it could be improved.

## collecting data

### survey participants

Surveys were conducted with students during class time. Before undertaking each survey students were informed of the reason for the survey and of the importance of taking care to record thoughtful responses. As different students were at College on different days, individual surveys were completed over the course of one week. This enabled all students to take part.

Information on the purpose and nature of the research project was provided to all College parents/guardians. Tacit parental informed consent for the undertaking of the student surveys was given by all parents/guardians.

Parents/guardians were given the opportunity to respond to surveys on a voluntary basis and each survey was completed within in a four week period. (Parent/guardian information and consent sheets included in Appendices.)

### ethical considerations

Parents/guardians and students were informed of the nature and scope of the research project and given assurance that all responses were anonymous and that individuals would not be identified. Included in information was an invitation for parents/guardians to have their son/daughter opt out of the survey questionnaires. (Survey notification document included in Appendices)

## **data collection and management**

Trades Norwest students completed online questionnaire surveys as well as “pen and paper” surveys completed in class.

Types of data collected: paper questionnaire surveys, student work samples, individual interview transcripts, Likert-type surveys conducted through online survey development company Survey Monkey where results were securely stored on their server.

Parent responses provided qualitative data relating to the impact of the Trades Norwest program on individual students as well as parents/guardians and family life.

Student responses provided quantitative data based on a Likert-type rating scale. The results were able to be converted to percentages, charts and graphs.

There were four student survey subscales:

- Student wellbeing -- questions related to how well the College was meeting individual student personal needs
- Program -- students responded to questions relating to the relevance of the Trades Norwest integrated program
- Teaching practice -- questions related to the manner in which “lessons” were conducted
- Trade -- students asked to rate various aspect of the College focus on a trades

## **research team**

Those involved in researching, compiling and completing the project were:

- Gaynor MacKinnon, College principal -- program developer, contributing to various sections of the report
- Leonard Turnbull -- program developer, establishing online surveys and collating results
- Stephen Brewer -- conducting literature research, compiled charts and graphs
- Sarah Loch, University of Technology Sydney (UTS) -- Initial critical assistance and guidance
- Annette Hilton (UTS) -- ongoing critical assistance and guidance

Research for the project was conducted through a number of sources. During the initial research stages this consisted primarily of collecting data from surveys completed by student parents/guardians.

Data to be used for comparative purposes regarding student well-being was obtained from Trades Norwest and Macquarie Anglican Grammar School through Survey Monkey. Meetings were held with staff from Nowra Anglican College but staff changes there made it difficult for their continued involvement in this project.

## **data analysis**

### **results and findings**

The efficacy of the pedagogy at Trades Norwest in being able to re-engage students was considered and evaluated through investigating the effectiveness of the unique program offered at the College. The four foundations of our program were assessed in light of how each was able to contribute to the holistic reframing of student perceptions of school and the overall learning process.

### **survey participants**

Participants in the research include both enrolled students and their parents/guardians.

Three Trades Norwest year groups participating in the data collection process:

- Year 10 -- 22 students, 20 male, 2 female. Ages 15 - 17
- Year 11 -- 23 students, 18 male, 5 female. Ages 16 - 17
- Year 12 -- 33 students, 26 male, 7 female. Ages 17 - 19
- A total of 40 caregivers responded to 24 questions in the Parent/Guardian survey.

Part of the initial research concept was to include collecting and comparing data gained from Nowra Anglican College and Macquarie Anglican Grammar School, Dubbo. The intention was to evaluate responses from students at Trades Norwest and to compare this with corresponding responses from the two partner schools. This proved to be increasingly difficult due to the pressures and practicalities of competing agendas within each school. However, Macquarie Anglican Grammar School provided data from senior school student responses to the Student Wellbeing survey.

## **student wellbeing data analysis - comparative data**

The student well-being survey comparative data from Macquarie Anglican Grammar School and Trades Norwest indicated that both schools satisfactorily addressed student needs with students responding they were generally content with their school life and the way the individual schools addressed their welfare issues and concerns. However, the most significant difference between the two schools was seen in student responses to the questions relating to their life outside school.

These areas were:

- personal life
- self esteem
- tension over school/homework
- overall home-life stress levels

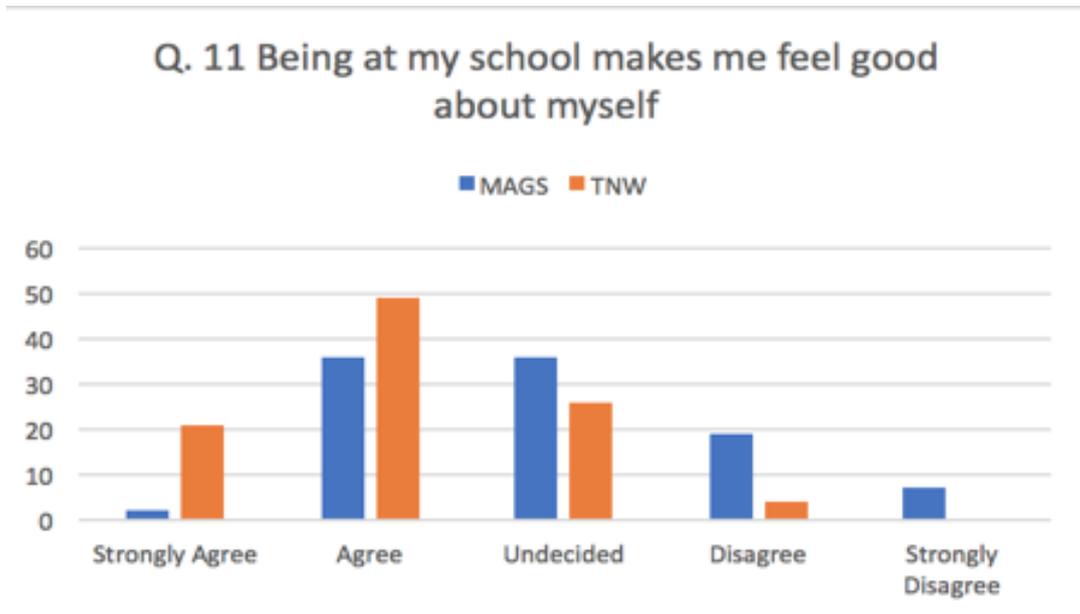
Considering the number of students at Trades Norwest who identify, either by diagnosis or by disclosure, with having mental health issues it is seen that a significant College goal of reducing overall stress levels and increasing student self-worth is being addressed. By reducing stress levels both at school as well as at home and by increasing student self-esteem, Trades Norwest is creating a holistic environment in which student educational and emotional needs can be met.

## **survey results relating to stress levels, self-esteem**

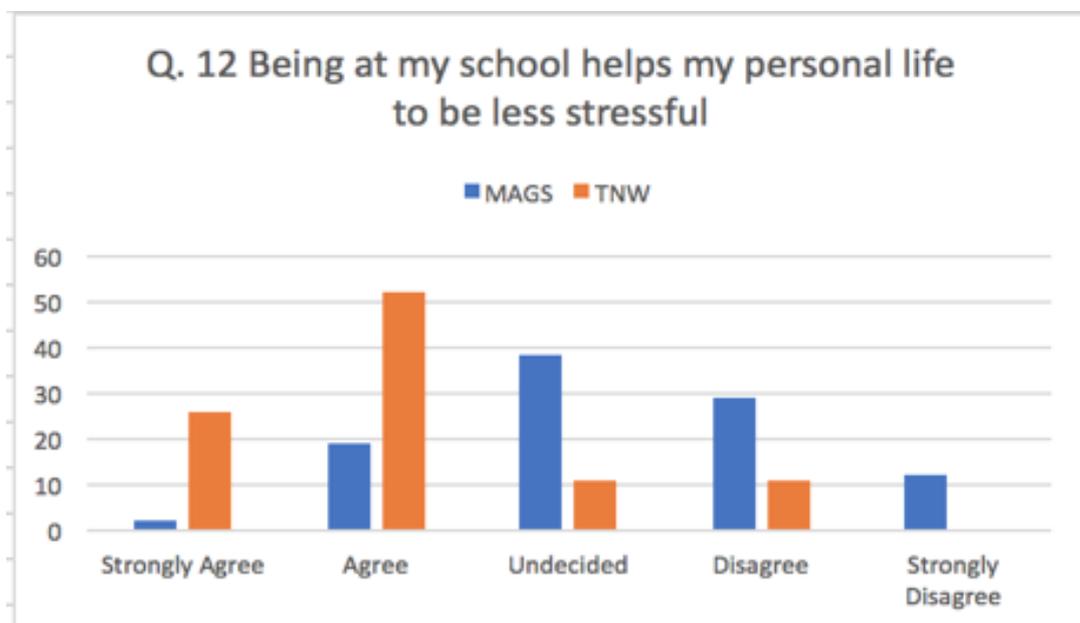
The graphs below indicate the success the College is having in relation to helping reduce student anxiety and stress levels. These results were sourced from students at Trades Norwest and Macquarie Anglican Grammar School, Dubbo in response to questions relating to self-esteem and stress levels.

Macquarie Anglican Grammar School offers a traditional curriculum for Stage 5 and Stage 6. A trade and TAFE component is placed into that curriculum. Both Trades Norwest and Macquarie Anglican Grammar School offer a Higher School Certificate (one – Macquarie Anglican Grammar School, a traditional ATAR based HSC and the other – Trades Norwest, a non-traditional non-ATAR based HSC). However, the composition of the student body as discussed in the following section of the project report is quite different. Trades Norwest have a student enrolment that comes from a previous educational environment that is disengaged in the learning process. Macquarie Anglican school would have some of these students but it is anticipated not as many, as a percentage.

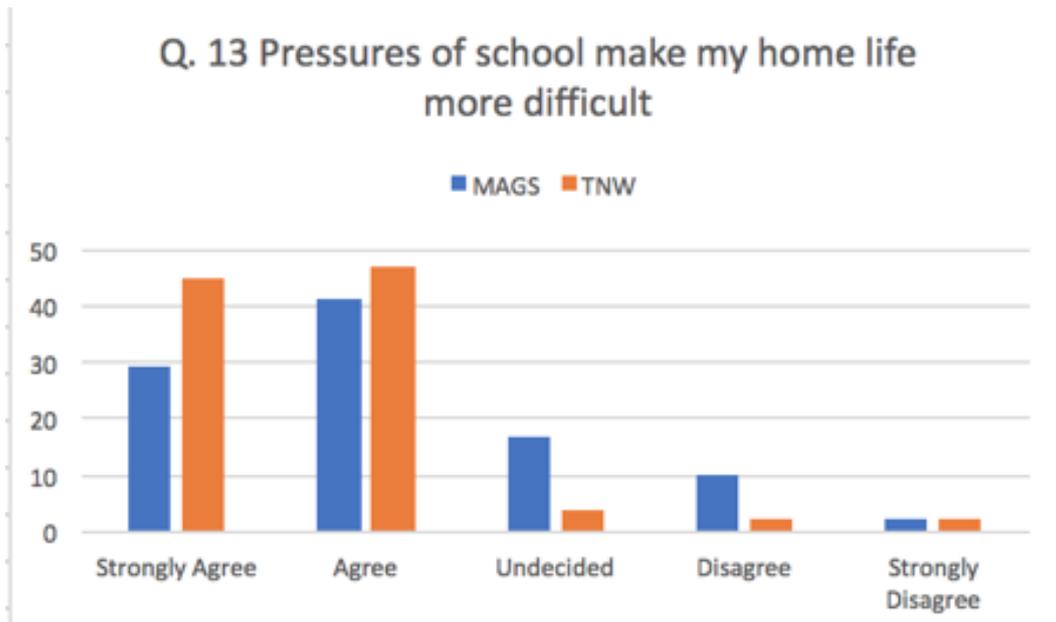
The three questions from the survey that are shown below deal with stresses and stressors for students. The questions concern pressures of school, the impact of school on personal self-image, home life and social life.



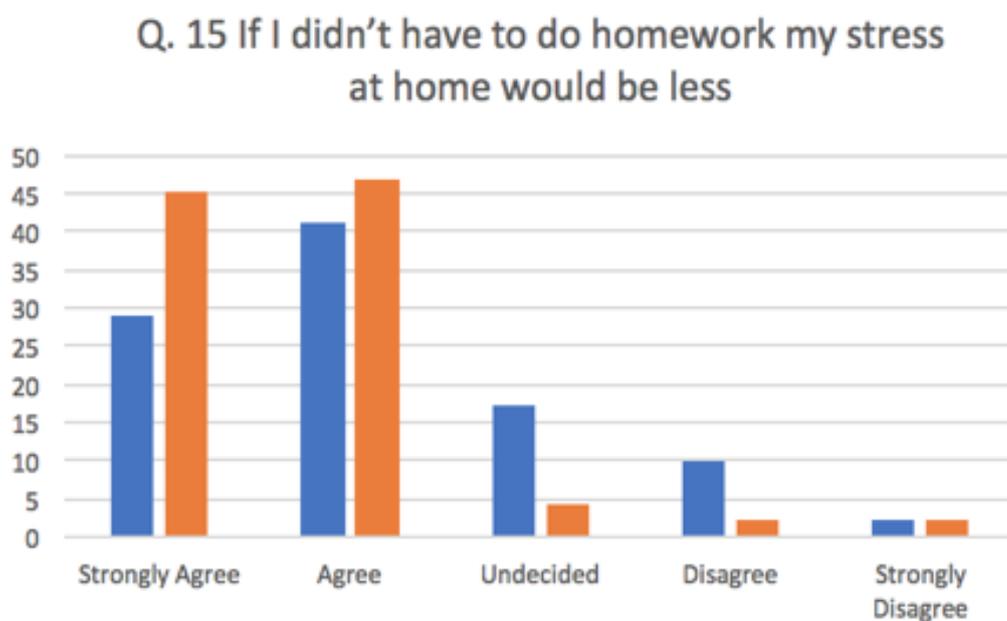
**Question 11** asks the students how school builds their self-esteem. As can be seen from the table, students from Trades Norwest believe that attending Trades Norwest makes them feel better about themselves – more so than the students from Macquarie Anglican Grammar. More students from Macquarie Anglican Grammar School, which has a traditional approach to teaching and learning, indicated that being at that school does not make them feel good about themselves. It must be remembered that the students enrolled at Trades Norwest come from a disengaged and at times disjointed background. To see them enjoying attending Trades Norwest and feeling better about themselves is a real victory for the college. The results from this question indicate a change in student perception about themselves when they are in a learning environment that is not in the style of a structured traditional schooling situation.



When looking at how students feel about school with respect to a less stressful personal life, (**Question 12**), again the curriculum design of Trades Norwest provides a solution. Because students do not have to rely on completing school work at home, school work does not become a stressor for them. Instead, students are free to further engage in the more vocational aspects of their course. The majority of the students from Macquarie Anglican Grammar were undecided or disagreed with the statement that school helps their personal life to be less stressful. The level of stress for students in a traditional educational environment has a significant effect on the personal life of students. Again, it must be noted that the students come from very different educational backgrounds with quite different levels of success in those backgrounds.



**Question 13** examines the pressures of school on home life. Trades Norwest specifically offers a curriculum delivery method that is designed to reduce the amount of work students are required to complete at home each day. Specifically, the authors believe this reduces the stress levels of the students and the family. Many students are enrolled at Trades Norwest because of “discussions” families have had regarding school in general and examinations and topic tests specifically. When asked, both groups believe that pressures from school have the ability to make home life difficult, but the Trades Norwest students agree (when Strongly Agree and Agree are added) to a higher quantum.



At Trades Norwest the project based learning booklets and the ability for the individual students to learn at their own rate mean that work does not need to be taken home for completion as homework. In **Question 15** the students from Trades Norwest overwhelmingly agree (91% for Strongly Agree and Agree) that this assists in reducing the stress levels at home. It must be remembered these students come to Trades Norwest with a background of disengagement and little or no academic success. Hence wherever possible, the Trades Norwest’s curriculum is designed to be completed by students at their own pace using learning styles that suit themselves during the working day at College.

## student wellbeing at trades norwest

At Trades Norwest the College counsellor interviews all students upon enrolment and is available for ongoing student counselling as necessary.

As of November 2016 there were 22 students in the Year 10 cohort. At the time of data collection the counsellor had spoken with twelve students. Students identified the following mental health issues. The outcome of their discussions are shown in the following table:

ISSUE	% YOUNG PEOPLE DIAGNOSED IN AUS. <sup>1</sup>	PROJECTED NUMBER IN AGE GROUP AUS. WIDE <sup>2</sup>	% INTERVIEWED FOR COHORT WHO IDENTIFY	PROJECTED NUMBER FOR COHORT
Depression	6.3	1 in 16	32	7 in 22
Anxiety	16.6	1 in 6	59	13 in 22

<sup>1</sup> Young people aged between 4 and 17 years

<sup>2</sup> The Mental Health of Children and Adolescents - August 2015

As seen in the table, the number of students enrolled at Trades Norwest who present with anxiety and depression is much higher than in the general population for young people. It would be interesting to gain data for the prevalence of these issues for students in schools in the local area.

This data indicates the strong imperative for a senior studies program that provides a safe and supportive environment for learning for young people and especially for those entering a trade career pathway.

The March 5, 2016 edition of the Sydney Morning Herald Good Weekend magazine contained a disturbing article by reporter Peter Munro on the suicide rate of Australia's tradies:

### **hard times: the suicide scourge among australia's tradies**

***Tough, physical work, poor job security and a macho culture that condemns the vulnerable. No wonder Australia's tradies are at high risk of breakdown and suicide.***

Peter Munro writes:

*"Suicide among construction workers - who are almost exclusively men - aged 15 to 24 is more than twice as high as other young males, according to the Australian Institute for Suicide Research and Prevention.*

*Every two days in Australia, a construction worker kills himself. They're six times more likely to die from suicide than through a workplace accident. For those under the age of 24, the increased risk is 10 fold."*

In his article, Peter Munro does not attempt to address the causes of these high suicide rates amongst tradies, rather he tells their stories in the hope that the community will understand that there is more to a tradie than just the often untidy and macho exterior.

The Australian Institute for Suicide Research and Prevention in their research paper, "Suicide in Queensland's Commercial Building and Construction Industry", noted that "younger workers (15 to 24 year olds) in the CBCI were at elevated risk of suicide, whereas older workers had very similar suicide rates to those of general Australian and Queensland males."

At Trades Norwest we are aware that we are sending young, vulnerable students into an industry in which there are considerable factors that may contribute to mental health issues. Consequently, there is a need to carefully consider and care for the mental health of our students who desire to pursue a trade career. Because of this, we have included components addressing mental health issues into some of our programs.

## learning barriers survey

This survey was released resulting from a visit to the site by Professor Martin Mills (Head of School, School of Education, Faculty of Humanities and Social Sciences, University of Queensland). As mentioned, Professor Mills outlined what his research had found with respect to disengaged students.

The question in our survey was,

**“What do you think were the barriers to your learning or engagement as a student at your previous school?”**

Students responded by writing up to five sentences describing what they believed were barriers to engagement and learning. These responses were sorted into eight criteria.

### LEARNING BARRIERS

1. Poor curriculum
2. Inability to build/develop effective relationships between staff and students
3. Inflexibility of the curriculum or organisation
4. Being unable to “clear a path to learning”
5. Student voice not heard/registered
6. Lack of service programs (helping in the community etc.)
7. A barrier (physical/emotional/dialogue) exists between the school and community.
8. There is a lack of sense of belonging

As seen in the graph below (Fig: 1), the responses from the students in the survey were able to be aligned almost directly to the barriers as outlined in the work of Professor Mills on disengaged students and the reasons for their disengagement.

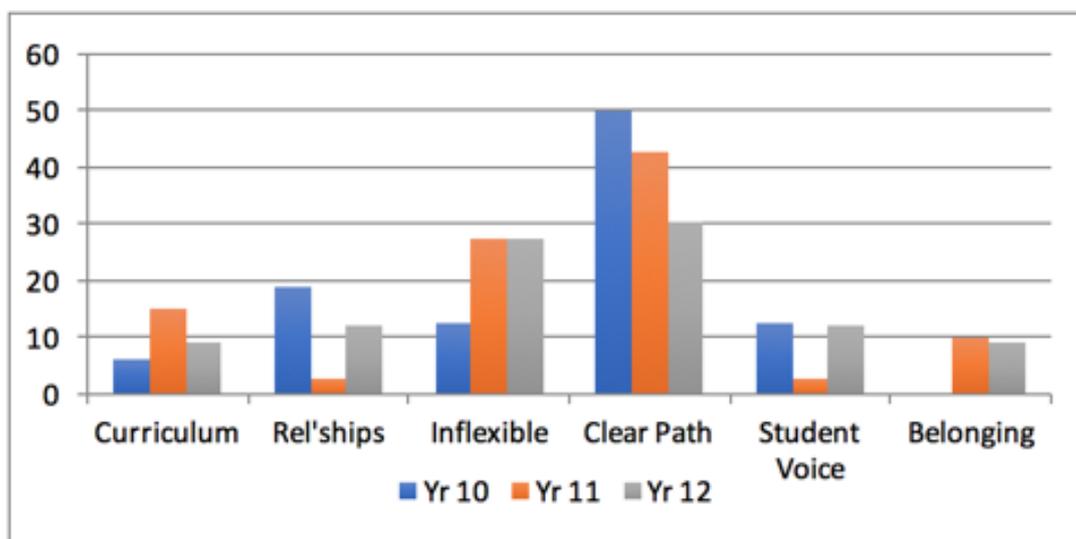


Fig: 1 Learning Barriers Survey Results-- all students

The strongest areas of student response were for barriers listed as numbers 3 and 4.

### RESULTS FOR BARRIER 3: INFLEXIBILITY OF THE CURRICULUM OR ORGANISATION

Students felt the over-emphasis on uniform in some schools occurred at the expense of learning. This is interesting as Trades Norwest has a uniform policy directed at both the College identity as well as health and safety concerns. However, it seems that because uniform regulations at the College are less regimented and in appearance are more like trade work clothes, students are more readily compliant to the wearing of a uniform at Trades Norwest.

Students also believed the way lesson material was delivered in previous schools hindered their engagement with the learning process. They believed much of the material was delivered too fast and with a lack of explanation. To some it seemed there was a set amount of work (some inferred an extravagant amount of work) that was expected to be covered in an often too short a period.

Students also thought that in the delivery of lesson material there was a lack of differentiation for abilities of individual students in the class – it was a “one size fits all” approach to teaching. The question arises as to whether this was an indicator of a lack of respect from the “school” towards the students, or from the fact that it is very difficult to cater for the differing academic abilities of many individuals in a class. In any case, students often found the work was set at a level that was too high or too difficult for them.

Finally, some students believed the school they were attending had too many students, which indicated they felt lost in the large numbers and therefore could not be heard.

### RESULTS FOR BARRIER 4: BEING UNABLE TO “CLEAR A PATH TO LEARNING”

In this area, students raised two main concerns that restricted their learning. These two areas -- distractions in the classroom and teacher delivery -- are arguably linked. Students desired lessons and material directed at them on a personal level with work tailored to their individual learning style and ability. This is clearly a huge ask of any teacher or system. Information that is clearly directed at the middle or top of the class group is not accepted in an engaging learning environment. However, Professor Mills that a system where students do not feel threatened by an overwhelming work load is a path that has not been cleared to more enable student learning.

Students have embraced the more informal and personal curriculum pattern and delivery at Trades Norwest. Also, students clearly want classrooms that are well-managed by teachers. Distractions in the classroom which lead to an inability for students to focus on their task, and therefore ultimately lead to disengagement, inhibit student learning.

The project based learning model used at Trades Norwest enables students to learn individually or in small groups. Choosing which learning method and lesson delivery a student prefers can change throughout any given teaching day. This gives the student a genuine feeling of having some control over their learning environment. This more readily allows students to learn and to embrace the work to be covered.



Something students did not mention, but would clearly be a barrier to the learning pathway is that of the anxiety and depression identified in many Trades Norwest students. This is covered in other areas of this document. This is in addition to those determined to have learning support needs such as dyslexia.

## teacher practice survey

NO.	QUESTION	SA	A	U	D	SD
		%	%	%	%	%
1	The project tasks at TNw are relevant and interesting for the students	60	40	0	0	0
2	I approach my students from an androgogical (adult learner) perspective	0	40	60	0	0
3	I try to contribute to the well-being of other staff members	80	20	0	0	0
4	I find it easy to encourage a culture of respect within the classroom	20	20	40	20	0
5	I prefer to teach students as a class group, rather than facilitate individual learning	0	20	40	0	40
6	I find it easy to get the students to complete work by a set date	0	40	20	20	0
7	Working collaboratively with my colleagues is an important part of my teaching practice	80	0	20	0	0
8	Students work through exercises on their own, at their own pace	80	20	0	0	0
9	I encourage students to work on their own, consulting a neighbour from time to time	20	80	0	0	0
10	I assist students to choose the order of questions to complete within the topic/unit of work	40	20	20	20	0
11	I encourage students to compare research methods to complete different questions	0	20	20	40	0
12	Students are encouraged to draw links between topics and move between topics	20	60	20	0	0
13	I am always respectful towards my colleagues	100	0	0	0	0
14	Mentoring, peer observation and coaching should be part of a formal school/college arrangement	80	20	0	0	0
15	All my students are aware there are clear and structured learning outcomes for each unit of work	0	40	40	20	0
16	All learning tasks should offer a degree of student choice, either by how they learn or how they display their learning. (Choice in how they do it or how they present it.)	20	60	20	0	0
17	I provide a motivational learning environment for my students	20	60	20	0	0
18	I am considerate of the different learning styles of my students	80	0	20	0	0
19	I use effective communication/questioning techniques to elicit appropriate responses	0	60	40	0	0
20	I use effective evaluation methods to improve both teaching and learning	40	40	20	0	0
21	I take an active part in continuing curriculum development	60	40	0	0	0
22	I encourage student discussion and questions	60	40	0	0	0
23	I work collaboratively with individual students to assist them complete their tasks	80	20	0	0	0

This survey was presented to the teaching staff at Trades Norwest. Teachers were asked their opinions on the organisation of the curriculum and on how it is delivered to the students. Questions were asked about professional learning opportunities within the College.

This survey was presented to the teaching staff at Trades Norwest. Teachers were asked their opinions on the organisation of the curriculum and on how it is delivered to the students. Questions were asked about professional learning opportunities within the College.

There were 23 questions in the teacher survey. Responses to each statement were collected using a Likert scale (Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree). For each question, staff were able to add a comment/response. However, written comments/responses were not necessary. The results of the survey were collated and the tallies were expressed as percentages and appear in Fig: 2 and the accompanying graph (Appendices Fig: 7). An analysis of the results appears after the graph, below.

The small number of respondents did make it difficult to draw accurate conclusions. However, the authors believe the data obtained was a relevant reflection of the College teaching practice. Teaching staff believe that students at Trades Norwest are being treated as young adults. Further, they believe the curriculum format presented to the students reflects many of the principles of adult learning (Andragogy) as prescribed by Alexander Kapp (1833) and later by Malcolm Knowles.

### **QUESTIONS AND RESPONSES TO THE TEACHER SURVEY FELL INTO THREE CATEGORIES:**

- **Teachers see themselves as both academic and non-academic Mentors.**

Questions 2, 4, 6, 17, and 19 in the survey dealt with “Teachers as Mentors”. As discussed, both academic and non-academic (i.e. social/life) skills were placed in this area. Building a positive culture, time management, motivation, communication skills and techniques, life skills, developing a culture of respect, viewing students as young adults, developing staff resilience and how to work as part of a team, were all included here.

- **Students are treated and taught as young adults.**

Students are enrolled in TAFE trade courses or in other training institutions. In these educational facilities, the emphasis is on teaching young adults. However, this is a situation that is not always received in the most positive of terms. At Trades Norwest some students, often as young as 15 in Year 10, find it difficult to respond with a mature and positive manner. As one teacher remarked: “Sometimes, with mature Year 11 or Year 12, it is easy to treat the students in a more mature manner but not many Year 10 students are at that same point”. Many teachers agreed with this comment. This could be because of the maturity levels of some students in their class, depending on whether the teachers taught in Stage 5 or Stage 6. From comments provided it appears as if most or all of the teachers made attempts to reach out to the students as treat them as young adults.

*The emphasis is on teaching young adults*

- **Teachers are part of a Professional Learning Community.**

1. The main purpose of educational environments is student learning and the driving factor in how well students learn is teaching quality. Teaching quality can be improved through continuous professional learning. The most significant and supportive area in the development of teaching staff is found in being a part of a professional learning community. Professional Learning Communities allow teachers to work co-operatively and collaboratively. Teams can examine, evaluate and modify learning expectations for their students as well as the instructional strategies required to promote change. Hattie (2010) points out that the main feature of research evidence is that the “biggest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers”.

*What is needed is a rethinking of roles for teachers and students*

Therefore, what is needed is a rethinking of roles for teachers and students. This allows students to show the self-regulatory attributes that are most desirable for learners, such as self-monitoring, self-evaluation, self-assessment, and self-teaching. Hattie believes that students learn best when teachers are actively learning about their “trade” themselves. Therefore, the professional learning community existing at Trades Norwest serves to improve learning outcomes for students and improves teacher delivery of information and skills. In her article, Celine Provini states: “Professional Learning Communities work best when schools:

- have a culture that supports collaboration
- have the ability to take an objective/macro view of school efforts
- have shared beliefs and behaviours”

Teacher survey questions 3, 7, 13, 14, 20 and 21 (See Fig: 2) relate to how our teaching staff see themselves as being involved in a Professional Learning Community. All questions asked of the teachers saw an overwhelming affirmative confirmation of this, feeling that they all contributed and were active in continuing the collaborative development of the curriculum as delivered at Trades Norwest.

*“It’s necessary for all of us to work collaboratively.”*

It is necessary to acknowledge that the issue of peer mentoring and observation appears to be a preferred position. However, for this to process to be used effectively the processes required in this need to be more clearly defined. Part of this defining would need to acknowledge the experiences and qualifications of each member of staff and how these attributes can best be used.

**Is there any particular thing about the teaching staff and approach that you like?**

*teaching individual positive issues approachable willing*

As students complete tasks by primarily working independently in the classroom, there is, however, a degree of interaction between students and the teacher/mentor which plays a large part in assisting students to achieve academic understanding and success. Teaching, in the traditional format of a teacher-centred classroom practice, does not exist as a pedagogical model at Trades Norwest; instead our pedagogy is best described as being learner centred.

- **Teachers are actively involved in student learning.**

Students at Trades Norwest are able to learn and to complete tasks at their own pace. Classes are composed of multi-year groups. Classwork is available to the individual student via a digital platform using the Canvas learning management system in combination with the suite of google apps. This digital platform enables the teacher/mentors to check-in on the academic progress and comprehension of each student as they move through each topic. Students can access this online material at any time during the day.

Each unit of work is prepared by staff and includes learning outcomes and syllabus references. By working through each unit, students cover the syllabus requirements as set down by the NSW Educational Standards Authority (NESA).



As stated in *Student-Centred Learning (2014)*, "... student-centred learning/instruction is often associated with "self-guided" or "self-paced" learning, or with learning experiences that occur outside of traditional classroom settings or school buildings, such as internships, apprenticeships, independent research projects, online classes, travel experiences, community-service projects, or dual-enrolment courses". The self-paced completion of work units that are relevant to the student's current and future life experiences exemplifies the concept of learner centred education at Trades Norwest.

Shirley Hord (2009) states, "changing this teaching/learning process from instructor-centred to learner-centred (whether for children or adults) constitutes a fundamental change." Hattie (2010) maintains that teachers need to intervene to improve the learning outcomes for students, particularly when the content is new. Without making the classroom a teacher-centred environment, teachers interact with students by having more personal time with individual students or with small table groups. This approach helps improve the quality of student learning as well as helping to achieve learning objectives. Questions 8 and 9 in the student Teacher Survey (Fig: 2) examines these areas.

*Student centred learning is demonstrated when students work independently and are able to complete prescribed work at their own pace.*

Despite Trades Norwest being a College with a small student population, it is catering to its clientele. Students enrol wanting a vocational credential as well as a Higher School Certificate. The teaching practices are innovative and the development of a learning community serves to enhance teacher professional development as well as to improve student learning outcomes. Students are encouraged to work independently with self-assessment as a recent development. Teachers treat students with respect and make every effort to teach and work with students as young adults.

NO.	QUESTION	SA	A	U	D	SD
		%	%	%	%	%
2	I find doing project classwork more interesting than normal class work.	17	40	34	9	0
4	I like being able to work on my own tasks at my own pace.	67	24	4	2	2
5	Doing project work allows me to be more engaged in class.	28	33	35	4	0
6	Having project classwork to do makes the classroom environment more enjoyable.	24	39	28	9	0
7	Project work allows me to waste too much time.	4	15	21	36	23
8	Being able to work at my own pace allows me to take a break when I need it.	52	39	7	2	0
9	I would prefer to have a teacher actually teach me in class than do project work on my own.	2	15	2	28	26
10	I like doing research work to complete my tasks.	16	49	18	11	7
11	I find it difficult to stay on task in the classroom.	5	19	26	38	12
12	Project work is less stressful than normal classwork.	40	33	18	9	0
14	The project tasks do not interest me.	7	16	35	28	14
15	Project tasks are relevant and interesting.	16	39	30	16	0

Student Perceptions on Teaching Practice Survey Table (Fig: 3)

## student perceptions on teaching practice

The Teaching Survey was released to all students in attendance on a specific day. As with other surveys, our students were asked to respond to a series of questions using Likert Scale of Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree. Responses were tallied and presented as a percentage. This survey asked students about which aspects of the teaching program at Trades Norwest best suits them. The table (Fig: 3) appears in this section of the project report. A graph of the results appears in the Appendices (Fig: 8).

## curriculum development

The curriculum at Trades Norwest is delivered in a considered manner designed around the principles of andragogy. There is flexibility, choice and routine. Andragogy uses an approach to learning that is often problem-based and collaborative rather than didactic. We have found that andragogic processes better serve to engage learners at Trades Norwest and help to impart equity between teacher and learner. Student learning is carefully monitored and progress is celebrated. Students at Trades Norwest are encouraged to self-assess. This process involves conversations with their teachers and other students as the project builds. The project based learning model that exists at Trades Norwest exemplifies this approach. We have deliberately set up a “less to more” learning culture that encourages students to take more responsibility for their own learning. This involves dialogue with the teacher on self-graded assessments and encourages critical self-reflection and less reliance on direct teacher supervision. In this, students are able to work at an appropriate pace that, when monitored by the teacher, produces outcomes that have been challenging, yet not overwhelming.

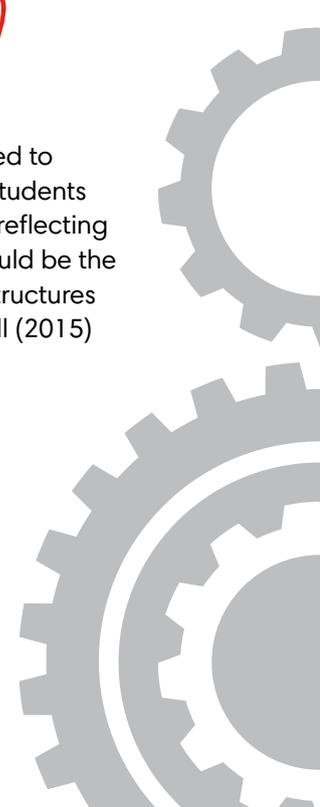
*Project based learning model with integrated outcomes*

Generally, students did not respond positively to the pedagogical methodology of their previous schools which relied on teacher centred learning processes and the inflexibility of delivery. Of course, this method does work well for many students, but students who enrol at Trades Norwest, largely, have had much difficulty with this approach. However, when asked about project work and the flexible approach of the College to their learning and completion of tasks, students responded overwhelmingly in favour of their current learning environment. (Question 2; 57% Vs. 9% and Question 8; 91% Vs. 2% respectively).

*“It makes them feel like they are being treated like an adult.”*

From our Barriers Survey, it was seen that some students wanted their learning to be more related to real life and their foreseen vocation. Question 15 in the survey examined this response. 55% of students surveyed said they thought the tasks at Trades Norwest were relevant and interesting, therefore reflecting real life. 15% of the surveyed students thought this was not the case. We believe these results could be the result of poor curriculum planning, poor pedagogy on behalf of the classroom teacher or the structures and systems of their previous schools. This response confirms the findings of Murray and Mitchell (2015) when they state *“course content is vital. Curricular materials that are vocational, practical and linked to skill development for employment assist the learner engagement”*. Also, McGregor and Mills (2012) state *“Curricular materials that are vocational, practical and link to skill development for employment assist learner engagement”*.

In response to the parent survey question, *“What are your thoughts on the self-directed integrated program learning at Trades Norwest”*, one parent summed up their feelings by stating, *“It’s a lot better than regular school. It helps them take more responsibility for themselves. It also makes them feel like they are being treated like an adult. On top of that it helps them to go at their own pace.”*



# trade survey

NO.	QUESTION	SA	A	U	D	SD
		%	%	%	%	%
1	What school year are you in at TNW?	67	Yes		33	No
2	I am currently doing a trade	82	31	1	0	5
3	Please indicate how you feel about completing a trade qualification	0	33	24	24	17
4	If TNW didn't have an emphasis on trade I would still come to school at TNW	16	42	25	10	0
5	The trade focus in each of the term tasks is relevant to me	4	13	62	27	6
6	The tasks don't really have a trade focus	32	50	16	1	0
7	A trade focus makes school more relevant to me.	26	58	9	5	1
8	At TNW I am treated and feel more like an adult.	24	49	21	6	0
9	The way I am treated at TNW encourages me to behave in a more mature way.	21	44	16	0	0
10	An emphasis on trade at TNW will prepare me for entering a trade	30	47	22	1	0
11	The emphasis on trade at TNW will give me an advantage when applying for a job.	10	56	29	4	0
12	Having a trade focus at school helps me to be more engaged in class.	16	39	30	16	0

Trade Survey Table (Fig: 4)

The Trade Survey was issued to all students at the College. They were asked to respond to a series of questions using a Likert scale with students asked to Strongly Agree, Agree, undecided, Disagree, Strongly Disagree. The responses were then tallied and presented as a percentage. The table For Years 11 and 12 (Fig: 4) appears in this part of the report. An explanation for this is in the following paragraphs.

Trades Norwest seeks to provide a framework for student career development. This approach is appreciated by the students. A curriculum that has a flexible trade/vocational focus presented by teacher/mentors is the reason many students enrol at Trades Norwest. Results of this survey and others analysed in this report indicate Trades Norwest serves a select group of young people, providing a curriculum that has meaning and is flexible, in assisting in the attainment of an SBAT.

The Trade Survey was conducted in April 2017 and was issued to all students in Years 10, 11 and 12. However, when considering the results, we realised that this would have been more relevant if completed late in the year. At the time of survey delivery, Year 10 were in the very early stages of their first year at Trades Norwest and many Year 11 students were yet to engage in an SBAT. Year 10 begin their Work Experience program later in the year, so their responses appear to be at times ill-considered. As a result of this, we deleted the Year 10 responses from the survey analysis

**Does having a trade focus make a difference to the way you view your child's learning environment?**

learn school definitely option relevant trade

## vocational pathways?

There is no single path to achieving a vocational career. However, at Trades Norwest students are at the centre of vocational development and career path planning. This is one of the reasons student responses to questions 4, 10 and 11 in the survey recorded high values. In responding to question 4, 58% disagree or strongly disagree with the statement "If Trades Norwest didn't have an emphasis on trade I would still come to school at Trades Norwest. This negatively posed question was answered strongly in the negative, indicating that the trade component of the curriculum was an important consideration to current student enrolment. Questions 10 and 11 examine a similar theme, i.e. trade/career preparation. In Question 10, 87% of respondents agreed or strongly agreed that having an emphasis on trade in the curriculum would better prepare them for entering a trade. However, in response to Question 11, 69% agreed or strongly agreed that the trade aspects of the curriculum would give students a stronger advantage when applying for a job.

Questions 5 and 7 asked students to think about the relevance and role that the trade focus at Trades Norwest has on them. Overwhelmingly (58% Vs 10%), the students believe the units of work with their trade focus are relevant to their learning. As well, the trade focus (82% Vs 1%) makes the college more relevant to them. When asked about their engagement in class and the reasons why they might be more engaged, the students responded by saying they thought the trade focus made them more focused and engaged in class. They see relevance in the work they are doing.

Question 9 asks students about their belief that they are treated in a more mature manner (73% Vs 6%). Question 8 also examines the belief of the students on how they are treated. 84% believe they are treated and feel more like an adult as opposed to 6%.

Examination of the results as shown in the figure indicate the value in attending Trades Norwest and being enrolled at Trades Norwest as being respected and valued as individuals and in the preparation they receive for their entry into a work force. Students are happy to enrol in the course and the parents see the benefits in the direction the College offers for the students.



## establishing business links

Through the efforts of the College Industry Liaison Officer and our “Meet the Tradies” days, Trades Norwest works closely with industry and businesses to provide as comprehensive career development pathway as possible.

College representatives participate in discussions with such organisations as the NSW Chamber of Commerce, the Apprenticeship Engagement Forum in order to maintain connections with the trade world.

Year 10 students and interested Year 11 students have presentations from various industry employer organisations in order to gain a fuller understanding of trade options available. In 2017 the College has hosted representatives from Plumbing, Roof Tiling, Glazing, Fitness Industry, Signs and Graphics and Wall and Ceiling Linings.

Students are able to acquire those specific skills that prepare them for their work and in the acquisition of these skills to undertake training that contributes toward a career in the trades or other skilled jobs.

Trades Norwest is confident in the skill outcomes arising from the curriculum and instructional process. These will be more than favourable when compared with outcomes from traditional academic environments.

## graduate outcomes

### EXIT SURVEY YEAR 12, 2016

1.	The number of students enrolled in Year 11 as of February, 2015	34
2.	The number of students who graduated at the end of 2016 (This includes new enrolments).	33
3.	The number of graduating students who had an SBAT.	26 (78%)
4.	The number of students enrolled in Year 11 in 2015 who graduated as Year 12, 2016.	21 (62%)
5.	The number of those students who had an SBAT	20 (95%)
6.	The number of students enrolled after initial census in Year 11 (i.e. after February 2015)	12
7.	The number of those students who gained an SBAT	7 (58%)

62% of students initially enrolled in Year 11 (2015) graduated in 2016. That is, of the 34 students who enrolled in Year 11, 21 graduated at the end of Year 12. Of that 62%, 95% graduated with a HSC and an SBAT. There were 12 students who enrolled post census in Year 11, 2015. Of those 12, 7 students (58%) graduated with an SBAT and a HSC. However, all these students were able to graduate with an HSC.

### academic outcomes year 12, 2016

The Year 12 cohort in 2016 was the largest to graduate under the new Trades Norwest model. In common with previous cohorts through ATCWS these students all completed studies in English and in General Maths. An analysis was conducted of the results of school-based assessments in these two subject areas for each year of the operation of the College either as ATCWS or as Trades Norwest. The results for prior year groups was obtained from records of the moderated school-based assessment marks. The school-based assessment marks for the 2016 were the weighted raw marks for the assessments in these subjects. The cohort of students in 2016 achieved the highest average marks in their school-based assessment marks in English and Mathematics General of any cohort to date.

## case studies

On the following pages are some individual stories clearly demonstrating successful missional outcomes for the students.





# case study 1

## Taylor F – SBAT Educational Support

Taylor joined the College at the very end of 2014 to try out the learning environment to see if it would suit her. She had a diagnosis of anxiety and Autism Spectrum Disorder at a high functioning level. Her anxiety was preventing her from participating successfully in secondary education. In 2015 Taylor joined the first large cohort in Year 11. She chose to study Educational Support as her vocational area and gained a traineeship at a local primary school in the Learning Support area. Taylor's academic strengths were able to shine through in her participation in the Trades Norwest program and she was able to successfully complete her HSC and is now in appropriate employment.

At the end of her Year 11 studies Taylor sent this email to the Principal:

*Dear Mrs MacKinnon,*

*My first year at Trades Norwest is coming to a close and I would like to personally thank you and the staff of Trades Norwest for making this year very rewarding. Not just for me, but many other students.*

*My move to Trades Norwest was not only a very good decision education and anxiety wise but it has helped me develop the techniques I need for the real world and has helped me see and deal with situations in an adult-like way.*

*I have had situations happen in my personal life, college life and work life that in the past I would have needed the assistance of other adults, but this year I feel like I have grown up and I am now able to handle a situation and think realistically and come up with my own solution.*

*The support I received from yourself and Mr M (Industry Liaison Officer) at the beginning of my time at Trades Norwest, regarding my trade and work was fantastic. I felt supported and felt like I had many people who believed that I could do amazing things in the work force. I have come to build a good and respectable bond with my teachers within the school, particularly with Mrs T (Business Services), Mr H (Mentor teacher) and Mr H (Chaplain). Mr H (Chaplain) has helped me get back in touch with my faith in God and he has helped me use my knowledge of the Bible and God to get through many tricky situations, relationships and achieve many goals. Mrs T has been a never-ending support line for me ever since I met her back in 2014. Not only has she been an amazing Business Services teacher but she's also been a very caring and loyal friend. Mr H helped me develop mathematic skills I thought I couldn't get back from being absent in Mathematics in year 9 and 10. He always made me laugh and feel truly welcomed in his classroom.*

*Since enrolling in Trades Norwest my anxiety levels have decreased to a point where I hardly feel anxious at all. My relationship with my mum at home has increased significantly and we are now both living equally and are having a great time living together. My relationship with my Grandfather (although already great) has improved and he now feels more like a father to me than a grandfather.*

*I have made some truly amazing friends, friends I believe to have for some time after college. To say that coming to Trades Norwest has changed my life is an understatement. Trades Norwest has changed my outlook on life, made me feel healthier, more supported, appreciated and loved. I am forever thankful to everything every member of staff has done for me. I have thoroughly enjoyed my year at Trades Norwest and I am very eager to start next year and experience everything new that college has to offer.*

*Thank you very much,  
Taylor F*

## James K – SBAT Electrotechnology

James started at Trades Norwest (while it was still branded ATCWS) in Year 12 in 2014. Prior to coming to the College, James's family had moved to Queensland and then returned to NSW where James enrolled at Arndell Anglican College. James had found it difficult to settle back into the NSW HSC program and decided he wanted to pursue a trade. We were able to accommodate James' study and he started his Electrotechnology course and quickly gained an apprenticeship. James has needed to change employers twice and the support the College has been able to provide to him has meant that these changes were able to occur smoothly. James is now in the final year of his apprenticeship and will be completing studies for his electrician's licence towards the end of 2017.

James's parents sent this email:

*Dear Gaynor,*

*We would just like to say THANKYOU !!*

*Thankyou for all of your hard work and dedication to giving the Students the very special opportunity of attending your College. When we came to you we had a son who was lost in life, the moving between States, the different curriculum, friends, his whole life was upside down and he was a cranky teenager. The change in James over the past few months has been amazing. I have my loving sweet happy boy back, the smiles and the love is back, my household is at peace again and taking the time to reflect over the past couple of years I know that I can attribute the peace in James to the very big difference that you and your wonderful team have made in his life. You have all given him the opportunity of self confidence, given him the ability to show some maturity as a young adult [not just a student among hundreds in a normal school environment and I feel that this has restored a lot of his trust and faith and allowed him to relax a little and to grow within himself without so many self confidence issues. So, Thankyou for believing in your college and for being there. you have certainly made a very positive improvement to our lives and this year has been such a blessing for us. We wish you all the very best.*

*Kind Regards,  
Matt and Ros.*

James said of his time at the College:

*My choice to come to ATCWS this year was good because.....It allowed me to start an apprenticeship and finish my HSC in the same amount of time as studying at an everyday school. ATCWS / Trades Norwest found me an apprenticeship and got me on my way to being a qualified tradesman.*

*It is good to study for the HSC and/or a trade at ATCWS because ....It is a high standard, relaxed and comfortable place to study. There is constant support from the teacher and flexible on your work hours. The College provides guidance to get the best out of your future.*



# case study 2





# case study 3



## James B – SBAT Carpentry

James started in Year 11 at the College in 2014 (while it was still branded ATCWS). He was struggling at his previous school to remain focussed on his studies. James prompted his mother to investigate the possibility of enrolling at the College and following the enrolment interview decided this was where he wanted to be. James chose Carpentry as his trade and was able to gain a school-based apprenticeship early in 2014. There were only 2 other students in the Carpentry group at that time and one of those had to leave College for health reasons. James made the decision to move his Carpentry studies to a TAFE where the class would be bigger.

James' mother emailed her appreciation of the College's program

*Dear Gaynor Mackinnon and the ATCWS team*

*We want you to know that we are very pleased with the quality of service ATCWS Glenwood has provided . My son James was at a crossroad at the beginning of the year and I was at logger heads trying to find an educational institution that could keep him engaged in learning, so as to complete his HSC. The format of learning at the school has enabled my son to continue his HSC and undergo an apprenticeship at the same time. We sincerely appreciate the responsiveness of Mrs MacKinnon and her team at ATCWS Glenwood. They are professional and always attentive to my son's needs . He enjoys his time there and we have found the combination of work, trade training & school to be a perfect fit for us. I have no hesitation in recommending ATCWS to other parents.*

*Sonia B*



## Alex F – SBAT Carpentry

Alex started in Year 11 in 2013 at ATCWS under the former model of studies and decided to continue into Year 12 with the new flexible learning in 2014 to complete his HSC. Alex was studying Carpentry although he was not completely sure this was the right pathway for him. On completing Year 12 Alex continued studying Carpentry at the College. Late in 2015 Alex lost his apprenticeship. His first reaction was to come to the College and talk to our Industry Liaison Officer and we were able to help him to keep on track with his studies and to find a new apprenticeship. Although not necessary, Alex chose to have the new apprenticeship sign-up at the College with our Industry Liaison Officer present to support him. A good outcome to a situation that too often ends in young people leaving the industry and a great tick of approval for the work of staff at the College.

*My choice to come to ATCWS this year was good because..... I am able to take control of my learning in a way that is easier to manage. Teachers at ATCWS understand how different this school is from a normal high school and can help you to complete work to the level you are capable of.*

*It is good to study for the HSC and/or a trade at ATCWS because .....ATCWS is a good place to do both your HSC and trade as it has taken the stress out of the HSC exams making it easier to focus on your trade at the same time.*



# case study 4





## **Riley L – SBAT Carpentry**

Riley started at the College in Year 10 in 2016, transferring from another Christian school in the local area. He had suffered some health issues in the past but has now overcome these with a healthy diet and lifestyle. Riley was keen to become a Carpenter and showed strong skills in this area. At the end of Year 10 Riley indicated that he would like to work as a cabinet maker and found a school-based apprenticeship with a kitchen manufacturer. At the start of 2017 he began his trade studies at Lidcombe TAFE while continuing at school at the College. He found that the course and employment were not suited to his interests and so returned to the Carpentry class at the College and found a school-based apprenticeship with a local builder where he is doing very well and proceeding well with his Carpentry studies.

*Riley's father told the Principal during Term 2 in 2017 that the decision to send Riley to the College was the best thing they had done. Even considering various issues that had arisen during Year 10 (and were very successfully resolved) he considered that the support the College has provided to Riley was outstanding.*

case

study 5

## Jordan W – Cabinetmaking

Jordan joined the College in Year 11 towards the end of Term 3 2015 from a Catholic secondary school. Jordan was a very anxious person who also had learning difficulties. Jordan chose to study Carpentry at Trades Norwest. He had several work experience placements with carpenters but did not find a suitable fit. During Year 12, the College was able to assist him to find a placement with a joinery firm and after a few false starts is now settled in a good apprenticeship as a joiner. Jordan was able to overcome his anxiety to deliver a heartfelt graduation speech at the Presentation Night in November 2016 where he expressed extreme gratitude for all the College had done for him. Jordan continues to visit the College regularly to keep in touch with staff who supported him so well.

case study 6





Mrs MacKinnon with Year 12 2014

## conclusion

How is the pedagogy at Trades Northwest Anglican Senior College reframing the learning environment for students whose needs have not been addressed in a previous educational environment?



From its origins, Trades Norwest has worked to offer a radically different learning environment for students. For those students who have been disengaged from the learning process we have sought to provide an opportunity for them to reconnect with learning. These endeavours are validated by educational research literature as addressed in our report. The cornerstones of the College foundations have been re-enforced by a series of surveys issued to parents, students and staff. The learning environment offered at Trades Norwest has been deliberately reframed to offer students the opportunity to enrol in a School Based Apprenticeship or Traineeship, gain the award of Higher School Certificate without the need to sit formal examinations and to achieve a Certificate II or III in Business Services.

The learning environment prevailing at Trades Norwest includes various components which build to enhance student learning processes and help support students who found previous school systems and curricula difficult to follow and therefore were not able to achieve an appropriate level of success. There are five main areas addressed by the College:

#### **SMALL CLASS SIZES**

The number of students in each learning group is kept deliberately small. This enables the teacher/mentors to better know their students. This relationship, as part of the Well-Being component of the Trades Norwest foundations, encourages and enables the teacher to work closely with individual students, quickly overcoming any issues that might arise from either their classwork or occupational work placement.



## **INTEGRATED PROGRAM**

The integrated teaching model is based on a variation of a Project Based Learning (PBL) model using a modified adult learning delivery process. Learning materials have been developed and delivered in a way where students can learn independently or in small groups. This material is completed at the student's own pace as opposed to that of the class or cohort. When kept "on track" and learning at a pace that suits them, we have found that students are more able to engage with the learning process and therefore become better learners. They also see the work as more meaningful in that it relates to their future careers. Added to the concept of self-paced learning is an ability for students to self-assess which further enhances the students' connections to the learning process. The structure, content and delivery of the curriculum is designed specifically to re-engage students in the learning process and to offer them direction in learning.

## **TEACHER MENTORS**

When staff are interviewed and selected they are not necessarily employed because of their teaching area or previous academic achievements, but more importantly because they have an empathy towards the students and have the desire and ability to practically engage with the philosophy of the College. The teacher mentors assist in the learning process rather than being at the centre of the learning process. The professional learning programs and culture that exist in the College help to enhance the ability of the teaching staff to mentor the students through their class work and vocational employment/placements.

## **MODIFIED CURRICULUM**

In Stage 6, the curriculum is presented as a series of integrated trade based units of work. By having each unit developed with a vocational emphasis, the learning is more directed and more meaningful. Each unit is designed to take approximately 10 weeks to complete. The syllabus outcomes as prescribed by NESA are integrated throughout the units of work. This enables students to enrol mid-term at Trades Norwest without being disadvantaged by having missed class lessons/work as delivered through following a traditional linear lesson program.

There are no formal examinations at Trades Norwest, yet students can satisfactorily achieve a non-ATAR Higher School Certificate. With a more relaxed task completion time frame and the absence of homework, combined with the lack of examination performance anxiety, we believe the College is helping to enhance the overall well-being of our students while raising student ability to demonstrate academic achievement.

## **SCHOOL BASED APPRENTICESHIP AND TRAINEESHIP FOCUS**

It is the goal for every student at Trades Norwest to have some form of School Based Apprenticeship or Traineeship. Students become aware of this online via the College's web page, via all literature about the College and at the enrolment meeting with the Principal. For most students an SBAT forms part of the required number of units to complete the course of study for the award of Higher School Certificate. The College employs an Industry Liaison Officer to work with the students and their parents to find suitable employers for the College's SBAT program.

Even though it is the College goal to have all students engaged in an SBAT, we also recognise that some students may not be able to gain an apprenticeship during their time at the college. However, students can still attend one of the TAFE courses offered on-site at Trades Norwest as the College has its own attached Registered Training Organisation – TechWest Sydney. Courses offered on-site by Trades Norwest/TechWest Sydney trainers are Carpentry, Electro-technology and Business Services. By undertaking training in one of these areas, students are able to gain valuable experience that can help them achieve an apprenticeship post Year 12.

When considering the research question originally proposed, "*How is the pedagogy at Trades Norwest Anglican Senior College reframing the learning environment for students whose needs have not been addressed in a previous educational environment?*", it has been found that Trades Norwest is meeting student needs in a number of significant ways. During the research and development stages of this report it became increasingly apparent that the College was addressing all of the barriers to student engagement as identified by McGregor and Mills. In fact, these same barriers were those that had been identified when structuring the foundations of the College philosophy and practice.

Seven barriers to learning as identified by McGregor and Mills and the steps Trades Norwest has made in addressing these barriers:

- **THE CURRICULUM AS OFFERED** – A project based integrated subject program which readily accommodates individual student learning needs. A distinct and relevant trade focus.
- **TEACHING PRACTICES WHERE TEACHERS CONTROL THE PACE, CONTENT AND TEACHING STRATEGIES** – Students are able to modify the work units to accommodate their own chosen trade or career path. Student self-paced learning.
- **STAFF RELATIONSHIPS WITH STUDENTS** – The classroom teacher functions more as a learning facilitator than as a teacher. Students are not instructed and directed as a homogenous group; rather they are addressed on an individual basis. The facilitator acts as a mentor who understands and makes allowances for each student.
- **ORGANISATION OF THE SCHOOL** – the school is not highly structured around year-based groupings and in fact encourages students to mix across year and age groups. There are no bells to signal start or end of lessons and students learn to manage the timing as in a day at work.
- **SIZE OF THE SCHOOL/CLASSES** – Classroom numbers are kept deliberately small so that teachers have time to know and understand the learning style of each student.
- **DISCIPLINARY PRACTICES** – An emphasis on dialogue with the student rather than a disciplinary/punishment based system
- **UNIFORM** – A more “casual” approach to school dress code reflected in students being able to choose the uniform items they would like to wear. These are chosen from various styles and colours of tradie clothing, with each item bearing the College logo.

Trades Norwest has been able to refocus and re-engage many students who have come to the College with a record of poor school attendance, poor academic record, being ill-disciplined and disruptive along with other significant signs of academic disengagement. The College has been able to achieve this outcome by making school relevant, accommodating and reasonable, with lessons delivered in a bespoke learning environment which students have been able to design around their own particular needs, abilities and learning styles.



# recommendations

## mentoring programs for staff and students

The project team believe that both the staff and students require mentoring to some extent. We understand that for different individuals the amount of time required for mentoring would be different. In some circumstances, the length of time could be quite extensive, extending in fact, for some of the students to two or three years depending on their needs. Teachers who are new to Trades Norwest would be required to have a Mentor (Pastoral Care Co-Ordinator) appointed to them for a short period of time to orient themselves with procedures, policies and the geographic layout of the campus. Depending upon their level of teaching experience this process would extend for at least six months.

Teachers new to the profession would require a Mentor for longer because of requirements from the NSW Educational Standards Authority (NESA). The College has appointed a Teacher Mentor at the time of printing. This teacher is working closely with two newer members of staff. The Teacher Mentor is responsible for working with these members of staff in the areas of classroom management and programming. Each has a regular meeting with the Teacher Mentor built into their weekly timetable.

Students also require a documented process whereby they can move seamlessly into the school.

Positive relationships between staff members was seen as vital by the staff in ongoing professional development and program evaluation and writing. This is evidenced in the Teacher Survey discussed earlier. As one member of staff wrote when asked about working collaboratively with colleagues; “Definitely, especially with our integrated classes. It is necessary for all of us to work collaboratively”.

**REVISED ORIENTATION PROGRAM** for Year 10 students and newly enrolled students during the year. This program would be an extension of the student Mentor program. As students enrol, they would be assigned a senior student to guide them around the campus and to allow them to meet students in their classes or cohort. The length of the Mentoring process would depend upon an agreement between the two students involved. They might continue to meet to discuss academic and social issues that arise during their day. As the Year 10 cohort begins the year, the Mentoring program as detailed above would be activated.

## restorative practices program

This program is concerned primarily with management issues and social functions within the classroom. These underpin every exchange that occurs within the classroom environment. By using this process, it is envisaged that a culture developed within the school and classroom is safe, pleasant and actually promotes learning. As with some other schools the program will be labelled as Restorative Practice.

This process is a big step away from the more traditional disciplinary methods used by schools. The program builds connection, while encouraging students to take larger degrees of responsibility for their actions and to work together towards an agreeable solution. This program revolves around the building and maintenance of relationships not only between students but between staff and students as well. This is a foundation principle of Trades Norwest where staff and students work together to actively build positive relationships. Once established this practice can be used to extend away from management issues and be inclusive of learning areas where checking in can be a way of judging student academic progress during and at the end of units of work.

There are a small number of trainers able to develop and deliver such a course within the immediate area of the College campus. One such person has been contacted and she is currently developing a site-specific program for our staff within the confines of our student population. It is envisaged this program will take many school professional development sessions to train the staff to a point where they can use this process effectively within their classrooms. The owning of inappropriate behaviour by students is an important step in the maturation process and is pushed strongly within the College. Restorative Practice involves all students in the decision-making process when the class is faced with poor behaviours. Through having the opportunity to contribute to the discussion on poor student behaviour resulting from educational disengagement and on what could be done to prevent a recurrence of such behaviours in the future, students felt that some of the learning barriers as experienced in previous schools were being dismantled.

# research to practice impact

## a clearer perspective on college educational practice

The process of compiling and researching data for this project has enhanced academic communication and professional dialogue within the college. We believe that once published the resulting document will enable staff to gain a more informed appreciation of the history and philosophy behind the establishment of Trades Norwest and of the outcomes we hope to achieve for our students.

The project authors have endeavoured to include College staff in a number of different formats, both formal and informal. Meetings have been conducted to discuss the findings of surveys and research literature. This has helped to inform staff of the progress of the project and to help engage them in the research process. During professional learning meetings staff were able to view appropriate research literature and survey results and were encouraged to discuss the findings from their perspective. These meetings, along with discussion of the educational literature, has enhanced staff awareness of, and commitment to the need to provide a quality educational environment for our students.

Discussions particularly concerning the College philosophy and approach to re-engaging disengaged students has given staff a clearer appreciation of how Trades Norwest is trying to reframe the learning environment for our students. With this knowledge came a better understanding of the students and student motivations. Understanding the philosophical and practical reasons behind the College pedagogy has helped teachers interact with students in a manner that has enabled many to refocus on their education.

The role of the teacher/mentor, from a pedagogical/andragogic perspective, was addressed through staff discussion of the behaviours and motivations of students. When evaluating teaching and learning programs staff were able to use the knowledge gained through formal and informal discussions to provide revised programs that included exercises directed at addressing the more adult nature of the campus. This included the self-assessment modules in many of the programs.

As a result of program revisions, staff commented that many students had a changed perspective on the self-paced units of work -- students seemed more positive and engaged. The program revisions also brought a change in the staff perceptions and attitudes. Being able to discuss and bring their personal insights into the units of work teachers were able to see themselves as being "stake holders" in the program. This has helped to further unite staff in the College goal of re-engaging the disengaged.

Seeing students become more engaged with their class work has encouraged staff to provide more purposeful quality feedback to the students. Increased student engagement has also helped motivate teachers to work to improve both resources and teaching practice.

## trades norwest program as a resource for other schools

Through leadership meetings and project meetings held by the AIS Trades Norwest has been able to widely promote its curriculum and educational philosophy. The Principal has also presented at the AHISA Directors of Studies Conference and the AIS Alternative Education Conference.

Recently, Scots College Sydney, an independent Presbyterian day and boarding school for boys, visited the College to view our non-ATAR curriculum structure and program implementation. As a result, the delegation from Scots was able to gather information that will help with the continuing development of their new Year 12 Applied Entrepreneurship program. This new venture by Scots College has been implemented to assist those students who may not have the academic ability to receive a high ATAR at the end of Year 12. A high ATAR is often seen as a necessary springboard for a successful high-achieving career. However, by delivering a non-ATAR HSC Applied Entrepreneurship, Scots College are seeking to prepare and assist students in preparation for a successful career in small business and social enterprise.



**Once published,** our project findings will be presented to the Trades Norwest staff as well as to the school parent body. Parents will be guided through a multimedia presentation outlining the survey processes, results and the interpretation of data. Parents will also be encouraged to participate in conversation around various aspects raised during the presentation:

- Awareness:
- Attitudinal Changes
- Engagement
- Willingness to become involved

Research partner schools who have assisted with statistics and the collection of data will be offered the opportunity for the authors to visit their school and present data and findings to school staff. They will also be able to view the project on-line through the Association of Independent Schools web site.



# appendices

## initial parent/guardian research information and invitation to be involved

### TRADES NORWEST PROGRAM EVALUATION RESEARCH PROJECT

#### **WHO IS DOING THE RESEARCH?**

Trades Norwest Anglican Senior College is undertaking the research funded by the Association of Independent Schools (AIS) and involves the University of Technology Sydney (UTS) as a research partner.

#### **WHAT IS THIS RESEARCH ABOUT?**

This research is to investigate the self-directed Integrated Program Learning (IPL) at Trades Norwest and how it is helping to engage students within an alternative trade-focused educational environment. During the next 18 months, there will be a number of parent and student surveys in which you and your son/daughter will be asked to participate.

#### **WILL I BE GIVEN INFORMATION ON THE RESEARCH RESULTS?**

Yes. Findings of the project will be made available to parents.

#### **IF I SAY YES, WHAT WILL IT INVOLVE?**

For this current survey you will be asked to complete and submit an online questionnaire. The questionnaire will include questions about your thoughts on Trades Norwest and on how the program has impacted on your son/daughter and on your family.

#### **IS THERE ANY RISK/INCONVENIENCE?**

You will be asked about your perceptions, observations and personal experiences in relation to the IPL at Trades Norwest. This may involve risks of feeling vulnerable in sharing personal insights.

Inconvenience will involve you spending time to complete and return your response. You may feel self-conscious about recording your views. All responses will be anonymous and treated with confidentiality.

Research data gathered from this project may be published in a form that does not identify you in any way.

#### **WHY HAVE I BEEN ASKED?**

You are able to provide information about your personal experience on how your son/daughter is responding/has responded to the IPL at Trades Norwest and about how you regard our program.

#### **DO I HAVE TO SAY YES?**

You don't have to say yes.

#### **WHAT DO I HAVE TO DO TO PARTICIPATE IN THE RESEARCH?**

You will need to electronically complete the questionnaire and return by email to the College by 13th March 2016

#### **WHAT DO I DO IF I DON'T WANT TO PARTICIPATE IN THE SURVEY?**

By not submitting the survey you indicate that you do not want to participate in the research project.

#### **WHAT WILL HAPPEN IF I DECIDE NOT TO PARTICIPATE?**

Nothing; there is no compulsion to complete and return the survey. However, your help with making the College a more efficient learning environment and a more accommodating atmosphere for your son/daughter would be greatly appreciated.

#### **WHAT IF I HAVE CONCERNS OR A COMPLAINT?**

If you have concerns about the research please contact the College on 02 8008 1300

## parental/guardian approval document

June 2016

### TRADES NORWEST RESEARCH PROJECT NOTIFICATION AND APPROVAL

Dear parent/guardian,

A part of our ongoing research into the positive influence the Trades Norwest Integrated Program Learning model is having on students, we would like to survey your son/daughter about how they are finding the program and about any positive effect it could be having on their overall well-being. During the next 18 months we will notify you of any additional surveys we may ask the students to complete.

Attached is a copy of the first survey your son/daughter will be asked to complete.

Please be assured that the survey will be completely anonymous and that your son/daughter will not be identified in any way.

If you do not wish for your son/daughter to undertake the questionnaire, please notify the College by 13/03/2016 that you would like him/her excluded from the survey.

Thank you for your help with our research project. Information provided by your family will greatly help the College with creating the most effective and accommodating learning environment for your son/daughter.

Kind regards,  
Leonard Turnbull  
Research Facilitator

Notification distributed with information of the research project survey process. Parents/guardians were given the opportunity for their child to opt out from undertaking the questionnaires.

## data instruments

*The surveys below were administered through online survey development cloud-based software service company Survey Monkey and were completed online by both parents and students over an 18 month period*

### PARENT/GUARDIAN QUESTIONNAIRE – QUALITATIVE RESEARCH

February 2016

#### PARENT/GUARDIAN QUESTIONNAIRE

Each of the following questions relate to one of the four foundational areas of the Trades Norwest program: Trade Focus, Teaching program, Teacher practice and Student wellbeing.

Thank you for your considered responses.

1. What are you hoping for your child to achieve at Trades Norwest (Trades Norwest?)
2. What are your child's perceptions of study at Trades Norwest
3. What are your thoughts on the self-directed Integrated Program Learning (IPL) approach at Trades Norwest
4. Relating to your child's school attendance, comment on the relevance of not having to do homework and exams
5. Is there any success that your son/daughter has been able to achieve at Trades Norwest that they may not have been able to achieve within a traditional learning environment
6. What are your perceptions on the program at Trades Norwest being able to help your child engage more with a learning environment?
7. Are there any perceptions you may have on the restorative focused student discipline at Trades Norwest?
8. Does being at Trades Norwest make your child feel more positive about him/herself?
9. Please comment on whether having your child at Trades Norwest is a good thing for you, personally

10. Does our program and learning environment help your child feel more relaxed or less anxious about being at, or coming to school?
11. Does not having to complete homework and exams make a difference to your child's well-being?
12. Have situations or relationships at home been any different since your child has been at Trades Norwest?
13. As a parent, what's the best thing about your son/daughter being at Trades Norwest?
14. Please describe your son/daughter's perceptions on the teaching staff at Trades Norwest.
15. Is there any particular thing about the teaching staff and their approach that you like?
16. Please comment about communications between College and home.
17. Please describe how you view the interaction between teaching staff and your son/daughter at Trades Norwest.
18. What would success look like for your child at the completion of his/her studies at Trades Norwest?
19. Because we are a trade focussed school, do you think this is reflected in the way staff treat you and your child?
20. Does having a trade focus make a difference to the way you view your child's learning environment?
21. Please describe any positives to Trades Norwest having a trade focussed environment.

## STUDENT QUESTIONNAIRE #1

June 2016

### STUDENT WELLBEING

*In this survey you are asked to consider being at Trades Norwest as compared to your previous school.*

*Tick the following statements according to whether you strongly disagree, disagree, are neutral, agree or strongly agree with the statement.*

*Your responses are completely anonymous.*

1. What year are you in at school?
2. Student well-being is a priority at Trades Norwest (Trades Norwest)
3. I feel less anxious about getting into trouble at Trades Norwest
4. At Trades Norwest my life is less stressful
5. At Trades Norwest teachers are more respectful to me
6. Project based learning makes it easier for me to complete my work
7. The classroom atmosphere at Trades Norwest helps reduce my stress level
8. My school life is happier at Trades Norwest
9. Since being at Trades Norwest I am less anxious about being at, or coming to school
10. Not having exams at Trades Norwest reduces my stress about not meeting expectations of others
11. I feel better about myself since being at Trades Norwest
12. Being at Trades Norwest helps my personal life to be less stressful
13. My life at home is less stressful since being at Trades Norwest
14. At Trades Norwest I find it easier to complete tasks
15. Not having to do homework reduces my stress at home
16. At Trades Norwest I have a better relationship with my teachers
17. I find it easy to make new friends at Trades Norwest
18. I attend school more regularly now that I am at Trades Norwest

## STUDENT QUESTIONNAIRE #2

August 2016

### TRADES NORWEST TEACHING PROGRAM QUESTIONS

*In this survey you are asked to consider how you consider the way classes are conducted at Trades Norwest. Tick the following statements according to whether you strongly disagree, disagree, are neutral, agree or strongly agree with the statement.*

*Your responses are completely anonymous.*

1. What school year are you in at Trades Norwest
2. I find doing project class work more interesting than normal school class work
3. The class tasks are too easy
4. I like being able to work on my tasks at my own pace
5. Doing project task work allows me to more engaged in class
6. Having project class work to do makes the classroom environment more enjoyable
7. Project work allows me to waste too much time
8. Being able to work at my own pace allows me to take a break when I need it
9. I would prefer to have a teacher actually teach the class than do project work
10. I like doing research work to complete my tasks
11. I find it difficult to stay on-task in the classroom
12. Project work is less stressful that normal class work
13. I get bored with doing project work
14. The project tasks do not interest me
15. Project tasks are relevant and interesting for me to do

## STUDENT QUESTIONNAIRE #3

October 2016

### TEACHING PRACTICE SURVEY

*In this survey you are asked to consider how you are treated at Trades Norwest. Tick the following statements according to whether you strongly disagree, disagree, are neutral, agree or strongly agree with the statement.*

*Your responses are completely anonymous and you will not be identified in any way.*

1. What school year are you in at Trades Norwest
2. Teachers at Trades Norwest treat me with respect
3. I am treated more like an adult at Trades Norwest
4. There should be more discipline in the classroom at Trades Norwest
5. Teachers should make students stay on-task and work more
6. Being able to work one-on-one with my teacher is important
7. I feel overlooked in the classroom
8. Teachers allow me to work at my own pace and don't rush me
9. Task directions are given clearly so I always know what to do
10. I feel I can always ask for help and receive it
11. I prefer the teacher to ask me if I want help
12. I find it difficult to stay on-task in the classroom
13. There is not enough discipline in the classroom
14. I don't feel I can ask my teacher for help
15. Teachers always make time to help me
16. I think my teachers like me

## STUDENT QUESTIONNAIRE #4

November 2016

### TRADE FOCUS SURVEY

In this survey you are asked to consider how important the College's focus on trade is to you. Tick the following statements according to whether you strongly disagree, disagree, are neutral, agree or strongly agree with the statement.

Your responses are completely anonymous and you will not be identified in any way.

**Consider the word "trade" to represent any of the many courses available at TAFE**

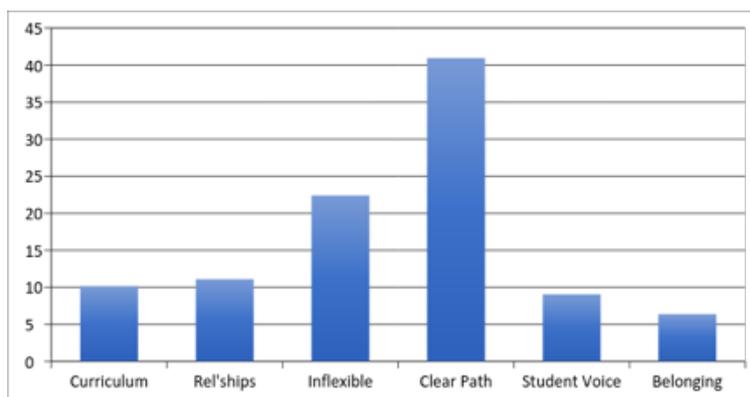
1. What year are you in at school?
2. A trade focus at Trades Norwest is important to me
3. If Trades Norwest didn't have an emphasis on trade I would still be at Trades Norwest
4. The trade focus in each of the term tasks is relevant to me
5. The tasks don't really need to have a trade focus
6. Having an emphasis on trade makes Trades Norwest more enjoyable
7. A trade focus makes school more relevant to me
8. An emphasis on trade at Trades Norwest will more prepare me for entering a trade
9. A trade focus makes me feel more responsible
10. I don't really care about having an emphasis on trade at Trades Norwest
11. The emphasis on trade at Trades Norwest will give me an advantage when applying for a job
12. The trade focus at Trades Norwest is not relevant to my future plans
13. Having a trade focus at school helps me to be more engaged in class
14. A trade environment makes the College feel less like school
15. Being in a trade focussed school makes me feel more positive about myself
16. An emphasis on trade helps me feel that I am working toward a job and am not just at school
17. A trade focus helps me better prepare for life outside school
18. Being with other students doing a trade is important
19. I am treated more like an adult than as child in a trade atmosphere
20. A trade focus makes it more enjoyable to come to school
21. I am more likely to want to come to school because of the emphasis on trade at Trades Norwest

### LEARNING BARRIERS SURVEY

What do you think were the barriers to your learning or engagement as a student at your previous school?

	CIRRICULUM	REL'SHIPS	INFLEXIBLE	CLEAR PATH	STUDENT VOICE	BELONGING	TOTAL
Yr 10 (%)	6	19	13	50	13	0	100
Yr 11 (%)	15	3	28	43	3	10	100
Yr 12 (%)	9	12	27	30	12	9	100

Learning Barriers Survey Table (Fig: 5)

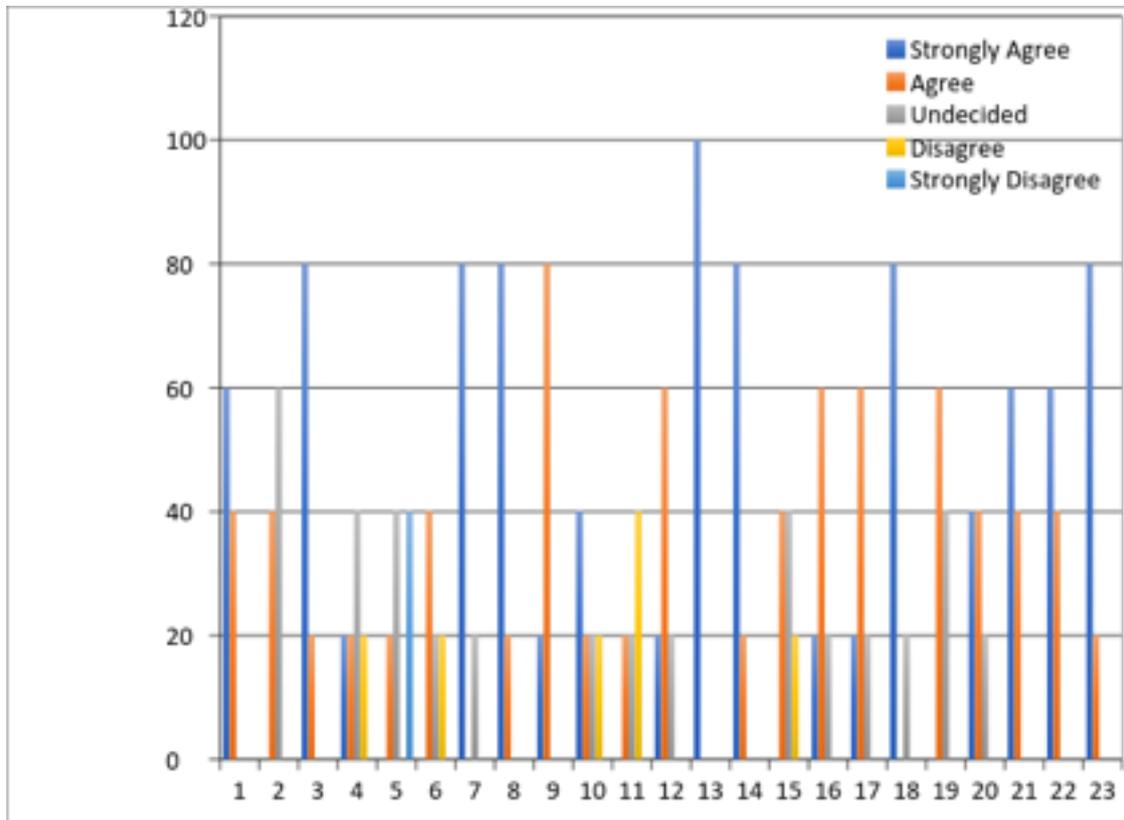


Learning Barriers Survey Graph (Fig: 6)

## TEACHER PRACTICE SURVEY

NO.	QUESTION	SA	A	U	D	SD
		%	%	%	%	%
1	The project tasks at TNw are relevant and interesting for the students	60	40	0	0	0
2	I approach my students from an androgogical (adult learner) perspective	0	40	60	0	0
3	I try to contribute to the well-being of other staff members	80	20	0	0	0
4	I find it easy to encourage a culture of respect within the classroom	20	20	40	20	0
5	I prefer to teach students as a class group, rather than facilitate individual learning	0	20	40	0	40
6	I find it easy to get the students to complete work by a set date	0	40	20	20	0
7	Working collaboratively with my colleagues is an important part of my teaching practice	80	0	20	0	0
8	Students work through exercises on their own, at their own pace	80	20	0	0	0
9	I encourage students to work on their own, consulting a neighbour from time to time	20	80	0	0	0
10	I assist students to choose the order of questions to complete within the topic/unit of work	40	20	20	20	0
11	I encourage students to compare research methods to complete different questions	0	20	20	40	0
12	Students are encouraged to draw links between topics and move between topics	20	60	20	0	0
13	I am always respectful towards my colleagues	100	0	0	0	0
14	Mentoring, peer observation and coaching should be part of a formal school/college arrangement	80	20	0	0	0
15	All my students are aware there are clear and structured learning outcomes for each unit of work	0	40	40	20	0
16	All learning tasks should offer a degree of student choice, either by how they learn or how they display their learning. (Choice in how they do it or how they present it.)	20	60	20	0	0
17	I provide a motivational learning environment for my students	20	60	20	0	0
18	I am considerate of the different learning styles of my students	80	0	20	0	0
19	I use effective communication/questioning techniques to elicit appropriate responses	0	60	40	0	0
20	I use effective evaluation methods to improve both teaching and learning	40	40	20	0	0
21	I take an active part in continuing curriculum development	60	40	0	0	0
22	I encourage student discussion and questions	60	40	0	0	0
23	I work collaboratively with individual students to assist them complete their tasks	80	20	0	0	0

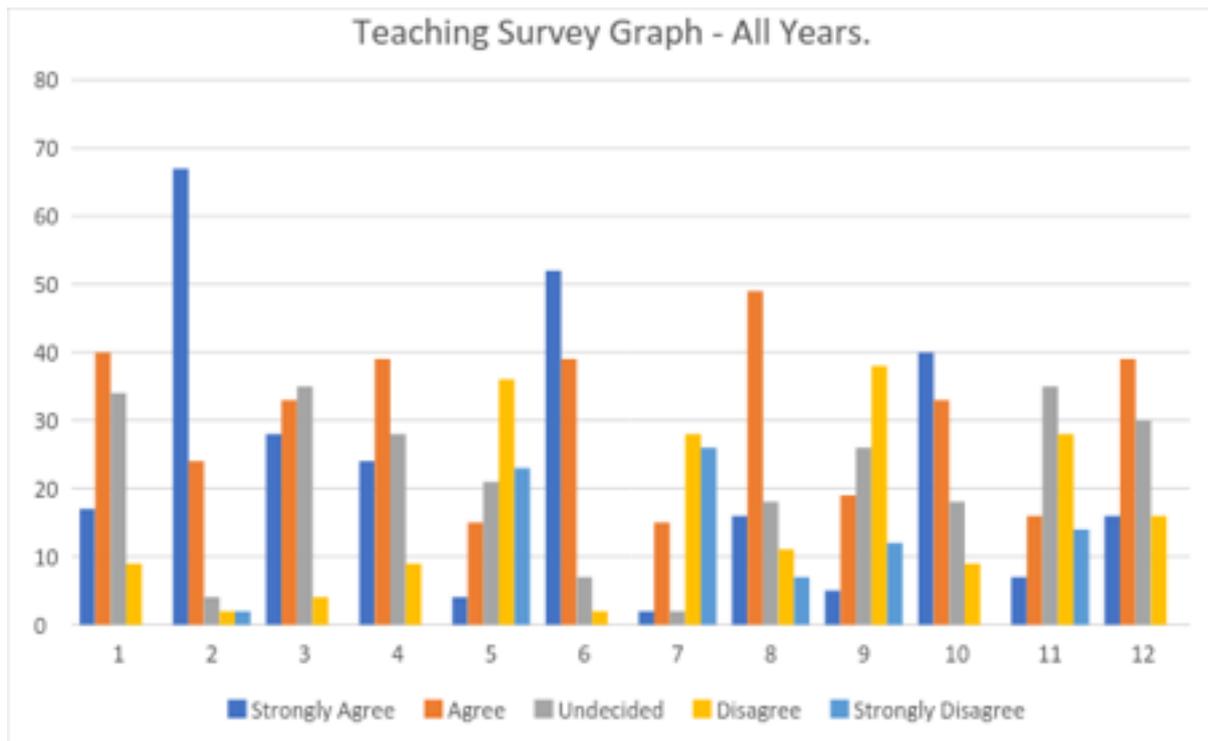
Teacher Practice Survey Fig:2  
Teacher Practice Survey (Fig: 7)



### STUDENT PERCEPTIONS ON TEACHING PRACTICE SURVEY

NO.	QUESTION	SA	A	U	D	SD
		%	%	%	%	%
2	I find doing project classwork more interesting than normal class work.	17	40	34	9	0
4	I like being able to work on my own tasks at my own pace.	67	24	4	2	2
5	Doing project work allows me to be more engaged in class.	28	33	35	4	0
6	Having project classwork to do makes the classroom environment more enjoyable.	24	39	28	9	0
7	Project work allows me to waste too much time.	4	15	21	36	23
8	Being able to work at my own pace allows me to take a break when I need it.	52	39	7	2	0
9	I would prefer to have a teacher actually teach me in class than do project work on my own.	2	15	2	28	26
10	I like doing research work to complete my tasks.	16	49	18	11	7
11	I find it difficult to stay on task in the classroom.	5	19	26	38	12
12	Project work is less stressful than normal classwork.	40	33	18	9	0
14	The project tasks do not interest me.	7	16	35	28	14
15	Project tasks are relevant and interesting.	16	39	30	16	0

Student Perceptions on Teaching Practice Survey (Fig: 8)



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