Vocational Education and Training

Otago Polytechnic

Dunedin, New Zealand

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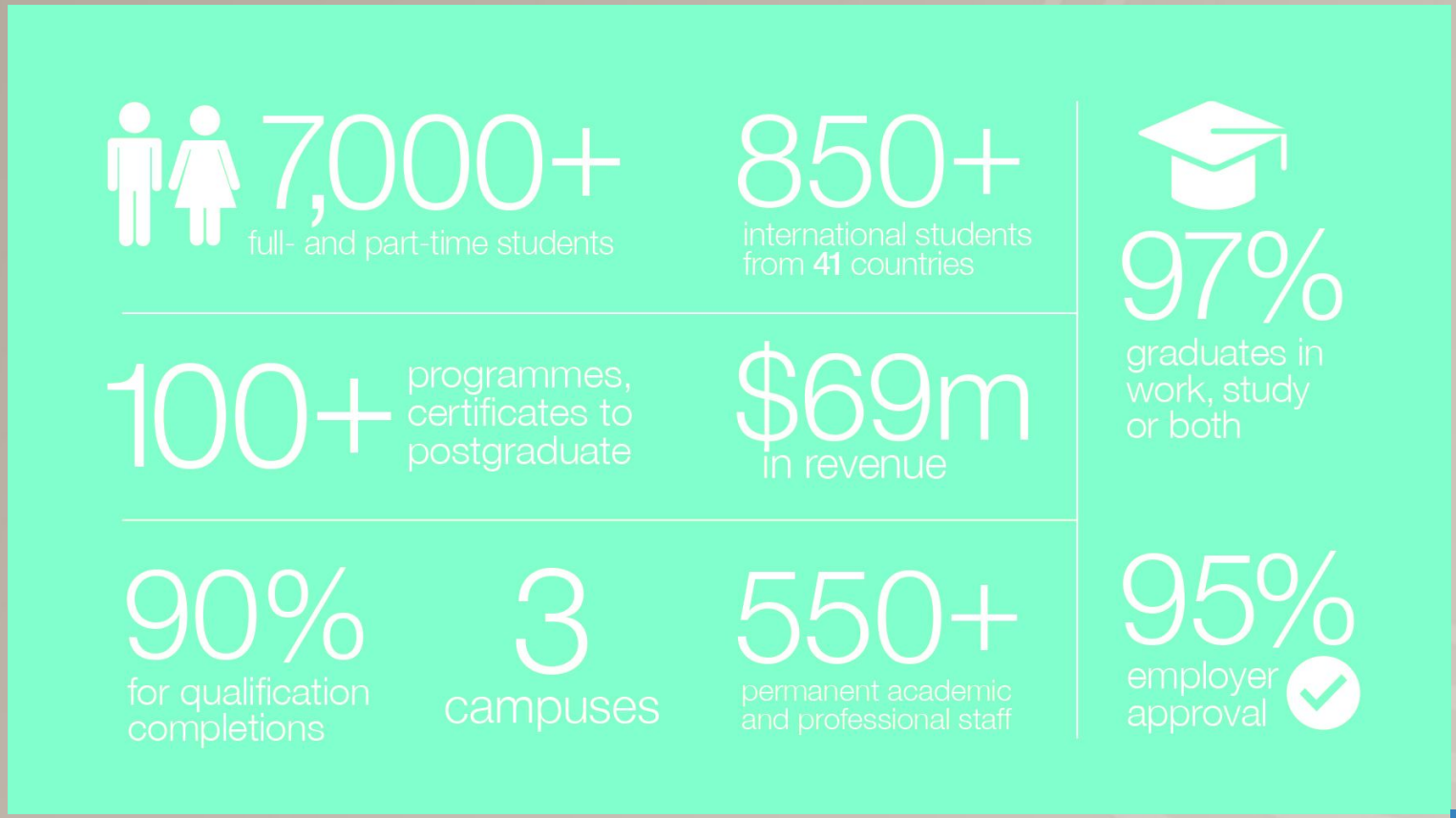
Otago Polytechnic at a glance



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Otago Polytechnic is owned by the New Zealand Government and offers the following academic qualification levels

- Masters
- Degree
- Diplomas
- Certificates

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Otago Polytechnic very is focused on vocational education:

- Construction
- Engineering
- Construction Management
- Quantity Surveying
- Architectural Technology

Vocational Education is developed in partnership with Industry Training Organisations.

New Zealand has:

- **11** industry training organisations who:
  - Represent industry sectors
  - Develop industry qualifications
  - Oversee apprenticeship training
  - Work in partnership with the New Zealand Qualifications Authority
- **18** Polytechnics / Technical Institutes who:
  - Provide vocational education
  - Work in partnership with industry
  - Educate their regions residents

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Connection between Vocational Education and Industry Training Organisations is vital:

The Vocational Learning Journey

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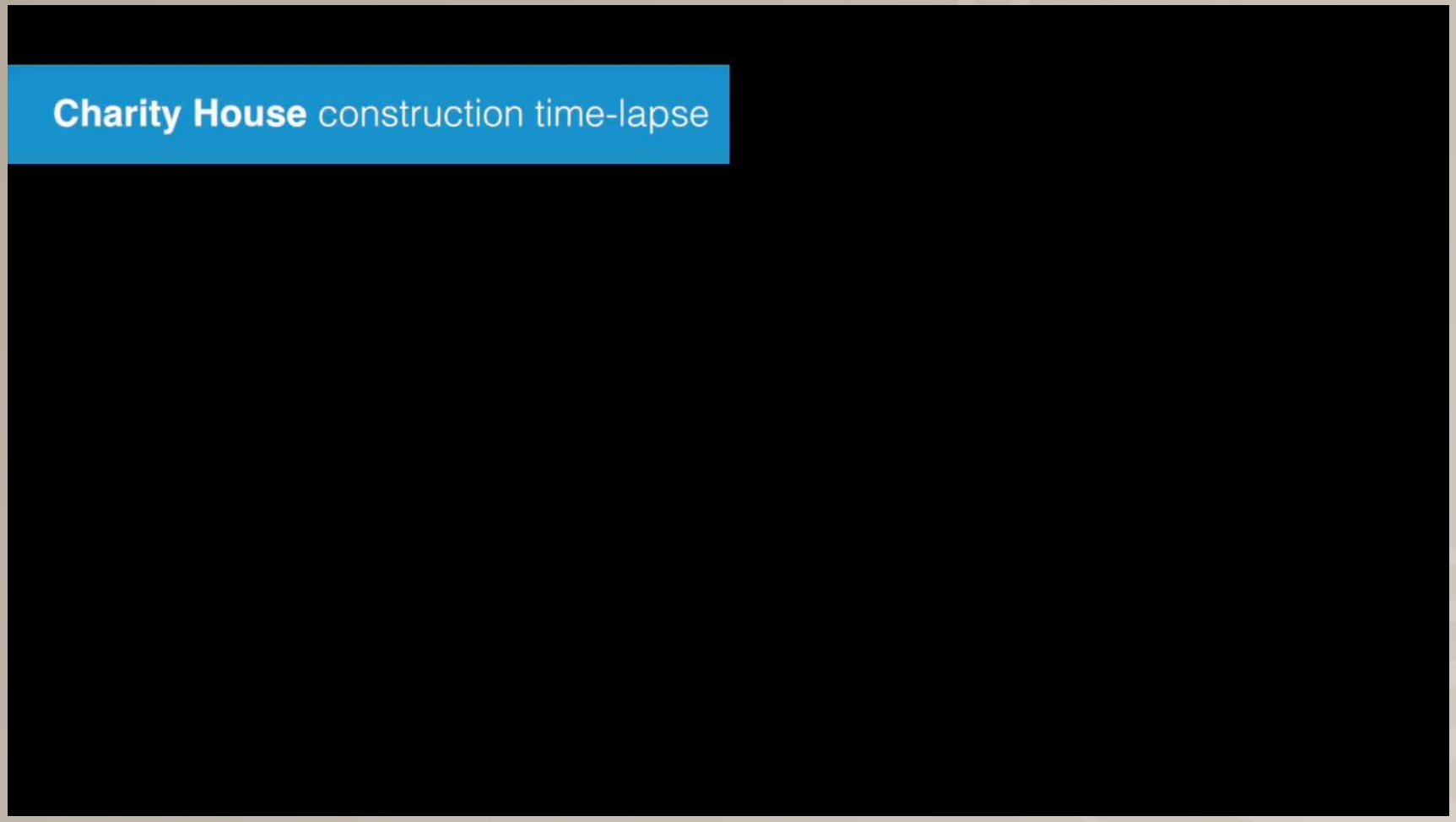
Pre Apprenticeship Training:

Otago Polytechnic is known for its expertise in experiential learning.

"Learning by Doing"

For example – our students build houses!



Pre Apprenticeship Carpentry Construction Training

Starts with:

•Pre-apprentice training at Otago Polytechnic

•One year full time which includes an 8-week internship

•Covers all aspects of carpentry and construction

•Programme structure

- 50 % theory – drawing and math
- 50% practical

•Students range in age from 17 years to 25 and older

•On completion the student begins an Apprenticeship

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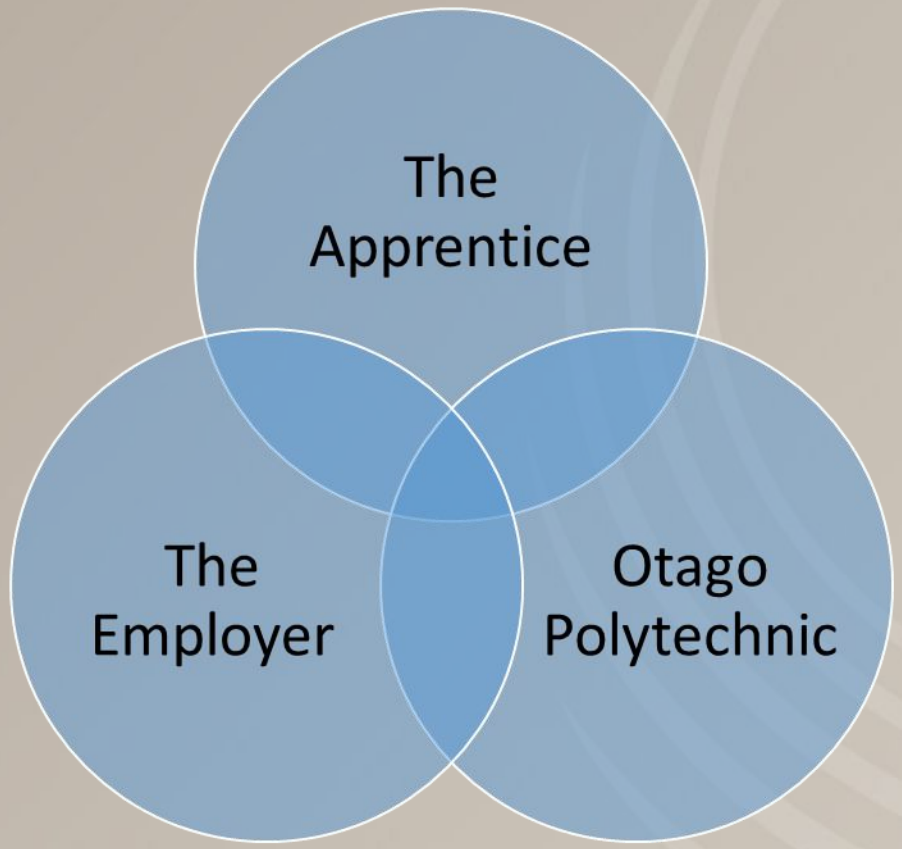
The Apprenticeship



- The contract = 8000 hours

1000 hours Otago Polytechnic
7000 hours on the job

Otago Polytechnic has a partnership with the Industry Training Association Building (ITAB) for Apprenticeship Management

•Unlike other apprentice schemes you are trained by a qualified educator with hands on class time where you will be networking with other apprentices as well as your time on the building site with your employer. Class time can vary between block course or night school.

•Designed as a robust and in-depth course ITAB gets apprentices up to speed with the latest industry standards.

•More comprehensive than shorter schemes ITAB provides approximately 8000 hours (over 4 years) of extensive practical experience and solid theoretical training giving apprentices a broad set of valuable professional skills.

•ITAB apprenticeships are available throughout New Zealand and apprentices who are currently in other schemes can switch over.

•Once enrolled and completed graduates receive National Certificate Carpentry Level 4. Additionally available is the National Certificate in Construction Trade (supervisor) Level 4 with an optional strand in Business Management, then followed by the National Certificate in Construction (supervisor) Level 5

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Managed Apprenticeship means:

- A partnership with industry, the student and Otago Polytechnic

- Industry employs the apprentice

- The contract is for on-the-job training provided by the employer

- The student agrees to the conditions of employment

- An Otago Polytechnic assessor agrees to undertake the on-the-job assessment

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Students record their “on the job training” through the development of an E-Portfolio

•Photographic evidence with descriptions of the activity

•The evidence can be recoded on any mobile device!

•The evidence is then emailed to an assessor

•At the end of the apprenticeship the apprentice has a visual record of his/hers training

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Digital Portfolio Example

Module A
Part of Unit Standard 12997

EP 97 Health and Safety

E-Portfolio 2012-2013

Correct PPE

Flying timber and saw dust is controlled by wearing eye protection

Excess noise is controlled by wearing ear protection

Ensure there is no loose clothing or hair that can get caught in the machine

Safety shoes must be used to prevent injury from any objects dropping from the bench.

I am wearing a face mask for any dust

PPE requirements for different situations are different, Because in the left picture i am cutting a product that creates a lot of dust i am using a respiratory protector.

E-Portfolio 2012-2013

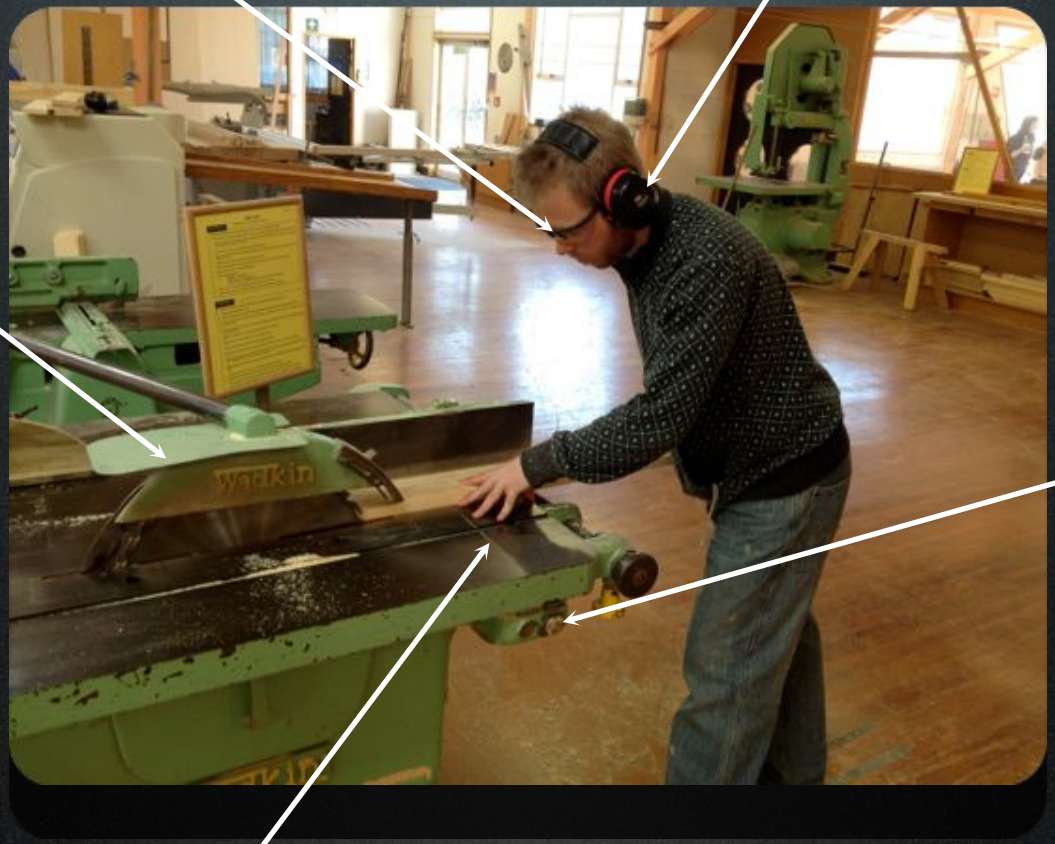
Safe Use of Machinery

Flying timber and saw dust is controlled by wearing eye protection

Excess noise is controlled by wearing ear protection

Ensure there is no loose clothing or hair that can get caught in the machine

Make sure guard is at the correct height and no more than 6 -12 mm above timber to prevent easy access to the blade.



Ensure that emergency stop button is easily accessible

Ensure working area is clear of shaving and off cuts to prevent trip hazards

Use the STOP line to prevent your hands from getting close to the blade, use a push stick after this line

Safety shoes must be used to prevent injury from any objects dropping from the bench.

Erect Framing

We Erected all the frames and tacked them in place. When all the frames we up we straightened all the joins and then braced it all straight using string lines.

E-Portfolio 2012-2013

Advantages of a Managed Apprenticeship:

- Pre training
- The student experiences hands-on in their chosen profession
- The employer gets trained staff
- Employment rates remain high
- The apprenticeship is managed
- Continuity of training

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Advantages (cont.):

- Industry and institutional relationships grow
- Institutional staff are kept current with industry practice
- Industry don’t have to worry about assessment
- Education is a true partnership

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At the end of the apprenticeship:

•The student graduates with a National Certificate in Carpentry (Level 4)

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Otago Polytechnic is:

- Interested in collaboration
- Offers tertiary teacher training with a vocational educational focus
- Sharing curriculum
- On-shore and Off-Shore programmes
- Offers to deliver **your** curriculum in New Zealand !

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Next Step

Learner Capability Assessment

What does this mean?

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Learner Capability

We say that our graduates are capable and we say that this means they are **personally effective, future focused** and **able to practice sustainably**.

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Learner Capability

We say that graduates who are capable are **work ready.**

The Learner Capability Framework, sets out to **define the characteristics** of 'personally effective', future focused' and 'able to practice sustainably' and to set our **behaviours** through which **learner's capabilities can be measured**.

*While the three concepts are separated to identify characteristics and specific behavioural indicators they are also interdependent in addressing the collective requirements for **being capable** and **work ready.***

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Learner Capability

Personally effective individuals have strong communication skills, are culturally competent, digitally competent, work independently and in teams, take responsibility for their actions and seek feedback to improve their performance. They are skilled at making the best use of the time and resources at their disposal to achieve goals.

Future focused leadership requires individuals to be forward thinking, creative, enterprising/innovative, a life-long learning and be able to work in leadership roles.

Being able to practice sustainably utilizes critical thinking, holistic thinking and ethical practice, in the application of ecological, social, political and economic sustainability to relevant contexts. Capable practitioners challenge existing practices and change ways of operating.

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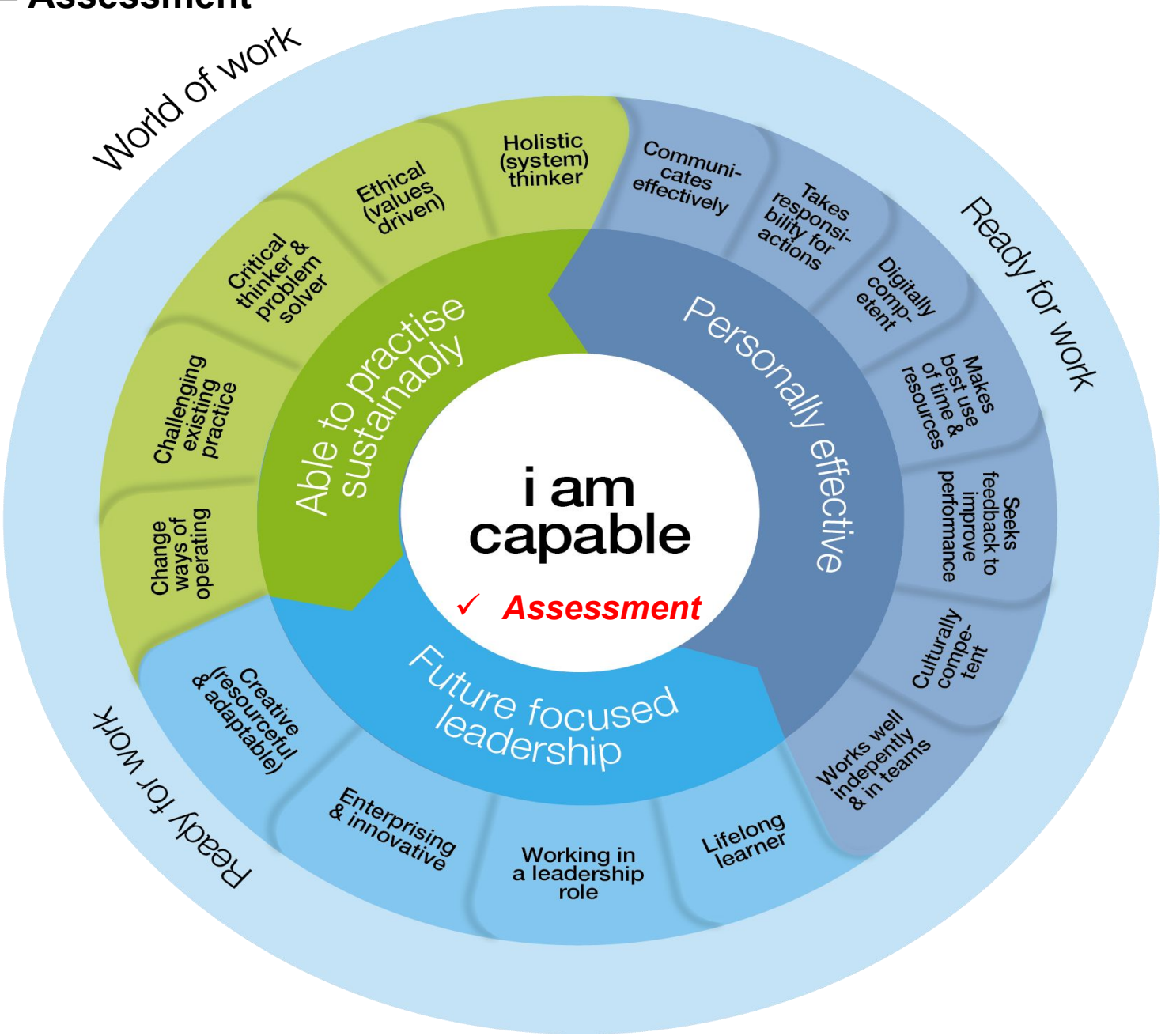
Stage 1 – Assessment



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Thank you
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- **If you have any queries please contact:**

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Module D
Part of Unit Standard 24392

EP 92 Alterations and Additions

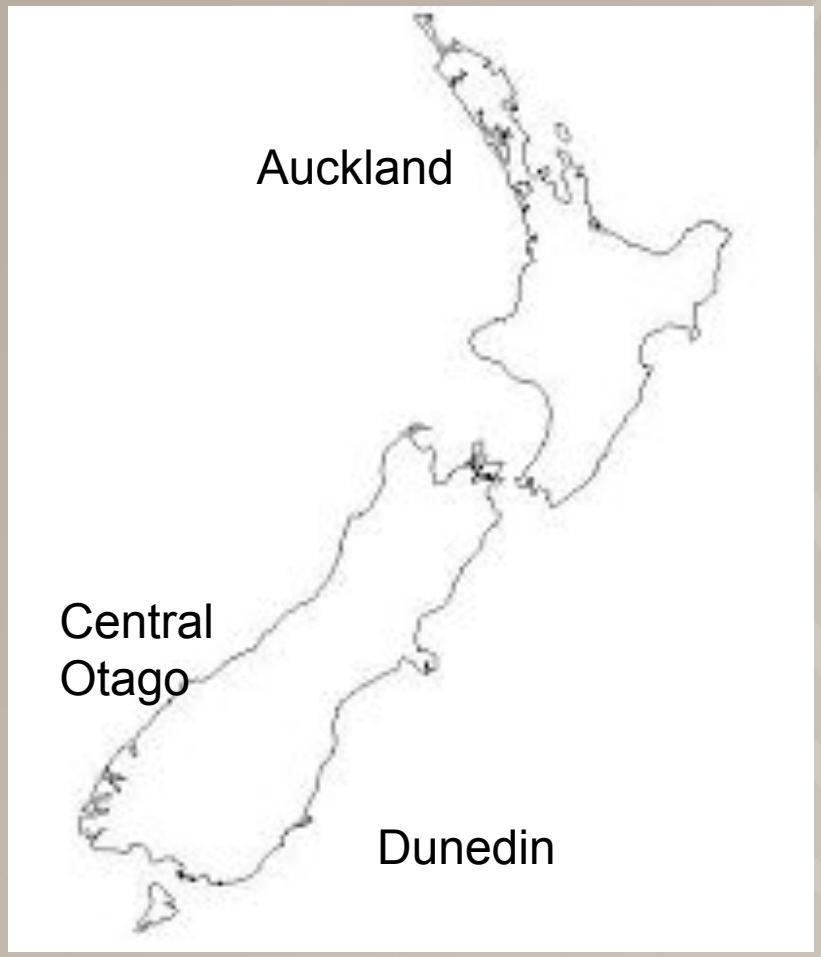
E-Portfolio 2012-2013

Supporting and lowering an Existing Building




After getting the house to site, it is backed into place before being held up by jacks so the truck can get out. When the truck is gone the middle row of piles is concreted into pre-prepared holes. The house is then lowered onto the piles using hydraulic jacks .

E-Portfolio 2012-2013



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