



Flexible Delivery (case highlight)

E learning

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E learning

- The NZ system has traditionally differed from the Australian system in many ways, so it is difficult to compare the two directly, although in many ways the outcomes are similar, certainly most of the practical skills are.
- Unlike Australia, much of the underpinning theory has traditionally been delivered by distance learning.

Background

- About 7 years ago, for a variety of reasons, Unitec began the development of it's own distance learning material.
- This was in part due to dissatisfaction with the existing material, and partly so that we could retain control over the content.
- A number of crucial decisions were made at the time.
- All material was to make full use of colour, and include either photos or purpose made illustrations.
- There was to be ample use of “white space” and highlighted text, as well as reference to manufacturers resources and codes and standards.

Full colour diagrams

Water Flowing in Pipes

When a body of water flows *full bore* it produces pressures much like the *plunger* in the syringe. This results in

- an increase in pressure in front of the body of water, and
- a reduction of pressure behind it.

Both these pressures may cause a threat to the water seal in the traps (see Figure 12 and Figure 13).

Water flowing full bore through a discharge pipe (as a solid plug) approaches fixtures that are protected by water traps.

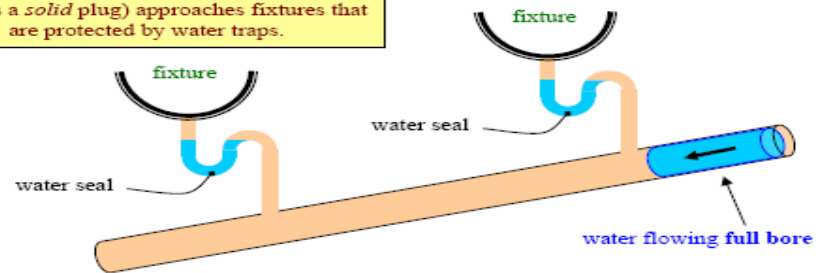


Figure 12

Positive (higher) pressures are produced in front of the plug of flowing water. Negative (lower) pressures are produced behind the plug of flowing water.

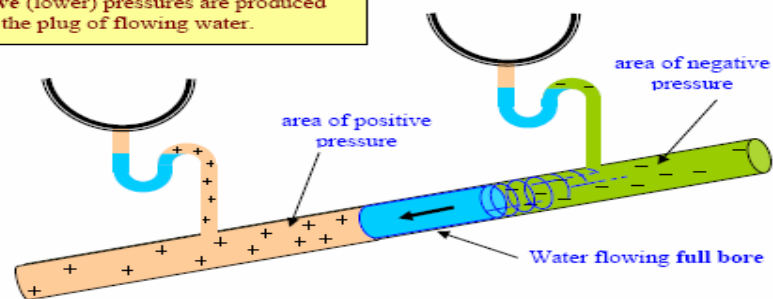


Figure 13: pressures building

Move to e-book

- It was always our intention to one day use technology to its full extent, and produce an e-book. Until recently we were constrained by the reliability and cost, as well as the number of students who did not have access to computer technology at home, or the ability to use it.
- We have determined that at least 96% of apprentices now have access to Broadband, and use it on a regular basis.
- A decision was therefore made to transfer our distance learning material (with appropriate changes) onto a web based e-book, with a number of enhancements , and a number of different subscription levels giving different views.

Current situation

- Apprentices began to be moved into this system in late July, as each group came in for a block course.
- So far about 40% of our apprentices are using it, with the remainder using it by June next year.
- Considerable effort is being made to encourage the use of the e-book, and several periods are set aside on each block course to introduce the apprentices to the technology, and get them comfortable using it.

Demonstration

- The web site this can be found at is:
<http://plumbingonline.unitec.ac.nz>

The front page has an option for one weeks free trial, which we encourage you to do.

Enquiries from educators should be directed to
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THANK YOU