



CASE STUDY



Supporting our Future Builders through

blended learning with Moodle

About 82 kilometres from metropolitan Sydney city in Australia, near the coastline of the country, lies Wollongong. The city encompasses a number of smaller regional towns that can be classified almost as "remote" in Australia.

One of the most popular trade in the area is in the building industry. Builders in Australia require a certification (Certificate IV in Building & Construction) to be able to operate and TAFE Illawarra (NSW) is one of the main education providers for building qualifications there.

Many of the builders face barriers to gaining their certification due to a number of challenges, including: distance, no access to the course due to small class numbers and other life commitments that do not allow them to attend typical class hours.

In 2014, TAFE Illawarra redeveloped their course in Moodle, offering a blended learning option that addressed many of the challenges above whilst also bringing a number of positive teaching, learning and institutional changes.

Problem

Due to the "remote" location of Wollongong and the surrounding smaller towns in the catchment area, a face to face and physical location to study the Certificate IV in Building & Construction course was only available in areas with sufficient learner numbers (about 20 on a minimum).

This is to ensure that there are efficient and cost-effective resources to support learners during the course.

In addition, many of the learners are also working while studying or have family commitments, giving them limited time to attend a physical classroom during the normal 9am - 5pm hours.

As a result, many potential builders do not get access to the necessary course to pursue their trade.







Actions

In 2014, TAFE Illawarra redeveloped their Certificate IV in Building & Construction course to make it available online in Moodle.

By also using Adobe Connect, the course was turned into a blended learning format, giving learners a choice of doing a face to face / online attendance two days a week and one compulsory online session.

To cater for the different needs of their students across various locations, TAFE Illawarra used the following tools in Moodle:

- Activity reports: which allow teachers to check on the progress of every learner and identify support where needed;
- Quizzes: the various setting options to, for example, restrict only one re-attempt encouraged learners to research the questions accurately;
- Assessment / assignment: with the advancement of social media, Moodle's assignment file upload choices allow learners to create and submit assignments via videos;
- Forums: the use of forums has reduced SMS communication to trainers/educators at all hours as students learn from each other;
- Learning Analytics: the ability to follow and watch students through Learning Analytics has enabled a higher completion rate whilst also minimising plagiarism;

- Integration with Camtasia video: providing learners with video tutorials that they can watch anytime. The team at TAFE Illawarra also use the quiz function at the end of their videos to create a SCORM package;
- Integration with popular apps such as the construction estimate apps that allows learners to be aware of the latest industry standards and codes.

In 2014 we redeveloped the above course to ensure greater flexibility to students and also allow the Institute to work together, whilst allowing access for students from remote locations. These areas have never had access to the course before due to small numbers – now with MOODLE/ Adobe Connect and the Institute working together – the community works together.



Results

Brett McCroary, Teacher/ Instructional Designer TAFE Illawarra, summarises the results of this new blended learning format with Moodle: "Since redeveloping our Certificate IV in Building & Construction course to be delivered through Moodle/ Adobe Connect, there has been greater flexibility for students in areas that have never had access to the course before due to small numbers."

"There has also been a number of positive student, teacher and institutional results that we have seen through our blended learning format with Moodle."

These results are summarised below:

Institutional results

The availability of the course through an online delivery method meant that the number of students taking the course has grown from 46 in 2014 to around 84 in 2016. Completion rates have also increased from 46% (in 2014) through to 77% (in 2016).

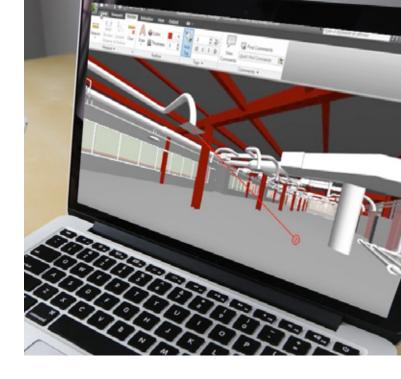
Some of the students are accessing the course from isolated areas of the region.

The cost-effective model of delivering the course through Moodle/AdobeConnect has also been noticed by other TAFE locations outside of the region, providing opportunities to expand and offer the course to more regional areas around the country.

Student results

Teachers of the course have noted that the online learning format is continuing to be the preferred choice of learning because it provides learners with flexibility to not only learn from any location but fit into their family, work and personal lifestyles.

A case example of this is with one student who is balancing a successful football career while also studying: https://www.illawarra.tafensw.edu.au/about-us/news/1115-kicking-goals-in-malta-and-athome



Teacher results

Through Moodle, teachers of the course have taken a different approach to delivering the course and incorporating more active learning.

"Activity reports, quizzes, assessment features all help to enable an improved method of marking assessments and managing completions," said Brett McCroary.

"Moodle's learning activities empower educators by making teaching and supporting our learners more effective."

FURTHER INFORMATION

Follow the progress of students completing Certificate IV in Building & Construction at TAFE Illawarra through their YouTube Channel: The Wollongong Chippy!

