Moving from Teaching to Learning:
Using an online quiz in an academic Legal Research Skills programme

Introduction

The Law Library at the University of Canterbury has for many years had a well established and well attended legal research skills programme. However one of the ongoing challenges has been to instil some research skills in the 500 first year law students who pass through the School of Law each year. With the introduction of a new Course Management System (Moodle), the time was right to move from testing these students using a paper-based quiz to the use of an online quiz. The online quiz worked well for both the librarians and the students and the outcomes achieved seemed to surpass those achieved when a paper quiz was used. However using an online quiz to teach legal research skills does have limitations and expectations should be adjusted accordingly.

Background

The University of Canterbury Law School offers an open access first year Law course (LAWS 101) called The Legal System. Around 500 students enrol each year, of which the top 200 will move on to second year. Students require little in the way of Legal Research Skills in this first year. They are provided with a course book that contains cases, articles and other materials. They are also given extensive reading lists containing books and articles that are either put on closed reserve in the Law Library, or an electronic copy is put on the University's Course Management System - Learn (Moodle). There is little requirement for extra research effort, in fact the students are told that they can get an A grade by thoughtful use of just the materials provided on their reading lists. However, this changes in the second year. Almost immediately the students are required to find cases and legislation, to read journal articles and other commentary from New Zealand and other common law jurisdictions in order to successfully complete their assignments.
Our challenge has always been to equip the students for their second year during their first year where legal research has seemed unimportant or even irrelevant.

Our Legal Research Programme

So, how do we teach legal research skills? For the last few years, we have been running a programme each year that seems to be successful and popular (mostly).

The LAWS 101 students

Our 100 level students have always been problematic, so we have traditionally kept our ambitions low. The legal research skills component of their first year is made up of some material in their tutorial book, a 50 minute show and tell session in the library and a quiz that is completed and handed in but that does not carry any credit. In the past, around 60% of students complete the library project.

200-300 Level - General

We run a series of eight classes at the beginning of each year. They run for 50 minutes in the form of a show and tell with a data-show connected to a computer while each student follows along at their own computer. They cover:

- Introduction to legal research
- Finding Legislation
- Finding Case Law
- Finding Journal Articles
- Brookers
- LexisNexis NZ
- Westlaw
- LexisNexis International

These are not compulsory but if students complete all eight, they can receive a Legal Research Skills certificate signed by the Law Librarian. These certificates are sought after as a prerequisite to being chosen for the Law School research assistant pool.

200-300 Level – Specific

The library staff run assignment-based legal research sessions in a timely fashion throughout the year. Again, they are only 50 minutes long, but they are focussed closely on the specific resources required to write a particular essay. These are very popular with the students (there is nothing like a looming deadline to motivate!), and they build on the introductory sessions taken at the beginning of each year. They are very labour intensive for us, as we must create them new each year, as the essay topics (and available resources) change.

First Year Frustrations

It was the frustration associated with teaching legal research skills to our first year law students that was the driving force behind the creation of the online quiz.

Previously we had offered a 50 minute session in the library dedicated to some basic concepts, then they were asked to complete a 20 question quiz in their own time and hand it in. This was a painful process for many of the students, requiring many trips to the information desk to ask for help and clarification from the Librarians.

Then after the quiz had been completed, my colleagues and I would have to mark them – taking time to make comments and correcting mistakes. When the marking process was finished we would compile a feedback sheet to be handed back with the quiz.

The exercise was given back to the students two weeks later, during a tutorial that was dedicated to case analysis. The tutors had no time allocated to go through the results, and we relied on the feedback sheet to show the students where they had gone wrong. Our suspicion was that the students barely glanced at the results. Certainly we have only ever had a handful come back to us

for clarification of our marking comments. We would spend around 100 hours marking, yet we had little idea of how much the students had learnt.

2008 – 2009 Numbers and mark ranges

In 2008, 492 students were enrolled in LAWS 101, 287 completed the quiz (58.3%) and the average mark was 17.2/25 (68%). The marks covered the entire range from 5.5/25 to 25/25.

In 2009, 525 students enrolled, 312 completed the quiz (59.4%) and the average mark was 18.8 /25 (75.2%). The marks covered a very similar range as 2008 (6-25).

Why an electronic quiz?

In 2009 UC changed their course management system to Moodle (rebranded by UC as *Learn*). Previous course management systems had not lent themselves as easily to this kind of testing (Blackboard, WebCT) and we had not felt equal to the task.

We felt our current scenario was not the best way to teach basic legal research skills. The students viewed it as a chore to complete and didn't see the relevance to their studies. We hoped that we could manage the large number of students better and limit (or even eliminate) time spent marking. We wanted the students to receive instant feedback, to feel successful and to encourage interest in legal research, as this assignment serves as a stepping stone to the kind of research required in second year courses.

Our Aims for the Quiz

We are aiming to introduce the students to some basic legal research concepts and skills, which can be built on as they progress through law school, including:

- Knowledge of the basic structure of legal information
- Familiarity with legal citation for articles and cases (Law School style is based on the NZ Guide to Legal Citation)
- Use of legal dictionaries
- Use of the Library catalogue to find books
- How to find a recent NZ case – a simple search on our main case finding database for a recent reported case
- How to find some journal articles on a legal topic

Designing the Quiz

I started by translating the paper version of our quiz directly into the online environment. It very soon became apparent that some major changes needed to be made to the form and structure for it to work well online.

The Moodle software offers a variety of different question styles, including:

- Multiple choice

- Embedded
- Short answer
- Descriptive
- Essay Style

We chose to use very simple short answer style and multiple choice questions. Due to the number of budding lawyers completing the quiz, we needed it to be entirely self explanatory, free of loop-holes, and we wanted the students to get feedback before they moved onto the next question. Moodle allows the students to attempt a question multiple times and it is also possible to impose a penalty each time a question is attempted. We allowed multiple attempts without a penalty to improve the learning outcomes. This was identified as a fault by one of the participants, who said "It's kind of stupid that you can just keep clicking on all of the answers until you get it right. I actually went through it though, and did find it helpful". This seems to indicate that despite the student's ambivalence, our desired outcome was achieved.

Towards the end of the quiz development process, I asked two law faculty members to give me feedback. And they did, as only lawyers can! This was invaluable and resulted in a much clearer and more tightly structured quiz. We also included two feedback questions at the end of the quiz; one was a compulsory multiple choice question asking the students to assess the quiz on a scale of 'very useful' to 'a waste of time', the other was an optional free-text 'any other comments' field. We did have some reservations about the way the quiz needed to be structured. It felt very much like we were spoon feeding the students by having the correct resource linked to each question and the use of multiple choice questions gives the students a big pointer towards the correct answer. There was also no need for the students to enter the library to complete the quiz and so we felt we had lost an opportunity to connect with the students on a personal basis.

Running the Quiz

We opened the quiz for a four week period, giving the students warning of when it would start and end. They were told it was a pilot, and that any comments or feedback would be greatly appreciated.

The library ran 24 information sessions over the course of the two weeks. These sessions were structured in a 'show and tell' format and included information to help them complete the quiz (and we also sneakily included some useful information that wasn't included in the quiz). These classes were attended by 185 students (compared to 263 in 2009 and 216 in 2008).

The Quiz

Figure 1

Figure 1 shows the first two questions of the quiz with answers and feedback. You can see here an example of a descriptive question used to give the information required for questions 1-3. Then there is a very simple short answer question which requires one word only to be entered. If any other word is entered here, the student gets an encouraging "wrong" response. Question 2 is an example of a multiple choice question which has been answered incorrectly, and is displaying feedback. Each option gives some useful (but not too useful) advice on how the student might get the right answer. They can then try as many times as it takes to get the mark for this question. When putting together the options for the multiple choice questions, we used examples from the wrong answers given by the students in previous years. Question 2 also refers the student to an online resource that they must use to find the answer. It is important to give some thought to how the users will navigate from the quiz to the web resource and back again. We chose to force each web link to open in a new smaller window on top of the quiz, so even the most inexperienced web users could find their way back.

Questions in this quiz

Order	#	Question name	Type	Grade	Action
↓		Article Citation			
↑ ↓	1	Article citation title colour		1	
↑ ↓	2	Article Citation Journal		1	
↑ ↓	3	Article Citation Page		1	
↑ ↓		Law Report			
↑ ↓	4	Law Report parties plaintiff		1	
↑ ↓	5	Law Report parties defendant		1	
↑ ↓	6	Law report citation		1	
↑ ↓	7	Dictionary Definition		1	
↑ ↓	8	Primary material		1	
↑ ↓	9	Call number 1		1	
↑ ↓	10	Copies 1		1	
↑ ↓	11	Call number 2		1	
↑ ↓	12	Copies 2		1	
↑ ↓		Case Description			
↑ ↓	13	Case database		1	
↑ ↓	14	Case database reasons		3	
↑ ↓	15	Case Court of Resolve		1	
↑ ↓	16	Case formal citation		4	
↑ ↓	17	Legal articles databases		1	
↑ ↓	18	Legal article searches		1	
↑	19	Legal article citation		2	

Total: **25**

Maximum grade: 25

Save changes

☐ Show page breaks
☐ Show the reordering tool
Go

Question bank

Category: Default for Learn 48 - Practice course for Sara Roberts (32)

☑ Display questions from sub-categories too
☐ Also show old questions
☐ Show question text in the question list

The default category for questions shared in context 'Learn 48 - Practice course for Sara Roberts'.

Create new question: Choose...

Page: 1 2 (Next)

Sort by name

Action	Question name	Type
« ⚲ ✎ ⇅ ✖ ☐	Article Citation	
« ⚲ ✎ ⇅ ✖ ☐	Article Citation Journal	
« ⚲ ✎ ⇅ ✖ ☐	Article Citation Page	
« ⚲ ✎ ⇅ ✖ ☐	Article Citation Title	
« ⚲ ✎ ⇅ ✖ ☐	Article citation title colour	
« ⚲ ✎ ⇅ ✖ ☐	Bracket description	
« ⚲ ✎ ⇅ ✖ ☐	Brackets Round	
« ⚲ ✎ ⇅ ✖ ☐	Brackets Square	
« ⚲ ✎ ⇅ ✖ ☐	Call number 1	
« ⚲ ✎ ⇅ ✖ ☐	Call number 2	
« ⚲ ✎ ⇅ ✖ ☐	Case Court of Resolve	
« ⚲ ✎ ⇅ ✖ ☐	Case database	
« ⚲ ✎ ⇅ ✖ ☐	Case database reasons	
« ⚲ ✎ ⇅ ✖ ☐	Case Databases	
« ⚲ ✎ ⇅ ✖ ☐	Case Description	
« ⚲ ✎ ⇅ ✖ ☐	Case formal citation	
« ⚲ ✎ ⇅ ✖ ☐	Copies 1	
« ⚲ ✎ ⇅ ✖ ☐	Copies 2	
« ⚲ ✎ ⇅ ✖ ☐	Dictionary Definition	
« ⚲ ✎ ⇅ ✖ ☐	Law Report	

Page: 1 2 (Next)
Show all 32

Select all / Deselect all
With selected:
◄ Add to quiz   Delete   Move to >>
Default for Learn 48 - Practice course for Sara Roberts (32)
Add 1 ▾ random questions   Add

Figure 2

Figure 2 shows part of the question bank for our quiz. You can see from this list the name and type of question. It is vital to name each question in a descriptive and clear way, because as the list gets longer it is difficult to distinguish one from another. From the question bank, you select the questions that you want to include in a specific quiz. You can also set up the quiz to randomly select questions from this list, so that each attempt by the student includes different questions.

Editing a Multiple Choice question ❓

You have permission to :

- Edit this question
- Move this question
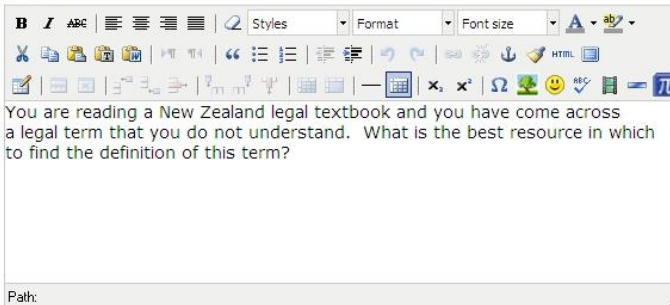- Save this as a new question

General

Current Category Library Research Exercise (44) ☑ Use This Category
Save in Category Library Research Exercise (44)
Question name* Dictionary
Question text ❓

You are reading a New Zealand legal textbook and you have come across a legal term that you do not understand. What is the best resource in which to find the definition of this term?
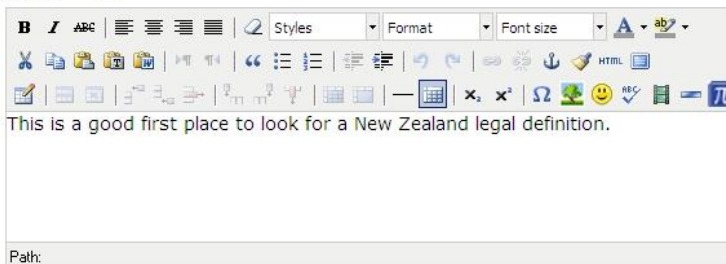
Choice 1

Answer Butterworths New Zealand Law Dictionary
Grade 100 %
Feedback

This is a good first place to look for a New Zealand legal definition.

Figure 3

Figure 3 shows part of the question editing screen for a multiple choice question. You can enter as many options are required, indicate a mark and designate a snippet of feedback to accompany each answer.

Results

There were NO technical hitches. Apart from the librarian who forgot to close the quiz before the Easter break (that would be me). Out of 520 students enrolled in LAWS 101, 381 (73.2%) attempted the quiz and 357 (68.6%) finished it. 289 persevered to get 20/20 and 68 people settled for less than 20/20. The break-down of those who didn't get 20/20 was: ≤ 17(18), 18(22), 19(28). The overall average was 19.74 (97%).

Moodle allows very extensive statistics to be gathered. You can see the name of every student who attempted the quiz, how many times they attempted it, how long they took at each attempt and what they answered each time. You can break the results down by questions and see how each student answered it. All of which is very useful for future quiz development.

Some of the comments received were:

- A really good exercise to get some practice at finding things specific to law. Great!
- I liked that this exercise was online as you could see if your answers were right or wrong immediately.
- Having it online is really good. I think in other years it was a paper copy?
- Generally quite the cynic, I found this to be a highly helpful exercise that certainly helped in improving my confidence and aptitude in using law library resources. Thanks.
- Great exercise for beginning law students and complemented the law library tutorial well
- This was a very useful and hassle free introduction to researching in the Law Library. The skills I have learnt will be useful throughout my study here at the Law School. Many thanks
- I liked the inspirational comments when you get a right answer.
- I am studying part-time as well as working full-time, on top of which my partner and I have a four-month-old daughter. Online exercises such as this are extremely valuable in that I can work on them at times which are more convenient for me.
- A few more questions with varying amounts of difficulty to make it a bit more challenging would be good.

Paper and Online Quiz Comparison

	2008 (Paper)	2009 (Paper)	2010 (Online)
Enrolled	492	525	520
Competed	58.3%	59.4%	68.6%
Average Mark	68%	75.2%	97%
Range	5.5/25 - 25/25	6/25 – 25/25	17/20 – 20/20

Conclusion

The quiz was technically sound. Moodle did all we required it to do (and more) and handled the numbers of students very well. The main advantage for the librarians was that all of the work was completed before the quiz was released to the students. We found this very satisfactory, as our energy went into creating questions with useful feedback attached, rather than providing feedback during the marking process. Slightly higher numbers of students completed the quiz than had in previous years, more students achieved full marks and comments were predominantly positive.

The library staff had some reservations relating to the lack of library/student contact and the large element of spoon feeding in the use of multiple choice questions and the provision of the correct online resource to use with each question.

However over all, we felt that the students engaged more with the subject, they had more opportunity to get feedback about their answers and found it fun. We will certainly be using similar quizzes in the future to support the face-to-face teaching that we do.