

University of Southampton, UK

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LEARNING OUTCOME

The University of Southampton promoted the use of MyMathLab to their foundation year engineering students by setting **formative homework assignments**. They are **pleased with the good student feedback received** and plan to implement more features of the system in subsequent years.

Course

Foundation Year Mathematics

Textbook in use

Mathematics for Engineers, 5th edition, 2010
Croft and Davidson

Type of data collected

Anecdotal

Data collection period

2009–10

Course design

The course is equivalent to A level mathematics and is designed to prepare students for transition into level 1 engineering courses, preferably at our University. This academic year we had 140 students and our plans are to increase the number of the students up to 175 in a few years time. Home and international students are taught together.

Engineering Foundation Year has a long and successful tradition at our University. Students appreciate the lecture notes and problem sheets that they can access via Blackboard. When MyMathLab became available to support Croft and Davidson, *Mathematics for Engineers*, I saw this as an opportunity to enrich the module at no direct additional costs, apart from the time I needed to invest to master the technology.

On one hand I did not want to give up my well established and working system, on the other hand I wanted to explore the new technology and see how my students could benefit from it in addition to the existing system.

Assessments

Formative homework assignments that did not count towards the final mark.

Implementation

The technology was used in addition to the existing practice on a voluntary basis.

The very first task was to register the students online. A Pearson representative came to my first maths lecture for 15 minutes to introduce the technology and to explain how to register. This introductory file was also made available through the Blackboard site.

I did not use all the features of the technology. My main use was to assign homework and additionally I encouraged students to use the technology for their own studies. The homework marks did not contribute towards final marks though I found the gradebook well organised.

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The options that I have used, so far are very useful, especially the option which enables me to see how long the students were working on their homework. I did not put any limitation on times and number of attempts because of the way I used the technology though I do consider these options to be very useful.

Course results

I do not have statistical evidence so far. Through informal chats with the students I have learned that the technology has a great potential and suits some students' needs quite well. Not all students have been using the technology, but those who have used it were very positive about it.

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The students did not perform better in the exams. However, we have only used the technology partially for one academic year, so it is not feasible to evaluate its impact.

Conclusions

I have learned that this technology has its merits in enhancing students' learning experience and I have already passed this on to my colleague teaching a similar module. She is going to implement the technology in the coming academic year.

Going forward, I will probably not replace my old system completely with MyMathLab but I will implement more features of it, and will constantly remind the students to use it by creating more exciting and challenging tests and quizzes. I will also try to get more feedback from the students about the technology.

The technology is easy to use, modern and powerful.

Particular strengths that I can see are:

- flexibility (in many ways for students and lecturers)
- easy to set homework, assessments and quizzes.
- that it saves marking time.
- the eBook (though I would prefer to be able to navigate through the whole book instead of only relevant chapter for the topic I want to learn).

Drawbacks:

- you need to buy the textbook to get access to the technology.
- Some students regard the technology as a replacement rather than as a supplement to the lectures.