

MyMathLab at UEA

- This is a survey carried out by Claire Reeves at UEA. They used MyMathLab with two groups where for one group use was compulsory and for the other, voluntary. A very positive exercise in terms of demonstrating how best to use the technology (i.e., compulsory use; deep integration with course). See last two slides for summary of findings.

Survey of ENV-1A63 and ENV-1A65 “Maths and Basic Maths for Environmental Scientists” on the use of MyMathLab.

Trialled in 2008: Compulsory with assessed course tests in 1A63; Voluntary exercises for 1A65.

1. (All) Which maths module did you take?

Share Responses

No, but later on 1 student says they had the book from foundation year

1. (All) Which maths module did you take?

Download

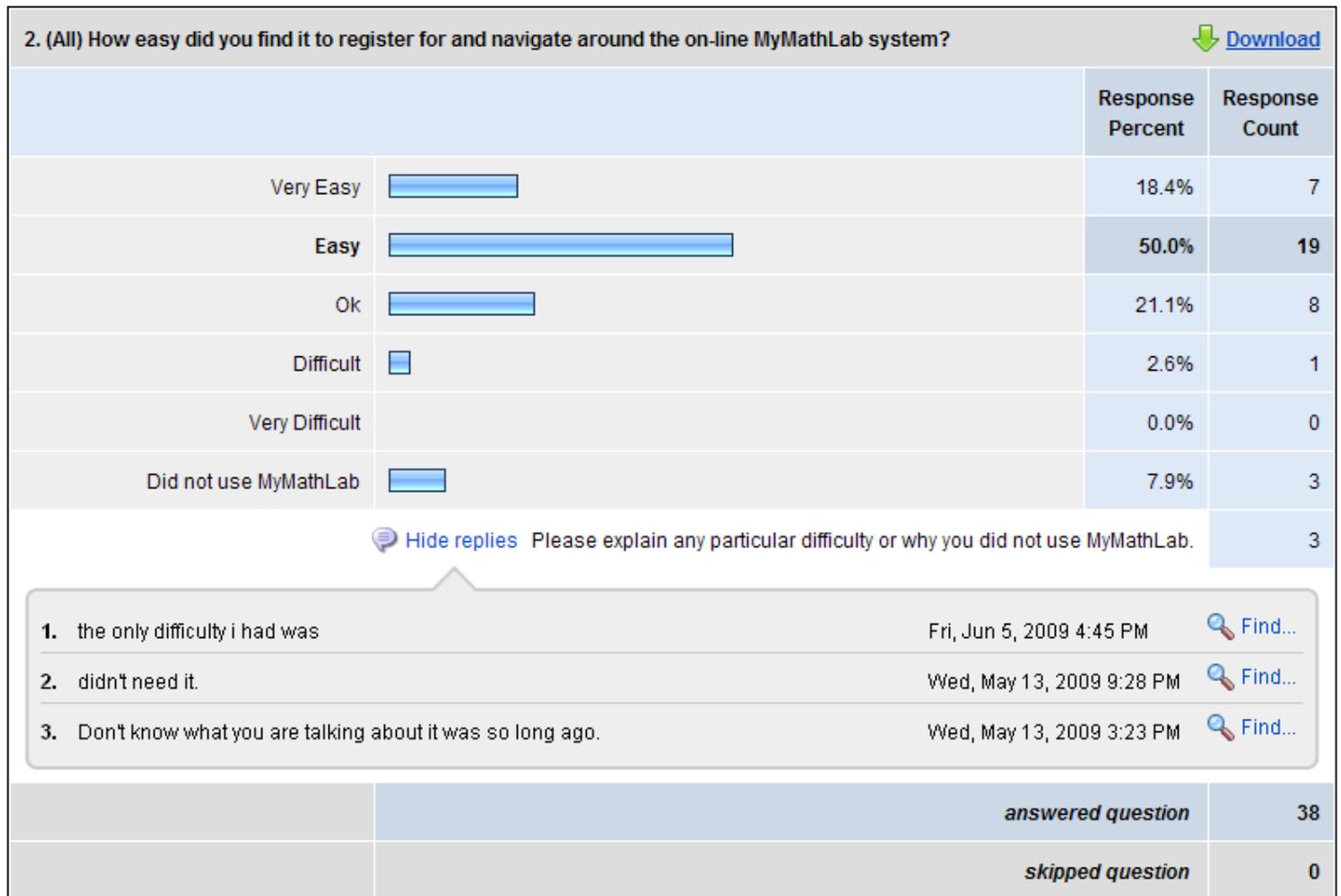
	Response Percent	Response Count
ENV-1A63 Mathematics for Environmental Sciences (Kaiser/Reeves)	78.9%	30
ENV-1A65 Basic Mathematics for Environmental Sciences (Dolphin/Vincent)	21.1%	8
Please state if you had used MyMathlab before this academic year and if so where?		9
answered question		38
skipped question		0

63 students with MyMathLab (MML) compulsory

13 out of 44 students registered for MML

- Very Good response rate from both modules.
- None had used MML before. 1 had used Croft and Davison before.

2. (All) How easy did you find it to register for and navigate around the MyMathLab system?

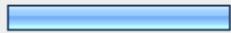
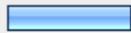


- Most students found it easy to register.
- 3 respondents (1A65) did not use MML.

3. (ENV-1A63 Only) How good do you think the on-line tests were for assessing your understanding?

3. (ENV-1A63 Only) How good do you think the on-line tests were for assessing your understanding?

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	Response Percent	Response Count
Very Good 	9.7%	3
Good 	45.2%	14
Ok 	29.0%	9
Poor 	16.1%	5
Very Poor	0.0%	0
Show replies Please add any comment.		6
1 of the 1A65 students answered this question, or ticked the wrong module		answered question 31
		skipped question 7

- Most students seemed to think the tests assessed their understanding reasonably well, but clearly there were quite a few who disagreed.

3. (ENV-1A63 Only) How good do you think the on-line tests were for assessing your understanding?

3. (ENV-1A63 Only) How good do you think the on-line tests were for assessing your understanding? [Download](#)

	Response Percent	Response Count
Very Good	9.7%	3
Good	45.2%	14
Ok	29.0%	9
Poor	16.1%	5
Very Poor	0.0%	0

[Hide replies](#) Please add any comment. 6

Needed exact answer format

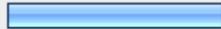
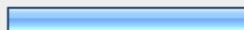
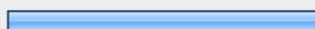
No marks for method - understanding

Easily abused?

1. took a while to get used to entering data Wed, Jun 3, 2009 5:40 PM [Find...](#)
2. They were quick and showed you the areas you needed to work on. Fri, May 29, 2009 8:08 PM [Find...](#)
3. But I did find that often it would mark me down for a typing error even if I got the answer correct which I thought was very unfair. Sun, May 10, 2009 8:27 PM [Find...](#)
4. Questions sometimes unclear, also the answer needed to be in an exact format to be answered correct. This format varied from test to test for certain answer types. Sun, May 10, 2009 1:40 PM [Find...](#)
5. the test only showed your answer which meant that if all your working were right and you failed to write out the correct result in the end it was impossible to tell if your understanding of the question was good or not Sat, May 9, 2009 6:23 PM [Find...](#)
6. Was pretty easy to seek help from the internet during the tests. However, in doing this I did feel I learnt well, using the test as a framework for revision almost. The system could be abused easily though I think. Sat, May 9, 2009 1:04 AM [Find...](#)

- MML does not reward understanding just the answer in the exact format.

4. (ENV-1A63 Only) Would you have preferred to have had similar questions set and marked as paper tests?

		Response Percent	Response Count
Yes		28.1%	9
No		31.3%	10
Indifferent		40.6%	13
Show replies Please add any comment.			8
2 of the 1A65 students answered this question, or ticked the wrong module		<i>answered question</i>	32
		<i>skipped question</i>	6

- Students divided or indifferent as to whether they would have preferred a written test.
- 31% would have preferred a written test, but 69% were happy with an on-line test – nice to know as this is less work to the teaching staff.
- Of the 9 that would have preferred a paper test, 5 suggested voluntary use of MML, 2 no use of MML, 1 no use of the FM textbook either & 1 compulsory MML tests (Q10)

4. (ENV-1A63 Only) Would you have preferred to have had similar questions set and marked as paper tests?

No		31.3%	10
Indifferent		40.6%	13

[Hide replies](#) Please add any comment. 8

1. found it useful to repeat some tests Wed, Jun 3, 2009 5:40 PM [Find...](#)
2. myMathLab would want the answer in one way only were as if the question was marked by a person then they would have understood the answer Mon, May 11, 2009 2:45 PM [Find...](#)
3. Working can be shown and feedback given. Sun, May 10, 2009 1:40 PM [Find...](#)
4. I think this would have been fairer as it allows you to show your working out and thus when marking you can see where you made mistakes. Sat, May 9, 2009 12:04 PM [Find...](#)
5. From an academic point of view possibly sit down testing in lectures would give a fairer reflection of progress. It would mean having a test every other week which including the coursework and end of course test might be too much for a first semester, first year module. Sat, May 9, 2009 1:04 AM [Find...](#)
6. I found it irritating being tied to a computer to complete these tests, also they took so long to complete, it really was a drag. Sat, May 9, 2009 12:45 AM [Find...](#)
7. Was annoying that typing the wrong type of digit in such as '*' or 'x' for multiply meant the question was wrong. There were no marks for almost getting the right answer which was often frustrating. Fri, May 8, 2009 6:28 PM [Find...](#)
8. Was annoying that typing the wrong type of digit in such as '*' or 'x' for multiply meant the question was wrong. There were no marks for almost getting the right answer which was often frustrating. Fri, May 8, 2009 6:26 PM [Find...](#)

answered question 32

Needed exact answer format. No marks for method - understanding

Tied to computer for long time

Same person answered twice?

- MML does not reward understanding just the answer in the exact format.

5. (ENV-1A63 Only) Did you find knowing if you had given the correct answer to a question along with the option to retake the test helped improve your learning?

Did not indicate where the mistake was.

Saw the benefit of more practice

Too long to re-sit. Same person tied to computer

5. (ENV-1A63 Only) Did you find knowing if you had given the correct answer to a question along with the option to retake the test helped improve your learning? [Download](#)

	Response Percent	Response Count
Very helpful	41.9%	13
Helpful	45.2%	14
No help at all	12.9%	4
Made learning harder	0.0%	0

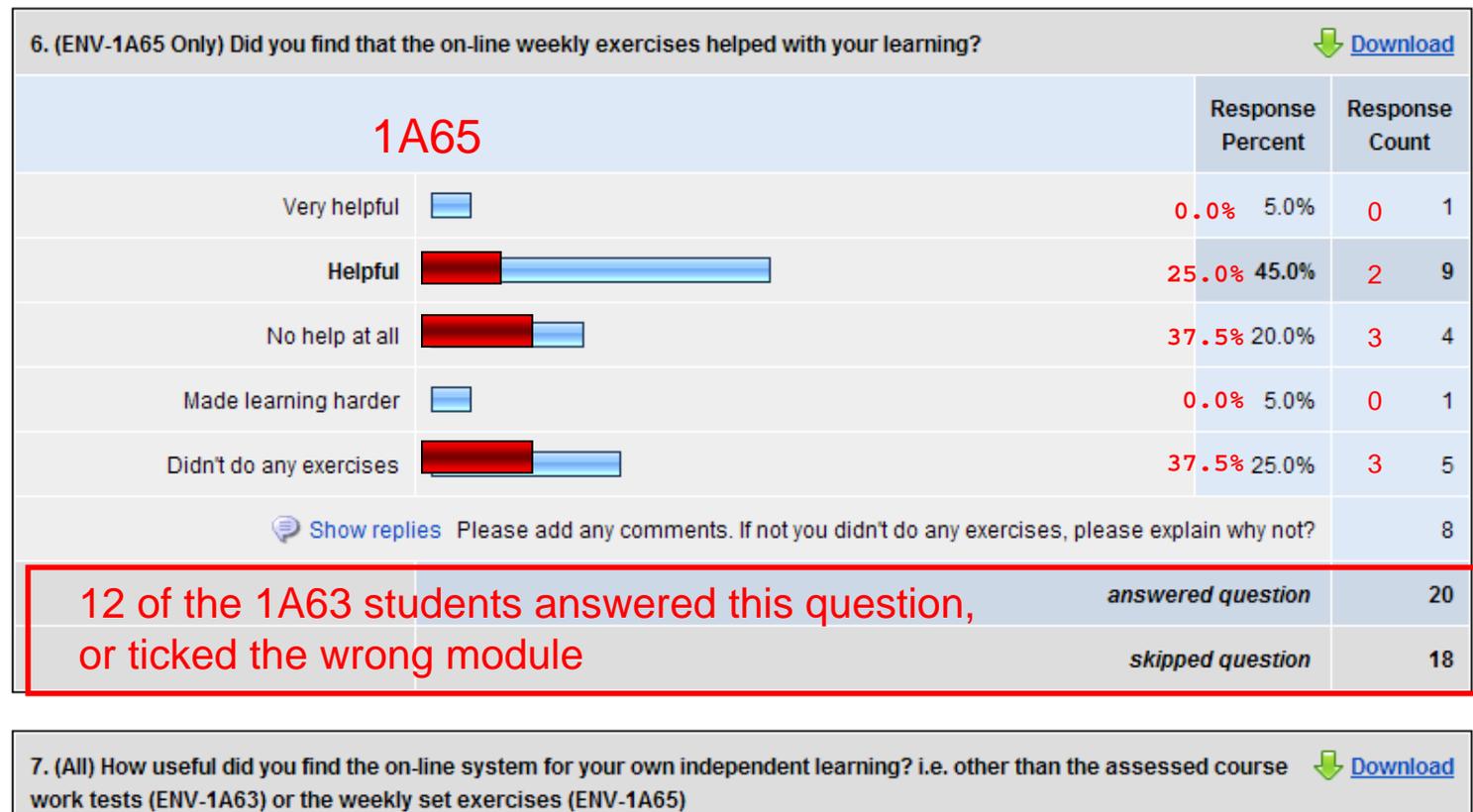
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1. i would have thought, had i used it, that i would have preferred to know whether or not i'd given the correct answer. Wed, May 13, 2009 7:26 PM [Find...](#)
2. it only said that you were wrong not where the error was as couldn't see workings Sat, May 9, 2009 6:23 PM [Find...](#)
3. Definitely, it meant I had to do more calculations which meant more practice and as a result better performance. Sat, May 9, 2009 1:04 AM [Find...](#)
4. I never resat, because it took so long to complete the first time round. Sat, May 9, 2009 12:45 AM [Find...](#)

1 of the 1A65 students answered this question, or ticked the wrong module	<i>answered question</i>	31
	<i>skipped question</i>	7

- Most found this helpful. Perhaps needed more direction to exercises with on-line help.

6. (ENV-1A65 Only) Did you find that the on-line weekly exercises helped with your learning?



- Although initially looks like students found it helpful, the majority of 1A65 respondents didn't.

6. (ENV-1A65 Only) Did you find that the on-line weekly exercises helped with your learning?



- Rather mixed views. Seems like the students needed more reminding in class about the exercises and how they might use MML to practice
- Of the 8 1A65 students 4 suggested voluntary use of MML, 1 no use of MML, 1 no use of the C&D textbook either & 1 compulsory MML tests (Q10) (1 no response)

7. (All) How useful did you find the on-line system for your own independent learning? i.e. other than the assessed course work tests (ENV-1A53) or the weekly set exercises (ENV-1A65)

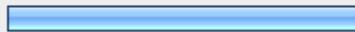
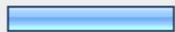
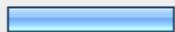
7. (All) How useful did you find the on-line system for your own independent learning? i.e. other than the assessed course work tests (ENV-1A63) or the weekly set exercises (ENV-1A65) [Download](#)

1A65		Response Percent	Response Count
Very helpful		14%	10.8%
Helpful		14%	45.9%
No help at all		43%	21.6%
Made learning harder		0%	0.0%
Didn't use other than for set tests		29%	21.6%
Show replies Please add any comments. If you did not use the system other than for tests, please explain why not?			6
<i>answered question</i>			37
<i>skipped question</i>			1

- Overall just over half found it useful for independent learning.
 - The rest found it no help or didn't use it outside set tests.
- For 1A65 less than 1/3 found it helpful for independent learning.

7. (All) How useful did you find the on-line system for your own independent learning? i.e. other than the assessed course work tests (ENV-1A53) or the weekly set exercises (ENV-1A65)

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	Response Percent	Response Count
Very helpful 	10.8%	4
Helpful 	45.9%	17
No help at all 	21.6%	8
Made learning harder	0.0%	0
Didn't use other than for set tests 	21.6%	8
Hide replies Please add any comments. If you did not use the system other than for tests, please explain why not?		6

1. in combination with the test book i was able to teach myself the concepts that the demonstrators were unable to explain in class

Thu, May 14, 2009 9:04 AM

[Find...](#)

2. same as before.

Wed, May 13, 2009 9:28 PM

[Find...](#)

3. If the work set in the lecture was compleated it was a case of copying up

Wed, May 13, 2009 3:23 PM

[Find...](#)

4. I hardly used the system for independent learning but when I needed information, I had easily gotten what I wanted with accompanying exercises.

Mon, May 11, 2009 6:50 PM

[Find...](#)

5. I used the textbook rather than the on line revision.

Sat, May 9, 2009 1:04 AM

[Find...](#)

6. For some reason I find it difficult to absorb information from a computer screen, I much prefer writing, and being able to draw/write my ideas.

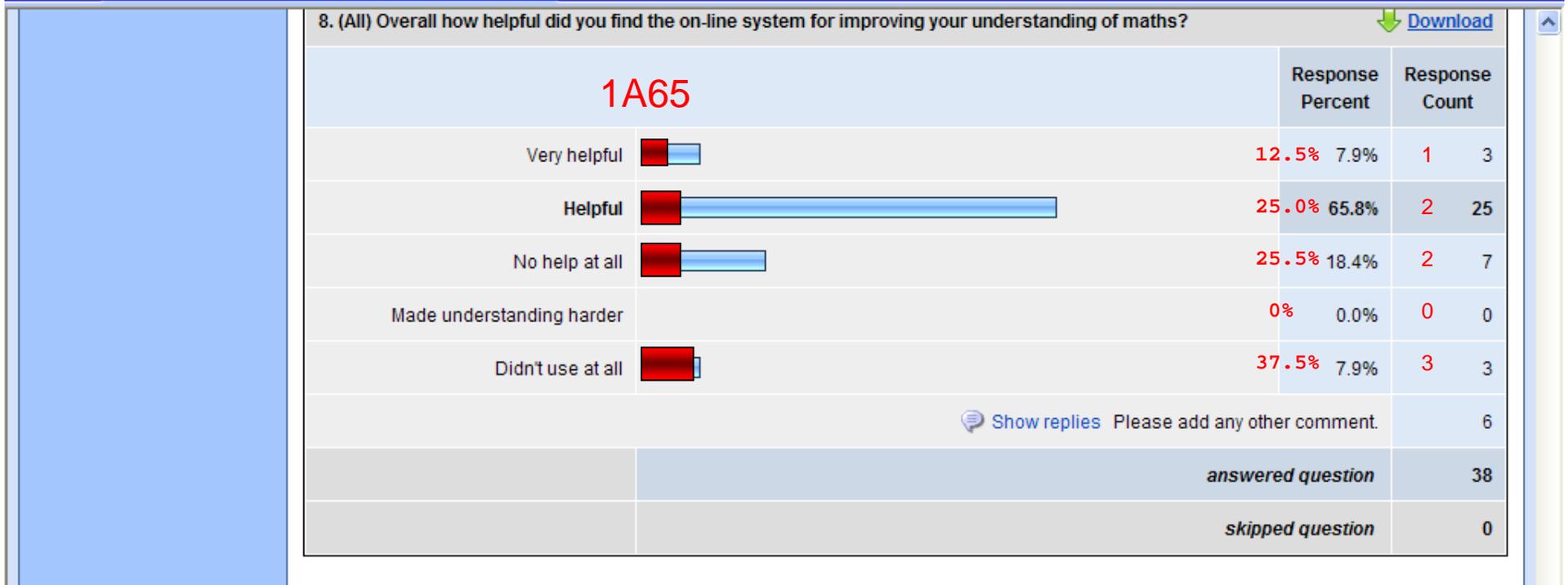
Sat, May 9, 2009 12:45 AM

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Preferred to use text books for independent learning

• For those who did not find it helpful, some preferred to use the text book

8. (All) Overall how useful did you find the on-line system for improving your understanding of maths?



- Overall over 70% found it MML useful.
- For 1A65 only 40% of respondents found it useful, but then an equal number didn't use it at all.
- Overall just short of 20% of those who used it found it no help (17% for 1A63 and 26% for 1A65).

8. (All) Overall how useful did you find the on-line system for improving your understanding of maths?

Good design - Stepping through a question helped understanding. See where you had gone wrong.

Needed exact answer No marks for method

8. (All) Overall how helpful did you find the on-line system for improving your understanding of maths?

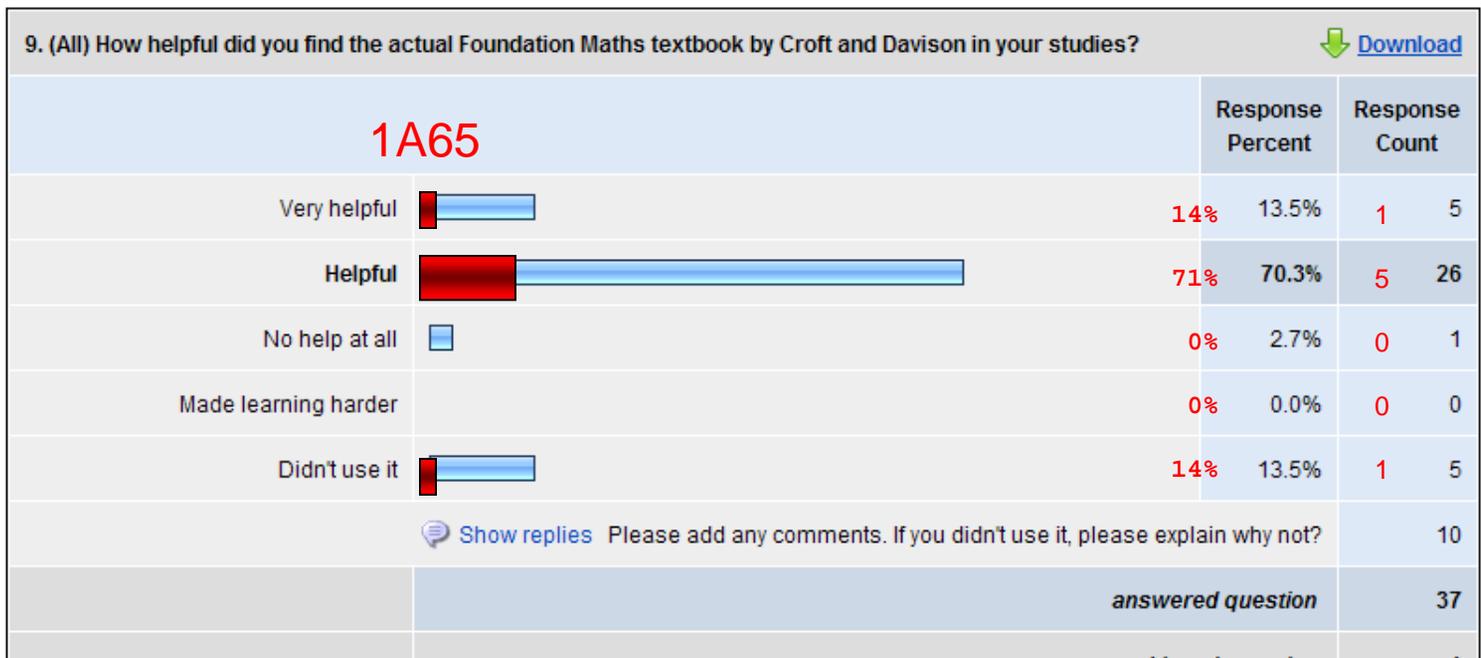
[Download](#)

	Response Percent	Response Count
Very helpful 	7.9%	3
Helpful 	65.8%	25
No help at all 	18.4%	7
Made understanding harder	0.0%	0
Didn't use at all 	7.9%	3
Hide replies Please add any other comment.		6

- The option for you to go through a question slowly step by step was really helpful in my understanding. Fri, May 29, 2009 8:08 PM [Find...](#)
- If I had used it I think it would have been helpful but as I didn't feel I needed to I thought it was abit unfair that I had to buy it all just to do the tests. Sun, May 10, 2009 8:27 PM [Find...](#)
- but only a very little Sat, May 9, 2009 6:23 PM [Find...](#)
- I thought the way in which you were able to see where you had gone wrong with a problem was helpful and well thought out by the person who design it. Sat, May 9, 2009 7:46 AM [Find...](#)
- I thought the way in which you were able to see where you had gone wrong with a problem was helpful and well thought out by the person who design it. Sat, May 9, 2009 7:45 AM [Find...](#)
- The internet was poor as the program would mark you wrong for small typing errors which could have been understood if the paper was marked by hand Fri, May 8, 2009 10:06 PM [Find...](#)

- Positive about design of stepping through problems. Issue of exactness & method.

9. (All) How helpful did you find the actual textbook by Croft and Davison in your studies?



- Overall over 80% found the Croft and Davison textbook helpful.
- A few never used it.

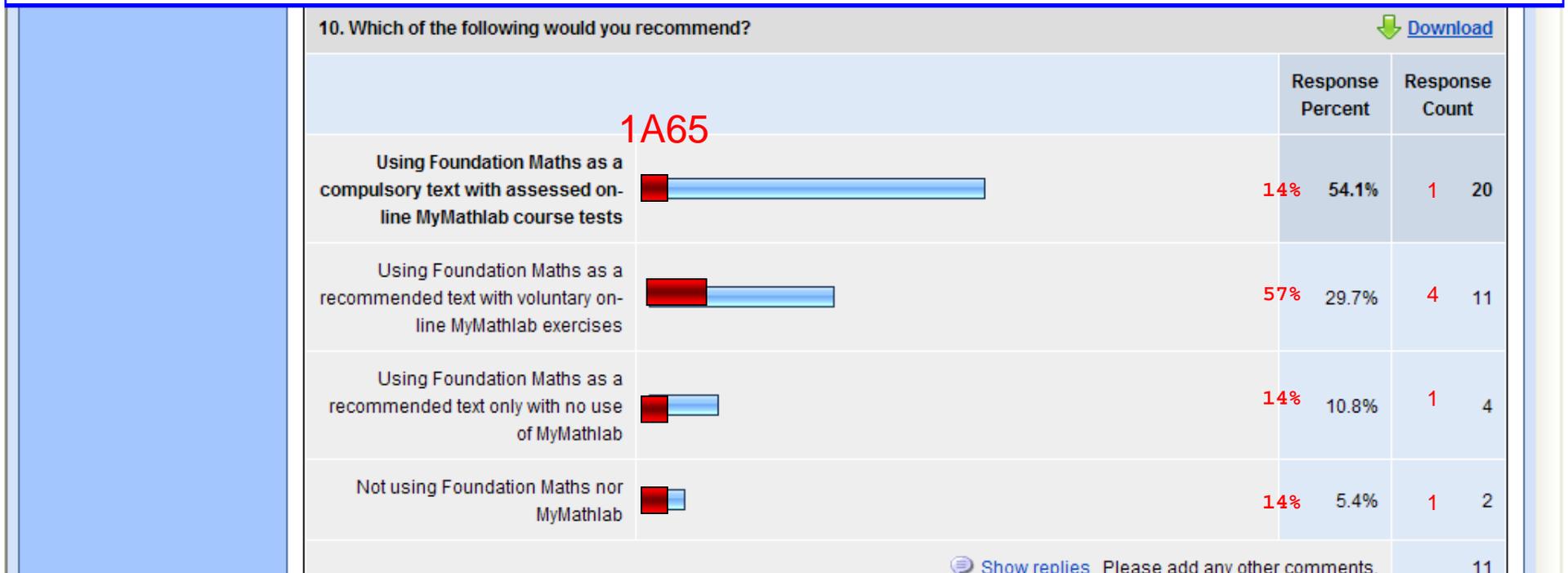
9. (All) How helpful did you find the actual textbook by Croft and Davison in your studies?

- Clearer online
- Book not referred to
- Expensive. Bought just for online
- Con - as bought for foundation year.
- Away from computer
- Good examples, graphics and navigation.

Response	Date	Count
1. didn't use it much but came in handy at times when needed an extra little practice on topics	Fri, Jun 5, 2009 4:45 PM	5
2. Not as clear as the online help.	Fri, May 29, 2009 8:08 PM	10
3. But not that much as nothing we learnt was referred to in the book.	Wed, May 13, 2009 9:28 PM	
4. I already had it from the foundation year but didn't have the disc and was expected to pay for a new book. What a con.	Wed, May 13, 2009 3:23 PM	
5. Again, as I didn't feel I needed to use it, I thought it was a waste of money.	Sun, May 10, 2009 8:27 PM	
6. Book was only bought for online access as far as i can tell.	Sun, May 10, 2009 1:40 PM	
7. it was good for revision when access to a computer was unavailable for example o the train. But other than that I preferred to use the material online.	Sat, May 9, 2009 7:46 AM	
8. it was good for revision when access to a computer was unavailable for example o the train. But other than that I preferred to use the material online.	Sat, May 9, 2009 7:45 AM	
9. Good text book, lots of examples, nice graphics and easy to navigate around.	Sat, May 9, 2009 1:04 AM	
10. Didn't think it was worth buying for one semester as barely used it. Don't think it should be recommended as £30 is alot of money for a textbook which wasn't used enough!	Fri, May 8, 2009 5:03 PM	
answered question		37
skipped question		1

- Cost. Foundation year. Reference in class.

10. (All) Which of the following would you recommend?



- Overall 54% thought MML should be compulsory whilst 30% thought it should be voluntary.
- For 1A63 where it was compulsory this year these figures were 63% and 23% respectively.
- 15% thought MML should not be used, and 1/3 of these thought that the Croft and Davison textbook should not be used either.

10. (All) Which of the following would you recommend?

Book not referred to in class – extra practice

1 answer was wrong.

Cost

No versus instant feedback

Needed exact answer.

Liked ENV written problems - groups

1. neither should be compulsory as i barely used both and i did fine,they should definately be something to use for extra help. The only problem with that is students may think they are ok and then the exam comes and they go badly. So i think teachers should check at the end of lectures how the class thought of the topic and then advise some extra work for those that need it. There is no need to make the purchases compulsory in the first year maths, it is only gcse standard to recap on.

Fri, Jun 5, 2009 4:45 PM

 Find...

2. I would recomend the on-line MyMathLab much more highly than the textbook.

Fri, May 29, 2009 8:08 PM

 Find...

3. Frustrating when correctly answered questions, as proven by MyMathLab answers, were actually marked wrong.

Tue, May 19, 2009 5:45 PM

 Find...

4. due to cost, if i struggled i would endeavour to find the answer from the internet or a friend

Wed, May 13, 2009 7:26 PM

 Find...

5. We never used the book in class I used it the previous year and would recomend it but take into accout that private study is also important.

Wed, May 13, 2009 3:23 PM

 Find...

6. I wouldnt recommend having the end-of-semester course test on-line but the compulsory weekly exercises online made things a bit easier in terms of finding the right sheet to answer, and being able to immediately learn from your mistakes without having to wait for the appropriate feedback a week later.

Mon, May 11, 2009 6:50 PM

 Find...

7. I dont think that students should have to buy it just to do the online tests.

Sun, May 10, 2009 8:27 PM

 Find...

8. Online testing gives no feedback or route to crrct answers.

Sun, May 10, 2009 1:40 PM

 Find...

9. If you made any accidental errors or wrote the right answer but in a different format then the answers were marked wrong even when the answer was right.

Sat, May 9, 2009 12:04 PM

 Find...

10. Good idea. Mixed well with the written courseworks, offered variation. However, I did prefer written CW the element of problem solving and relation to more relevant problems was really rewarding and satisfying and quite fun in a way when you have a huge group of people working on it together.

Sat, May 9, 2009 1:04 AM

 Find...

- Cost. Exact answer. Feedback? Reference in class. ENV problems.

Survey of ENV-1A63 and ENV-1A65 “Maths and Basic Maths for Environmental Scientists” on the use of MyMathLab.

Overall Conclusions & Recommendations

- By far the majority of 1A63 students found MML helpful. 1A65 less so.
- The majority of students thought MML should be compulsory with on-line assessments
 - For some cost was an issue, especially if already bought for foundation year
- Main complaint was that MML required the answers in an exact format and did not reward methodology.
- Mixed feelings about feedback. Instant feedback, but only right or wrong. Some students found being able to retake tests helped learning. Others didn't seem to be aware of the exercises they could do to learn how to answer a test question.
- Written test better for ENV problems, but maybe limited by the way we used MML.
 - Few used it for independent learning outside set tests.
- By far the majority found Croft and Davison helpful – used along side in-house text.
 - Use MML for 2009. 2010? New Numerical Skills modules (1A63, 1A65 & stats).
- Use as much as possible (reference in class, a few class sessions, assessed tests, extra homework (strugglers & advanced)) – students get more from it, better value.
- Need ENV type problems. Steps allowing feedback & habit of detailing methodology.

General thoughts on using MyMathLab.

- MML provides the opportunity for independent learning, some of which can be directed
 - fits into the idea of increasing student learning without increasing contact hours
- MML provides instant feedback to each student
 - far more feedback than can be provided by the teaching staff in class
 - feedback somewhat limited to right or wrong although students should be directed to the practice exercises where the on-line system can guide them through a problem.
- Evidence suggests students do little non-assessed independent learning unless the assessed tests can only be sat once!
- MML tests are easy to set. Same tests can be used each year as each question has different actual values. Marking is automated. Therefore efficient in terms of tutor time. Also allows frequent assessment and promotes regular practice.
- MML covers the fundamentals, but still need to teach the students to apply these techniques to ENV type problems.
 - Need to link appropriate MML parts to module curriculum or text.
- Written tests needed to demonstrate the importance of detailing methodology.
- In future students of even wider ranging maths ability will be taught together
 - MML could be used for providing extra practice to those you need it
 - Also may be for stretching the more advanced students (part of summative assessment?)