

Brug af e-læring i faget Matematik

Med fokus på feedback

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Oktober 2015

Agenda:

- Faget Matematik
- Problemstilling
- E-læringsplatformen: MyMatLab
- Feedback
- Udfordringer/opsummering

Faget Matematik

- 1. semester på HA-uddannelsen (5 ECTS).
- Ca. 600 studerende.

Problemstilling/udfordringer:

- Stor varians i evner og i udgangspunkt.
- For lav arbejdsindsats i løbet af semestret.
- Høje dumpeprocenter.
- Faget gik fra tre til to timer om ugen - samme pensum.

Faget Matematik

- 1. semester på HA-uddannelsen (5 ECTS).
- Ca. 600 studerende.

14 Forelæsninger

14 MyMatLab Ugeopgaver i MyMatLab
Studie Caf er

Hjemmearbejde Ugeopgaver (MyMatLab)
L se i bogen
Obligatoriske opgaver

E-læringsplatformen MyMatLab

The screenshot displays the MyMathLab Global interface. At the top, the browser address bar shows the URL: <https://www.mymathlabglobal.com/Student/Playe/homeework.aspx?homeworkid=565182&questionid=48&ushed-fah>. The page header includes "MyMathLab Global", "Help", "Rune Vammen Lesner", and the date "01/10/15 10:00".

The main content area is titled "Homework: Assignment, Week 41". It features a navigation bar with question numbers 1 through 15. Below this, the problem statement reads: "Find the following derivatives. Express your answer in terms of the independent variables. z_x and z_y , where $z = e^{2x+3y}$, $x = st$, and $y = s+t$ ". An input field for the answer is shown with a small square icon.

On the right side, there is a sidebar with buttons for "Help Me Solve This", "View an Example", "Textbook", "Calculator", and "Print".

An "Overview" window is open in the foreground, displaying the following information:

- Homework Overview - Rune Vammen Lesner - Mozilla Firefox
- URL: <https://www.mymathlabglobal.com/Student/OverviewHomeework.aspx?popup=yes&homeworkid=565182&id=2807&auto=yes&contentwin>
- Name: Assignment, Week 41
- Last Worked: (empty)
- Current Score: 0% (0 points out of 15)
- This homework will **not** affect your Study Plan score.
- Number of times you can complete each question: unlimited

Questions: 15	Scored: 0	Correct: 0	Partial Credit: 0	Incorrect: 0
Question 1 (0/1)		Question 2 (0/1)		Question 3 (0/1)
Question 4 (0/1)		Question 5 (0/1)		Question 6 (0/1)
Question 7 (0/1)		Question 8 (0/1)		Question 9 (0/1)
Question 10 (0/1)		Question 11 (0/1)		Question 12 (0/1)
Question 13 (0/1)		Question 14 (0/1)		Question 15 (0/1)

At the bottom of the overview window, there is an "OK" button. Below the overview window, the main interface shows "3 part remaining" and buttons for "Clear All", "Check Answer", and "Save".

Feedback til studerende

- Direkte individuel feedback.
 - Den studerende bestemmer tid og sted.
 - Flere typer feedback.
 - Målsætning.
- Hvad siger de til det?
 - Meget populært!

Feedback til øvelsesunderviser/instruktør

- Direkte feedback.
 - Hvor meget har de forberedt sig.
 - Er der generelle problemer.
- Hvad siger de til det?
 - Det virker god - tilgodeser de svage studerende.
 - Stor arbejdsindsats til øvelserne.

Feedback til øvelsesunderviser/instruktør

MyMathLab Global

Member: Høstsem 2015 - Class H1 T321 - Vammen Lesner - GRADEROOK - ITEM ANALYSIS

Assignment, Week 3B

Item Analysis

Name: Assignment, Week 3B # of students submitted: 29

Date Due

Export student details

Export course summary Data delimiter: comma Change...

Data does not include results submitted by an instructor.

#	Question ID	Section	Correct	Partial Credit	Incorrect	Not Attempted	Time Spent	Median Time Spent
1	6.6.3	Simple Rules for Differentiation	28	0	0	1	14m 53s	show median
2	6.8.2	Chain Rule	27	0	0	2	12m 23s	show median
3	6.10.2	Exponential Functions	28	0	0	1	10m 35s	show median
4	6.6.6	Simple Rules for Differentiation	28	0	0	1	6m 47s	show median
5	6.11.2	Logarithmic Functions	28	0	0	1	6m 25s	show median
6	6.8.8	Chain Rule	26	0	1	2	26m 31s	show median
7	6.7.2	Sums, Products, and Quotients	26	0	1	2	21m 37s	show median
8	7.1.2	Implicit Differentiation	24	0	1	4	19m	show median
9	6.9.3	Higher-Order Derivatives	23	1	2	3	22m 15s	show median
10	7.3.4	Differentiating the Inverse	19	0	2	8	18m 27s	show median
11	6.10.3	Exponential Functions	22	0	2	5	21m 23s	show median
12	6.11.3	Logarithmic Functions	22	0	1	6	13m 8s	show median
13	7.1.11	Implicit Differentiation	17	0	3	9	26m	show median
14	7.2.2	Economic Examples	14	0	2	13	17m 48s	show median

OK

Feedback til fagansvarlig

- Statistisk data.
- Hvordan er arbejdsindsatsen.
- Sammenligning på tværs af hold.
- Mulighed for intervention.
- Mulighed for konkret at måle på effekten af en ændring i læringsform.

Feedback til fagansvarlig

Gradebook - Rune Vammen... x

https://www.mymathlabglobal.com/Instructor/Gradebook/Assignments.aspx

MyMathLab Global Help - Browser Check Rune Vammen Lesner - 01/10/15 10:04

Member: Matematik 2015 - Class H1 [32] - Vammen Lesner - > GRADEBOOK - ALL ASSIGNMENTS

Manage Course List

Gradebook Legend

Export Data | 1 Manage Incompletes | Change Weights | Edit Enrolment List | More Gradebook Tools

All Assignments Overview By Student Study Plan Performance by Chapter

All Chapters Go

Assignments 1 - 5 of 6

Go to... < > >> <<

Enrolment List	Overall Score	# of Results	Assessment, Week 37	Assessment, Week 38	Assessment, Week 39	Assessment, Week 40	Assessment, Week 41
Percentage of overall score	100%	--	5%	5%	5%	5%	5%
Course Average	68.3%	--	83.1%	81.8%	66.2%	45.6%	43.2%
Course Median	70.1%	--	100%	92.9%	67.9%	39.3%	43.3%
# of Results	--	114	31	29	28	25	1
			Change Scores	Change Scores	Change Scores	Change Scores	Change Scores
	46.4%	4	100%	71.4%	7.1%	7.1%	--
	50%	1	--	--	50%	--	--
	12.5%	1	12.5%	--	--	--	--
	55.8%	4	87.2%	100%	35.7%	0%	--
	48.2%	4	100%	42.9%	42.9%	7.1%	--
	38.6%	4	68.8%	64.3%	21.4%	0%	--
	98.2%	4	100%	100%	92.9%	100%	--
	100%	2	100%	100%	--	--	--
	24.6%	4	12.5%	0%	78.6%	7.1%	--
	70.1%	4	87.5%	57.1%	57.1%	78.6%	--

STUDENT

- Course Home
- Study Plan
- Calendar
- Homework and Tests
- Results
- Student Resources

INSTRUCTOR

- Course Manager
- Home Page Manager
- HW & Test Manager
- Study Plan Manager
- Gradebook
- Instructor Resources

Udfordringer/opsummering

- E-læringsplatformen giver en klar forbedring af faget.
 - Direkte feedback giver hævet motivation og arbejdsindsats.
- Programmets begrænsninger.
- Udgifter til program.
- Alignment.