Facebook v Blackboard Discussion Forums in Teaching and Learning Mathematics

Vesna Perišić

CETL-MSOR Conference 2015
‘Sustaining Excellence’
8-9 September 2015, University of Greenwich
Outline

• Motivation
• Action
• Evaluation
• Conclusion
• Further work
• References
Motivation

Thinking of teaching ....

• Size of cohorts
• Diversity of cohorts (age, experience, background, aspirations,....)
• Abstract concepts - Mathematical rigour
• Anxiety

‘...daunting task that faces lecturers in responding to the pressure of mass HE.’ Biggs & Tan (2011)
History?
Mathematical rigour
(an example)
Communication

• Establish and maintain ongoing communication with students and among students
• Previous project: Use of social media (Facebook) to facilitate communication with students taking analysis module
• Current Project: Extend use of social media to include other modules I teach and complement it with discussion forums on Blackboard (VLE)
Action

In collaboration with Institute for Learning Innovation and Development (ILiD), UoS we:

• Set up Facebook group
• Support development of students’ digital literacies, including managing their online identities and appropriate security settings
• Nominated moderators to support group discussions
• DigiChamps to help if students are not familiar with Facebook
What was going on....

MATH2039_2013/14

Write something...

RECENT POSTS

Vesna Perisic
Tom Lehrer, as an example of mathematical career.

http://www.haverford.edu/astronomy/songs/lehrer/delta.htm

"There's a delta for every epsilon", by Tom Lehrer
www.haverford.edu
But one condition I must give: The epsilon must be positive A lonely life all the others live, In no theorem A delta for them.
Vesna Perisic
The Class Test will cover the material until differentiation (differentiation not included)

Seen by 94
View 1 more comment

Vesna Perisic There is a practice class test paper on Blackboard (Assessment folder) No, it is not multiple choice.
November 21, 2013 at 10:08am · Edited · Like

Alan Brook Ok thanks very much!
November 21, 2013 at 10:47am via mobile · Unlike · 1

Write a comment...

Joe Tait
Analysis related "cool" fact - A function which has derivate zero almost everywhere but still goes from zero to one. (Note that this will not be in the course)

Devil's Staircase -- Math Fun Facts
www.math.hmc.edu
If you plot this function, you get something called the Devil's Staircase.

You and 3 others like this.

You and 3 others like this.
FYI - what is going on locally...

http://southampton.web.uco.org.uk/2013/12/02/strike-action-is-on-at-the-university-of-southampton/

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Vesna Perisic
http://www.ucu.org.uk/index.cfm?articleid=6759

UCU - University and College Union - HE Pay Dispute 2013
www.ucu.org.uk

UCU members have voted to take strike action and action short of a strike in response to the employers' failure to make you a proper pay offer this year.

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Vesna Perisic
http://www.ucu.org.uk/index.cfm?articleid=6759

FYI

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Crispin Hoad Will you be striking?
October 24, 2013 at 9:01pm · Like

Vesna Perisic Yes
October 24, 2013 at 9:03pm · Like · 2

Leo Allen does this mean no analysis for tea?
October 25, 2013 at 11:11am · Like · 3

Vesna Perisic I do not know. You may want to do self study or study with your peers ( peer assisted learning ). It sounds good, isn’t it?
October 25, 2013 at 12:18pm · Like

Tom Munford Will you be striking again on Tuesday?
November 30, 2013 at 1:04am · Like

Vesna Perisic I will be striking again 😞
December 2, 2013 at 5:58pm · Like
Christmas MATH2039 tutorial

Going (17)
- Vesna Perisic (Host)
- Charles Cox
- Adolf Nomo

Friday, December 13, 2013
07/3009

You have an opportunity to:
- collect last marked problem sheet with feedback
- collect all other uncollected work
- ask any questions
- eat LEBKUCHEN

Vesna Perisic
Koch's snow flake

Like · Comment · Stop Notifications · December 4, 2013 at 4:27pm
Sandra Pott, Dijana Svilicic, Dana Utrobovic Kablar and 4 others like this.
Write a comment...
‘Vegan lemon drizzle cake’

Joe Tait

Apparently the recipe for the lemon drizzle cake was requested - here it is:

Vegan lemon drizzle cake on Heavenly Vegan Baking
heavenlyveganbaking.wordpress.com
Posts about vegan lemon drizzle cake written by Heavenly Vegan Baking

Leo Allen that sounds beautiful, but do you think it’d work with other milk substitutes ie almond or rice milk?
December 14, 2013 at 3:18pm · Like

Joe Tait I have normally substituted any sort of vegan milk quite happily. Having said that, I have not used rice milk so much, and I think that I tend to find it is a bit thinner, so I think something nut based may be preferable.
Let me know how it goes if you try it 😊
December 14, 2013 at 4:12pm · Like
Continuing project ...

• Continued using Facebook for communicating analysis
• Created Facebook group for the Engineering Foundation Year (EFY) cohort (2013/14)
• Created Facebook group for the first year maths students (2013/14)
• For each of the cohorts created a Discussion Forum on Blackboard (VLE) (2014/15)
Ongoing communication?

- Facebook communication

- Blackboard – ‘Blanckboard’

Debate on Blackboard at the ‘Technology Enhanced Learning’ conference (ILIaD), April 2015, University of Southampton
More on Blackboard

• The University is pushing for Blackboard
• Blackboard has been most recently upgraded and there is a smart phone App for Blackboard
• UoS Managed Learning Environment (MLE) team promoting Blackboard: blog, twitter, YouTube, Google+
• Top tips – how to use Blackboard beyond basics
• MLE team provides information such as:
  Type of device used to access Blackboard (August 2015): 88% desktop, 8% mobile, 4% tablet
Evaluation ??

• Exam results
• Student feedback (formal – informal)
• (NSS)
Exam Results

Before Facebook (BF)

2012/13 analysis cohort: 205 students; average 55%/51%
After FB has been introduced ...

2013/14 analysis cohort: 164 students; average 57% /57%
With Facebook and Blackboard Discussion Forum

2014/15 analysis cohort: 228 students; average 55%
Student Feedback

• Formal: - Students evaluation questionnaire
  - Poll on Facebook
  - Survey (Ethical approval)

Evaluation fatigue?

• Informal: *It is ‘cool’ to ‘meet’ a lecturer on Facebook;*

Helps to create more approachable and friendly atmosphere.
Conclusions
Further work

Implement some of the ideas I got here on this conference such as ‘outdoor education’ in order to develop a more collaborative learning and teaching environment in partnership with students.
References


Thanks!
Questions?

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\ln \left( G_n(t) \right) = -cP_n^2 t + C
\]

\[e^{\ln \left( G_n(t) \right)} = e^{-cP_n^2 t} \]

\[
G_n(t) = k_n e^{-cP_n^2 t} = k_n e^{e^{-cP_n^2} t}
\]

\[
R_n(2\pi t) = F_n(2) G_n(t)
\]

\[
(t) = \sum_{n=1}^{\infty} a_n R_n(2\pi t)
\]