



# 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



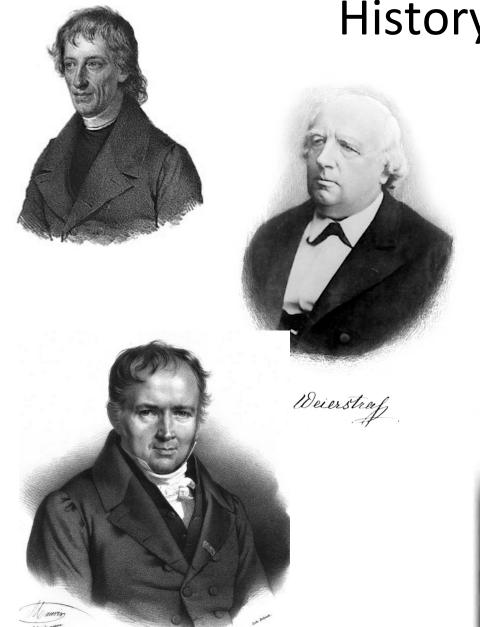
- Motivation
- Action
- Evaluation
- Conclusion
- Further work
- References

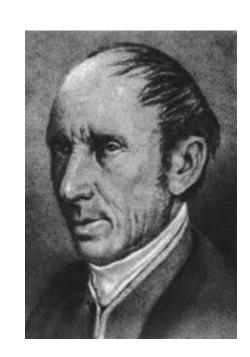
### Motivation

### 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?

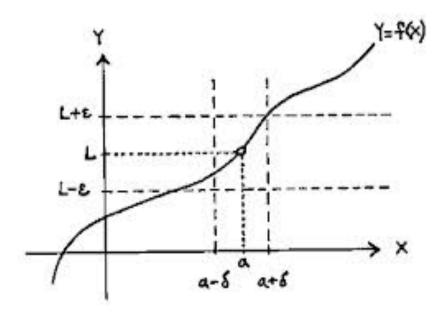






# Mathematical rigour

(an example)



## Communication

- Establish and maintain on going 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 Learnin Innovation and Development (ILIaD), 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





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.

+ C--- b. 40

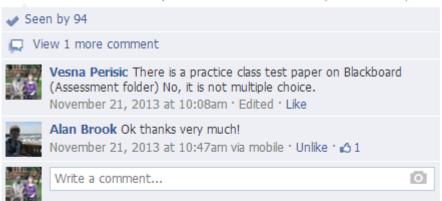
♠ Like · Comment · Unfollow Post · Share · Yesterday at 6:31pm



#### Vesna Perisic

The Class Test will cover the material until differentiation (differentiation not included)

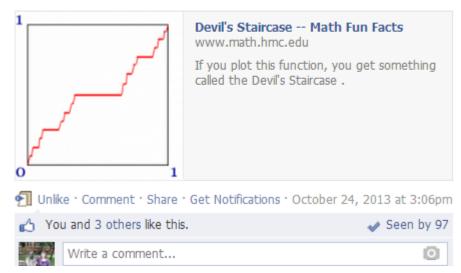
Like · Comment · Share · Stop Notifications · November 20, 2013 at 1:35pm





#### 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)





#### Vesna Perisic

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

FYI - what is going on locally ...



Strike action is on at the Universit Southampton - Southampton UC southampton.web.ucu.org.uk

Staff at the University of Southampton tomorrow (Tuesday 3 December) as n



Like · Comment · Share · Stop Notifications · December



Fiona Harvey likes this.



Write a comment...



#### Vesna Perisic

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

FYI



#### UCU - University and Co Pay Dispute 2013

www.ucu.org.uk

UCU members have voted action and action short of response to the employe you a proper pay offer th

#### 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.



Like · Comment · Share · Stop Notifications · October 24, 2013 at 8:57pm



Fiona Harvey and Joe Tait like this.





Crispin Hoad Will you be striking?

October 24, 2013 at 9:01pm · Like



Vesna Perisic Yes

October 24, 2013 at 9:03pm · Like · 6 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 (2)



December 2, 2013 at 5:58pm · Like



Write a comment...





#### **Christmas MATH2039 tutorial**

👢 Friends of Guests · By Vesna Perisic





Vesna Perisic (Host)



Charles Cox



Adolf Nomo

Recent guests (9 new)

#### Maybe (1)



② 4:00pm until 4:45pm in UTC





- You have an opportunity to:
   collect last marked problem sheet with feed!
  - collect all other uncollected work

  - ask any questions - eat LEBKUCHEN

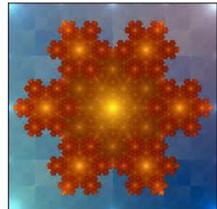




← Events

Vesna Perisic

Koch's snow flake



**□** Like · Comment · Stop Notifications · December 4, 2013 at 4:27pm

Sandra Pott, Dijana Svilicic, Diana Utrobicic Kablar and 4 others like this.



Write a comment...



# 'Vegan lemon drizzle cake'



# 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

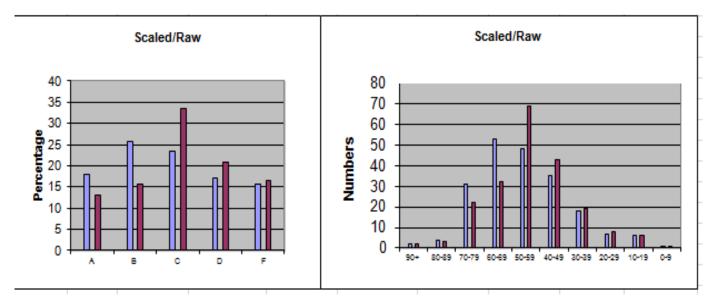
- The University is pushing for Blackboard
- Blackboard has been most recently upgraded and there is a smart phone App for Blackboard
- UoS Managed Learning Environment (MLE) team promoting Blackboard: blog, twitter, YouTube, Google+
- Top tips how to use Blackboard beyond basics
- MLE team provides 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)

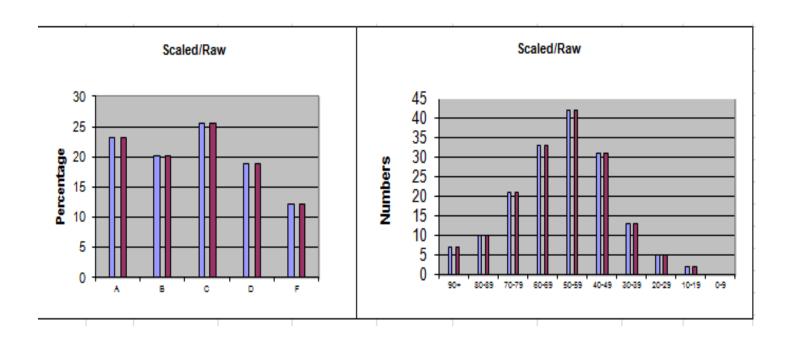
# **Exam Results**

Before Facebook (BF)



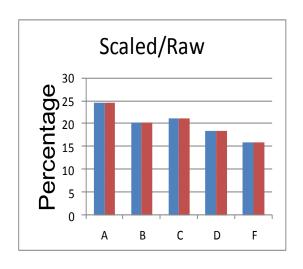
2012/13 analysis cohort: 205 students; average 55%/51%

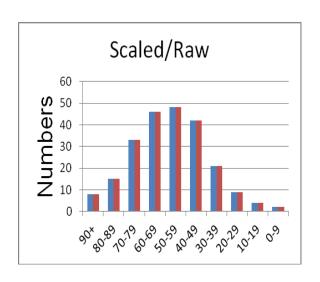
#### After FB has been introduced ...



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



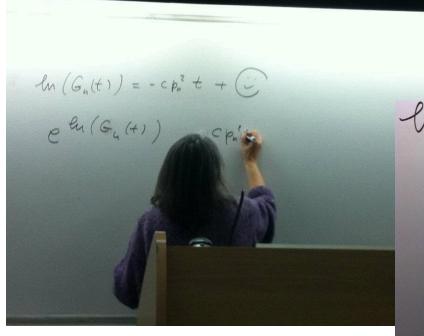
# Further work

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

- Biggs, J. B. and C. Tang (2011). Teaching for Quality Learning at University, The Society for Research into Higher Education.
- Gokhale, A. (1995). Collaborative Learning Enhances Critical Thinking, Journal of Technology Education, 1995, Volume 7 Number 1
- Perisic, V. et al. (2014). Exploring Use of Social Media in Teaching Analysis, 3<sup>rd</sup> HEA STEM Annual Learning and Teaching Conference 2014: Enhancing the STEM Student Journey, 30. April-1.May, 2014, Edinburgh
- Rambe, P. (2013). Converged social media: Identity management and engagement on Facebook Mobile and blogs, Australasian Journal of Educational Technology, 2013, 29(3)

# Thanks! Questions?



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