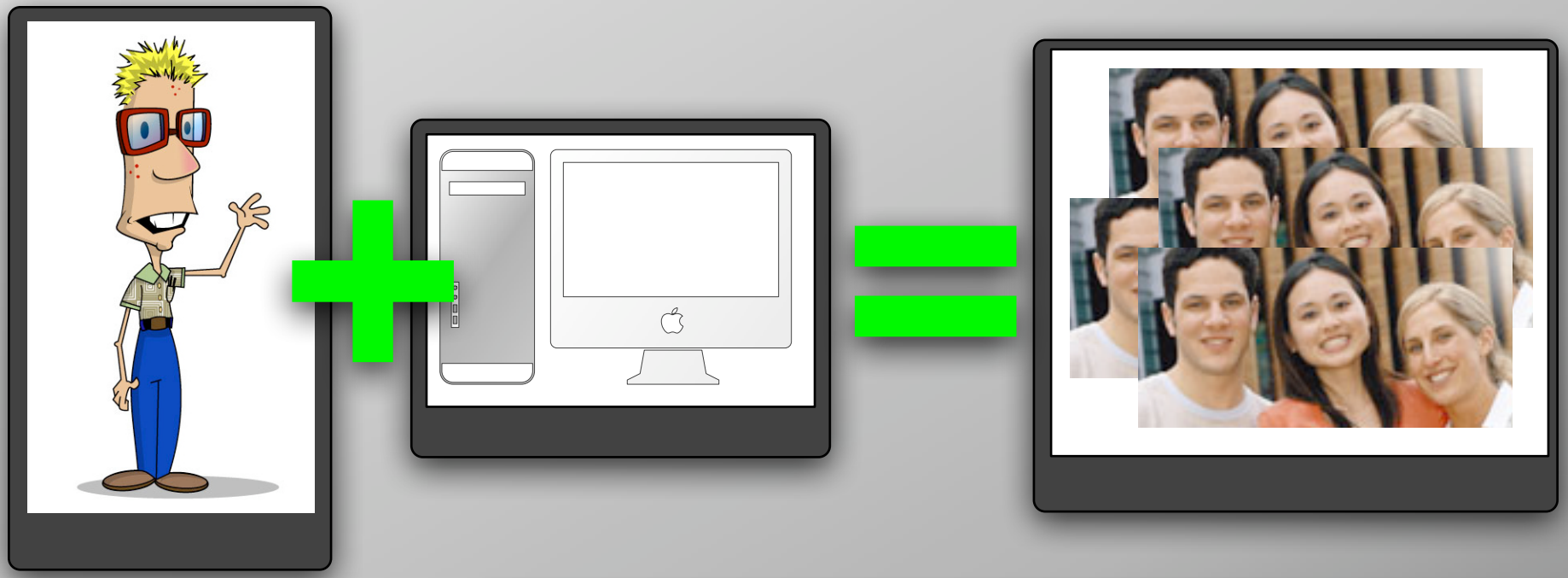
Learning from the Nerds

(Or, 'How I learnt to ~~survive~~ enjoy large class teaching')



Simon Angus
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MONASH University
Business and Economics

(Shh!) The secret to good teaching is ...

Employing Good People

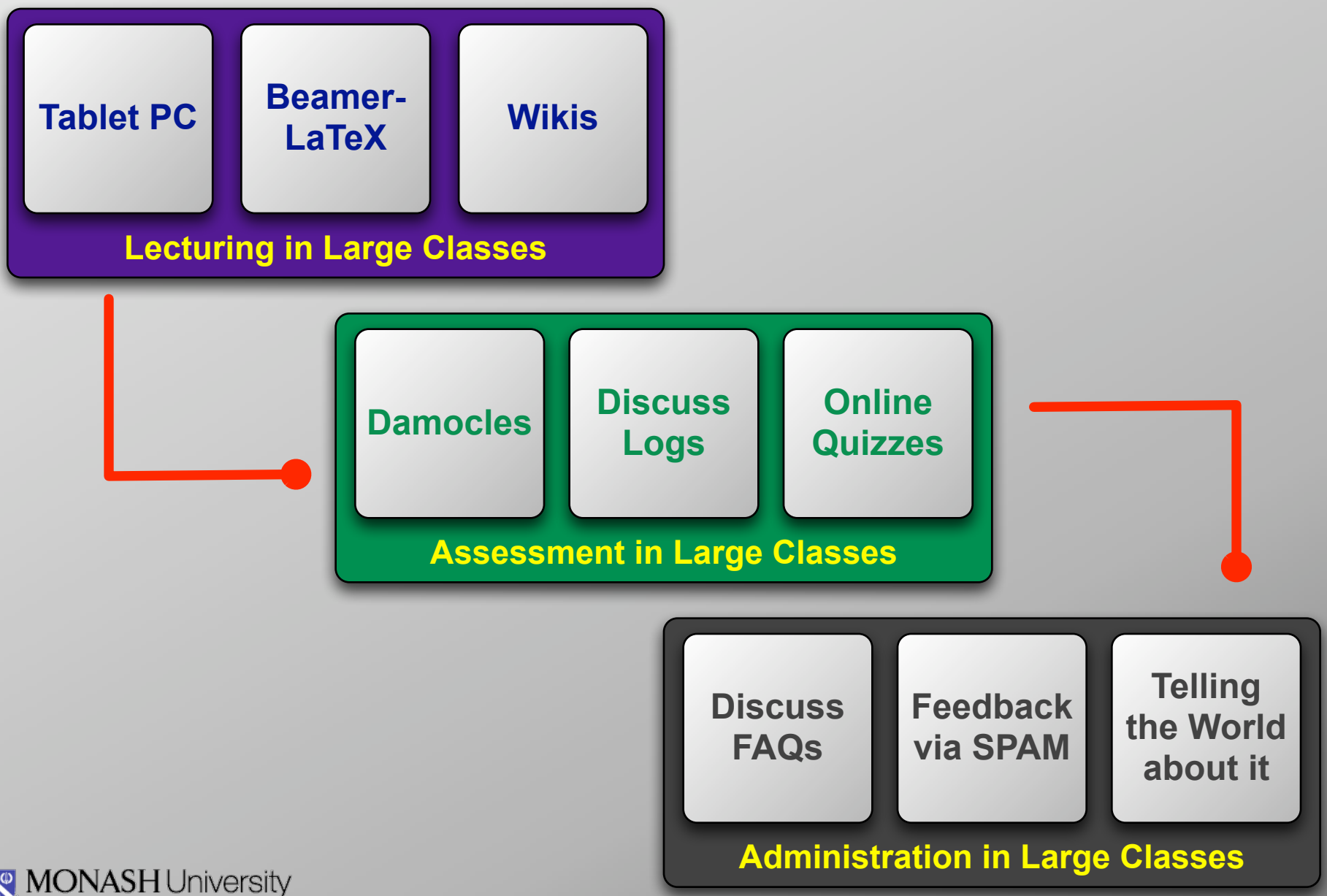
Treating Students as on a path to the UN (or equiv.)

Be Reasonable, Nice

Teaching things YOU find interesting

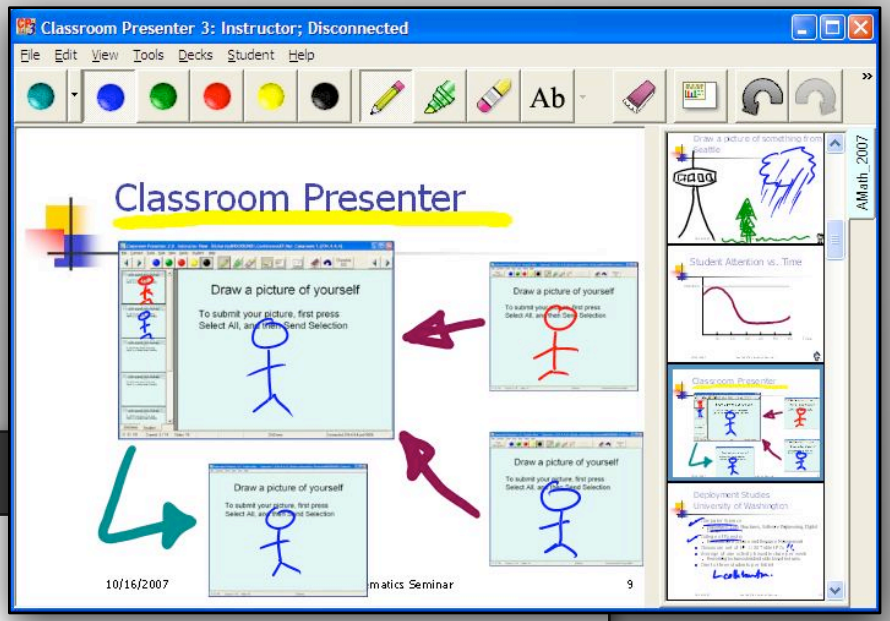
Teach the Truth

... and making technology work for you?



Tablet PC

Lecturing in Large Classes



Reflections

When to use:

- Always ... (?)

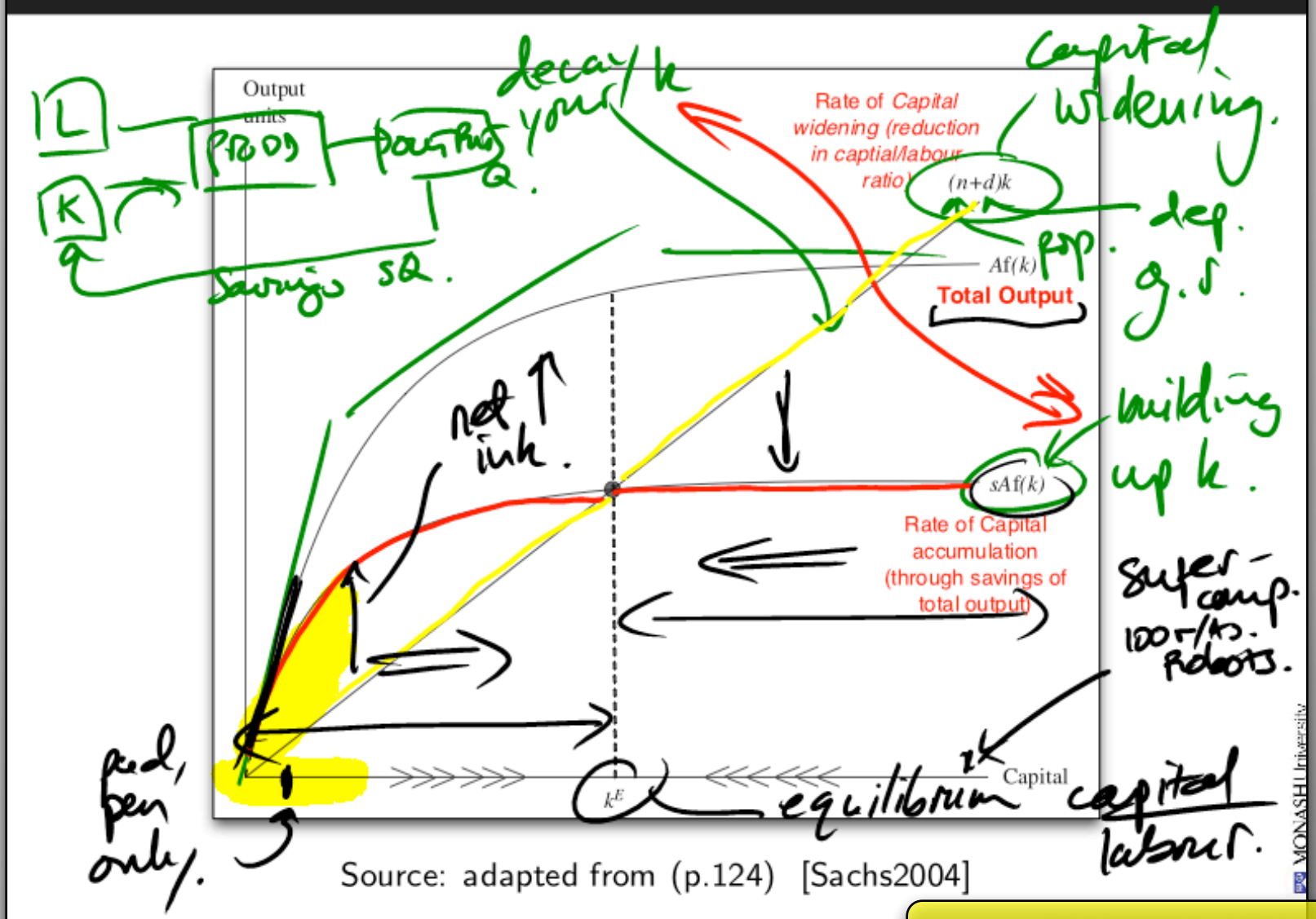
Why it is so good:

- DYNAMIC!!!
- Can have pre-prepared materials, but then dynamically edit them, scribble on them, create new materials -- all are saved
- Easy to use, easy to put on the web
- Students love it (so far) (survey results to come)

On the other hand:

- ? (a little more admin?)

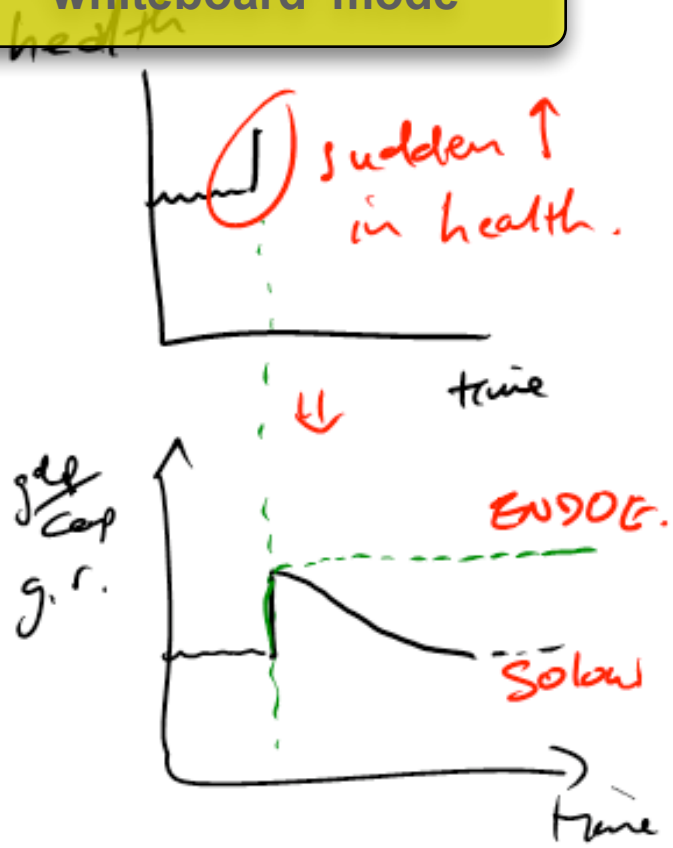
In Pictures: the Classical case



Source: adapted from (p.124) [Sachs2004]

In ECC2800 PPS ...

'whiteboard' mode



Importance of using >>yrs of data to capture period where most change occured in health var.

AVORA'S STUDY — HOW DOES GROWTH RATE IN GDP/CAP RESPOND TO SHOCK IN HEALTH VARIABLE (e.g. LIFEXPECTANCY).

In ECC2800 PPS ...

- **Then using the first-order conditions (λ = Lagrange multiplier):**

$$\alpha_i x_i^{\alpha_i - 1} \prod_{j \neq i} x_j^{\alpha_j} - \lambda p_i = 0, \quad i = 1, \ldots, m.$$

- **Multiplying x_i leads to**

$$\alpha_i \prod_{j=1}^{m} x_j^{\alpha_j} - \lambda p_i x_i = 0, \quad i = 1, \ldots, m.$$

- **Summing these equations over i and letting $\alpha = \sum \alpha_i$, we get**

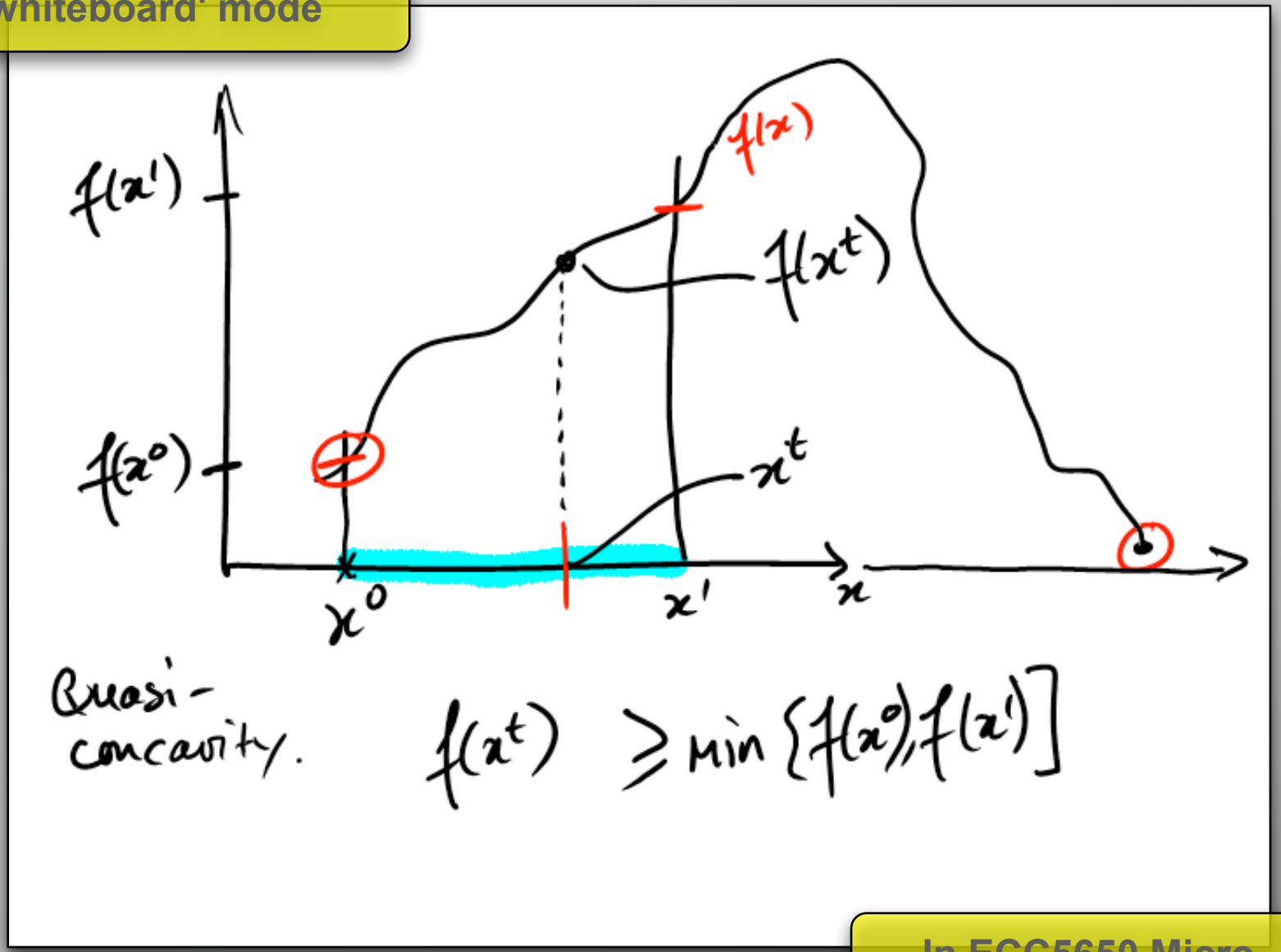
$$\alpha \prod_{j=1}^{m} x_j^{\alpha_j} - \lambda p \cdot x = 0 \Rightarrow \lambda = \frac{\alpha}{y} \prod_{j=1}^{m} x_j^{\alpha_j}$$

- **which leads to**

$$x_i = \frac{\alpha_i}{\alpha} \frac{y}{p_i}.$$

In ECC5650 Micro …

'whiteboard' mode



In ECC5650 Micro ...

Beamer-LaTeX

Lecturing in Large Classes

LaTeX – A document preparation system

LaTeX – A document preparation system

Reflections

When to use:

- Large class, teaching it more than twice, maths

Why it is so good:

- Great maths rendering, consistent typography, index, contents, references all work, large documents
- Write once, output multiple times!

On the other hand:

- Learning curve ...
- Drag and don't drop ...

Comment

Alesina: summing up

From the point of view of efficient aid, each of the "big three" donors – U.S., Japan, and France – has a different distortion:

1. The U.S. has targeted about one-third of its total assistance to Egypt and Israel;
2. France has given overwhelmingly to its former colonies; and
3. Japans aid is highly correlated with UN voting patterns (countries that vote in tandem with Japan receive more assistance).

These countries aid allocations may be very effective at promoting strategic interests, but the result is that bilateral aid has only a weak association with poverty, democracy, and good policy.(p.55) [AlesinaJEG2000]

MONASH University Economics

In slide mode ...

Layout for the quote appropriate for handout

Referencing: hyperlinked, bibliography, clear

Sectioning (contents table), clear layout

Alesina: summing up

From the point of view of efficient aid, each of the "big three" donors – U.S., Japan, and France – has a different distortion:

1. The U.S. has targeted about one-third of its total assistance to *Egypt and Israel*;
2. France has given overwhelmingly to its *former colonies*; and
3. Japans aid is highly correlated with *UN voting patterns* (countries that vote in tandem with Japan receive more assistance).

These countries aid allocations may be very effective at promoting strategic interests, but the result is that bilateral aid has only a weak association with poverty, democracy, and good policy.(p.55)
[Alesina and Dollar, 2000]

3 Aid Accountability

Monitoring Aid Agencies

Easterly & Pfutze (JEP, 2008)
Approach:

Selectivity: fraction of aid going to 'worthy' recipients (low corruption, very poor etc.)

Ineffective channels: is aid tied to goods from the donor, or food brought in unnecessarily, etc.?

Fragmentation: number of countries/organisations that work in a given recipient country, or program

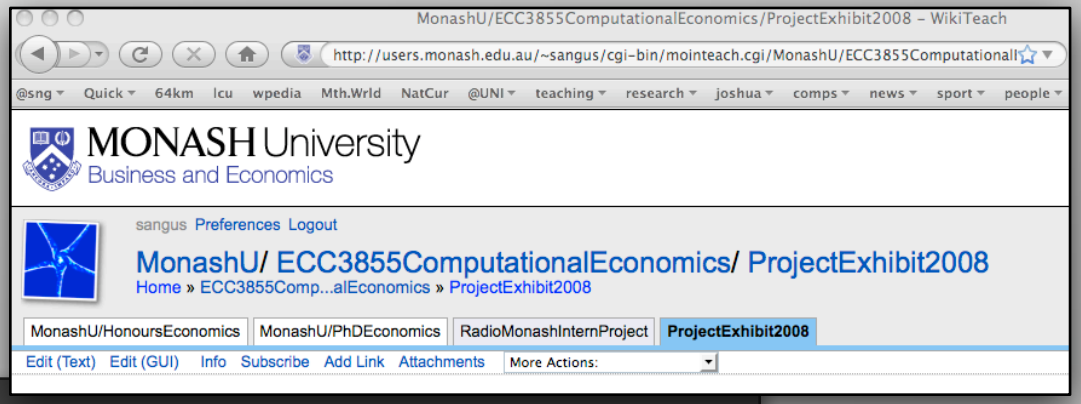
Overheads: overheads in aid provision

Transparency: willingness/ability to report on administrative details (number of employees, admin costs, consultants, total aid spend etc.)

In handout mode ...

Wikis

Lecturing in Large Classes



Reflections

When to use:

- Short lead-time, lots of hyper-links, web-content, (e.g. you're only teaching it once)

Why it is so good:

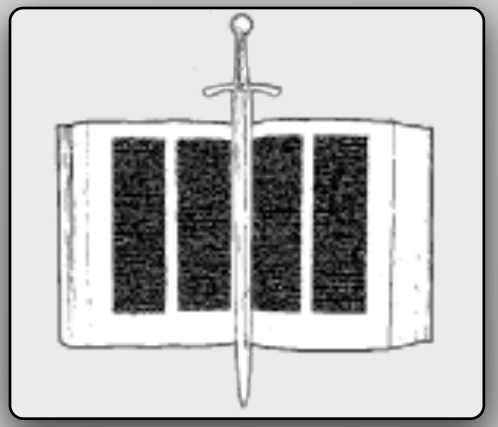
- Super fast ('wiki-wiki'!), hyper-links to pics very easy
- Dynamic updating (in-class updating?!)

On the other hand:

- Pretty bad handouts (not specific format), not that nice to look at
- Most students don't have laptops, so `all-in' edit not there yet ...

Damocles

Assessment in Large Classes



Reflections

When to use:

- Whenever you have in-session referenced essay work

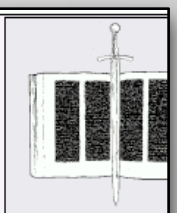
Why it is so good:

- Takes out all the leg-work! (references, highlighting etc.)
- Very, very good at what it does
- All online -- mark the essays anywhere (no paper submission)

On the other hand:

- ... student education re: plagiarism!

Damocles



CSE3323: Reports for "Essay", Semester 2, 2007

59 reports available from 58 students | Report for 1 student is still being generated | 30 students have not submitted | Upload Class List

Single Student Operations Student ID: Show Report(s) Upload Assessment

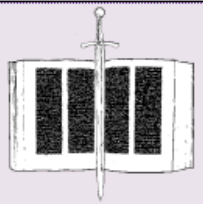
Sort by: Last Name Show runs longer than: 10 Show matches against: web Reports per page: 20 Regenerate

Reports: 1-20 21-40 41-60 61-80 81-90

Staff summary

Damocles

Damocles Report for 2008/1/Research Essay/



About Damocles

un length reporting threshold: 5 | Paragraph match threshold: 0.01 | Matches based on word stems | All words from matched paragraphs highlighted

1 ECC2810 Globalisation and economic system
2 Research Essay
3
4 |12 words|**2. "In China the struggle to consolidate the socialist system, the struggle**

Shanghai Underground - Shanghai, China Matching text

5 |32 words|**to decide whether socialism or capitalism will prevail, will still take a long historical period. However, we should all realize that the new system of socialism will unquestionably be consolidated. We can** |27 words|**assuredly build a socialist state with modern industry, modern agriculture, and modern science and culture."** |11 words|(Mao Tse Tung, |11 words|**Speech at the Chinese Communist Party's National Conference on Propaganda Work,** 1957) Is this statement true? Investigate the recent history of China with reference to the effects of economic institutional reform and globalisation on China's economy to support your answer.

Quotations from Mao Tse Tung â€" Chapter 3 Matching text
Shanghai Underground - Shanghai, China Matching text
j.1536-7150.19 92.tb02507.x Matching text

6 Abstract:
7 This paper is focusing on investigating whether now China is now under socialism or capitalism, and whether it will build a new system of socialism under the |9 words|**modern industry, modern agriculture, and modern science and culture** by analyzing the effects of economic institutional reforms and globalization.

God's Politics - Jim Wallis blog, faith blog, religion, christian, christianity, politics, values Matching text

8 Introduction:
9 In order to demonstrate whether this statement is true or not, it is
10 important to firstly look at the |5 words|**definitions of socialism, capitalism and** how valid they are under Chinese situations. And then it is important to discuss whether China will take a long period to decide and consolidate the socialist system. Finally, discuss about whether |6 words|**the new system of socialism will** be realize and built |10 words|**with modern industry, modern agriculture, and modern science and culture.**

m5731kk3537vu4 41.pdf Matching text
Shanghai Underground - Shanghai, China Matching text

11 From 1980 till 1991, Deng Xiao Ping, who |11 words|**as the late leader of the Communist Party of China (CPC),** |13 words|**developed Socialism with Chinese characteristics and Chinese economic reform, also known as the market** socialism, |7 words|**and opened China to the global market,** has asked the question of "what is socialism" for at least 20 times. He systematically expatiated on why we need to raise this question. |88 words|**"The realization of socialism and communism was the lofty ideal we Marxists set for ourselves during the revolutionary years. Now that we are trying to reform the economy, we shall continue to keep to the socialist road and to uphold the ideal of communism. This is something our younger generation in particular must understand. But the problem is: what is socialism and how is it to be built? The most important lesson we have learned, among a great many others, is that we must be clear about those** |35 words|**questions."**

Birth Certificate Deng Xiaoping Matching text Matching text
Deng Xiaoping - Wikipedia, the free encyclopedia Matching text
c1370.html Matching text
4.ppt Matching text

12 (Deng,1985)
13 As we all know that it is very hard to define the socialism and capitalism in just simple terms, as they are very com...

Individual Essay

17 Will |17 words|the struggle to consolidate the socialist system, the struggle to decide whether socialism or capitalism will prevail, |5 words|take a long historical period in China?

18 This is certain that China |6 words|will take a long historical period |5 words|to consolidate the socialist system and |7 words|decide whether socialism or capitalism will prevail. It can be proven from the following aspects.

19 First of all, Chinese economic institutional reform does not have a frame of reference. And that's one of the reasons that China did struggle a lot to find itself a suitable and proper economic system. There is no precedent ahead for China's leaders to be served as Chinese economy systems. All could be done is just to explore and experiment the ways themselves, or take what has been proven success. From 1958, Mao Zedong, |14 words|the leader of the People's Republic of China (PRC) from its establishment in 1949 decided to |6 words|delegate decision making power and relinquish from |5 words|central to the local authorities. This |7 words|reform, similar to Nikita Khrushchev's sovnarkhoz reforms

20 |21 words|in the Soviet Union in 1957, was emphasized on transferring from the central to local governments of the planning power, the |6 words|power of material resource allocation, the |6 words|control over enterprises, the power of |12 words|reviewing and approving capital construction projects and the administration of credit, the |5 words|administration of finance and tax-collection, the labor management, However, Mao did not realize that the highly controlled decision making power is the essence of central-planned economy. Simply decentralizing planned system without |9 words|a planned economy and administrative resource allocation led to several serious problems such as macroeconomic instability, rising inequality, |7 words|widening shortages in supplies of daily necessities, and huge chaos in the Chinese economy in 1958. This then led to regaining the central power, |8 words|which in turn caused another round of reform. |16 words|In 1978 Chinese leaders realized the weakness of Soviet-style planning and the need for reform but still |5 words|did not have a blueprint. |6 words|As early as in 1986, Chinese government, the State Council, |7 words|conceived a coordinated reform that focused on taxation, price, and fiscal policy systems. |6 words|Economic System Reform Program Design Office drew up plans for proposed |5 words|reforms with a focus on taxation, price, banking, finance, |12 words|and foreign trade in the early stages of the Seventh Five-Year Plan. |14 words|However, the leader of the State Council changed his mind in October that year.

21 Instead of implementing the coordinated reforms in taxation, price,

22 government banking, finance, |13 words|and foreign trade, he changed direction and focused on the reform of SOEs, which |5 words|took reform back to the traditional way |11 words|of maintaining both a market economy and a planned economy simultaneously.

23 Secondly, Chinese economic institutional reforms are not based on the mature and stable reform theories. The key idea of Marxism and Leninist is that: "if there is no theory of revolution, then there is no practice of revolution". However, Chinese economic reforms are not based on this kind of mature and stable reform theories. |7 words|"Cross the river by feeling the stones underneath the water with our feet" is the main idea of Chinese economic reforms. Nevertheless, the leaders of China still need to give the directions of where the economic institutional reforms are going to ahead and give the logical and reasonable explanations. That's why they have the National People's Congress held every several years as the main feature of China. In the

Shanghai Underground - Shanghai, China Matching text

[A-List] No 1 Response to "China: Capitalist Accumulation and Labor" Matching text
Shanghai Underground - Shanghai, China Matching text

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Wu%20Jinglian% 20IEA%20paper. doc Matching text

Wu%20Jinglian% 20IEA%20paper. doc Matching text Matching text Matching text Matching text
CHINA'S ECONOMY: REFORM AND PERSPECTIVES Matching text

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THE CONSULATE GENERAL OF SWITZERLAND IN CHINA - SHANGHAI FLASH - N° 2 February 2005 Matching text

... gotcha!

Discuss Logs

Assessment in Large Classes

Reflections

When to use:

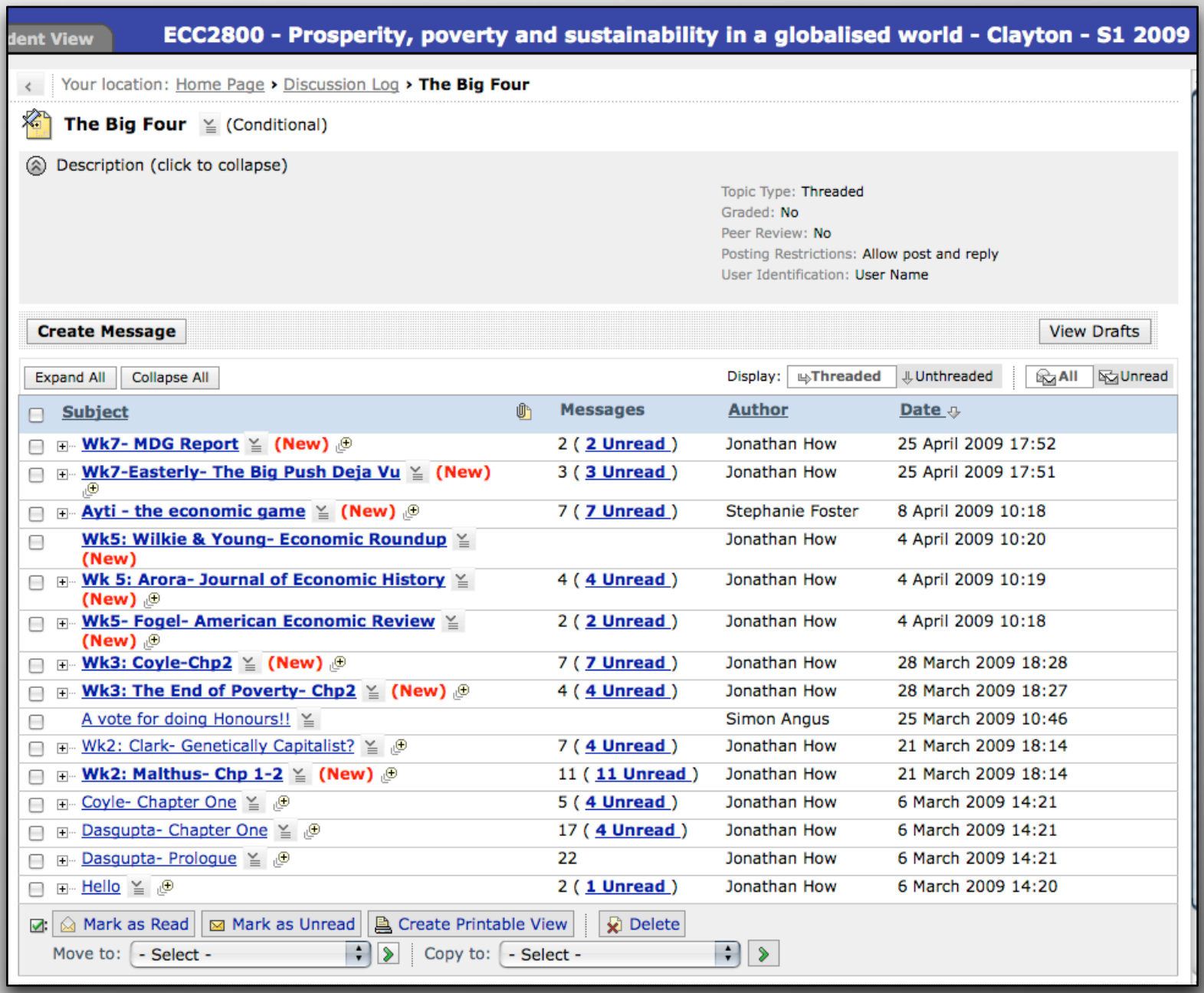
- When you have readings as part of your unit
- Instead of tutorial/small-group discussions

Why it is so good:

- Students READ THE READINGS!
- Small-groups (2-5 ppl is best), high social cost of not contributing
- Mark individually, however (and stress positive externalities)
- Can get in and engage with them, give prizes etc. (Post of the week)

On the other hand:

- Admin to set them up at the beginning
- Can become time-consuming: needs wise management


dent View
ECC2800 - Prosperity, poverty and sustainability in a globalised world - Clayton - S1 2009
Your location: Home Page › Discussion Log › The Big Four
The Big Four (Conditional)
Description (click to collapse)
Topic Type: Threaded
Graded: No
Peer Review: No
Posting Restrictions: Allow post and reply
User Identification: User Name
Create Message
View Drafts
Expand All
Collapse All
Display: Threaded Unthreaded All Unread
Subject
Messages
Author
Date
Wk7- MDG Report (New) 2 (2 Unread) Jonathan How 25 April 2009 17:52
Wk7-Easterly- The Big Push Deja Vu (New) 3 (3 Unread) Jonathan How 25 April 2009 17:51
Ayti - the economic game (New) 7 (7 Unread) Stephanie Foster 8 April 2009 10:18
Wk5: Wilkie & Young- Economic Roundup (New) Jonathan How 4 April 2009 10:20
Wk 5: Arora- Journal of Economic History (New) 4 (4 Unread) Jonathan How 4 April 2009 10:19
Wk5- Fogel- American Economic Review (New) 2 (2 Unread) Jonathan How 4 April 2009 10:18
Wk3: Coyle-Chp2 (New) 7 (7 Unread) Jonathan How 28 March 2009 18:28
Wk3: The End of Poverty- Chp2 (New) 4 (4 Unread) Jonathan How 28 March 2009 18:27
A vote for doing Honours!! Simon Angus 25 March 2009 10:46
Wk2: Clark- Genetically Capitalist? 7 (4 Unread) Jonathan How 21 March 2009 18:14
Wk2: Malthus- Chp 1-2 (New) 11 (11 Unread) Jonathan How 21 March 2009 18:14
Coyle- Chapter One 5 (4 Unread) Jonathan How 6 March 2009 14:21
Dasgupta- Chapter One 17 (4 Unread) Jonathan How 6 March 2009 14:21
Dasgupta- Prologue 22 Jonathan How 6 March 2009 14:21
Hello 2 (1 Unread) Jonathan How 6 March 2009 14:20
Mark as Read
Mark as Unread
Create Printable View
Delete
Move to: - Select -
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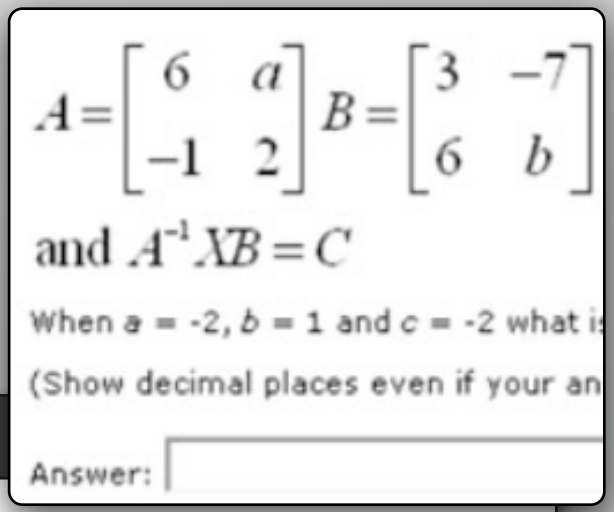
Online Quizzes

Assessment in Large Classes



Reflections

When to use:

- Low-cost, periodic testing mechanism
- Doesn't have to be just maths (though maths is better)

Why it is so good:

- It helps students to learn! (Angus & Watson, 2009)
- It is automatically marked
- Students get a lot out of it, increasing feedback scores

On the other hand:

- Costly one-off setup
- Need to master the software
- (Question banks?)

... actual question

Preview Current Item

Appearance in Internet Explorer (other browsers may vary slightly).

OK

$$A=\begin{bmatrix}6 & a\\ -1 & 2\end{bmatrix}\ B=\begin{bmatrix}3 & -7\\ 6 & b\end{bmatrix}\ C=\begin{bmatrix}c & -3\\ 4 & 5\end{bmatrix}.$$

and $A^{-1}XB=C$

When a = -2, b = 1 and c = -2 what is the value of X_{11} correct to two decimal places?

(Show decimal places even if your answer is an integer)

Answer:

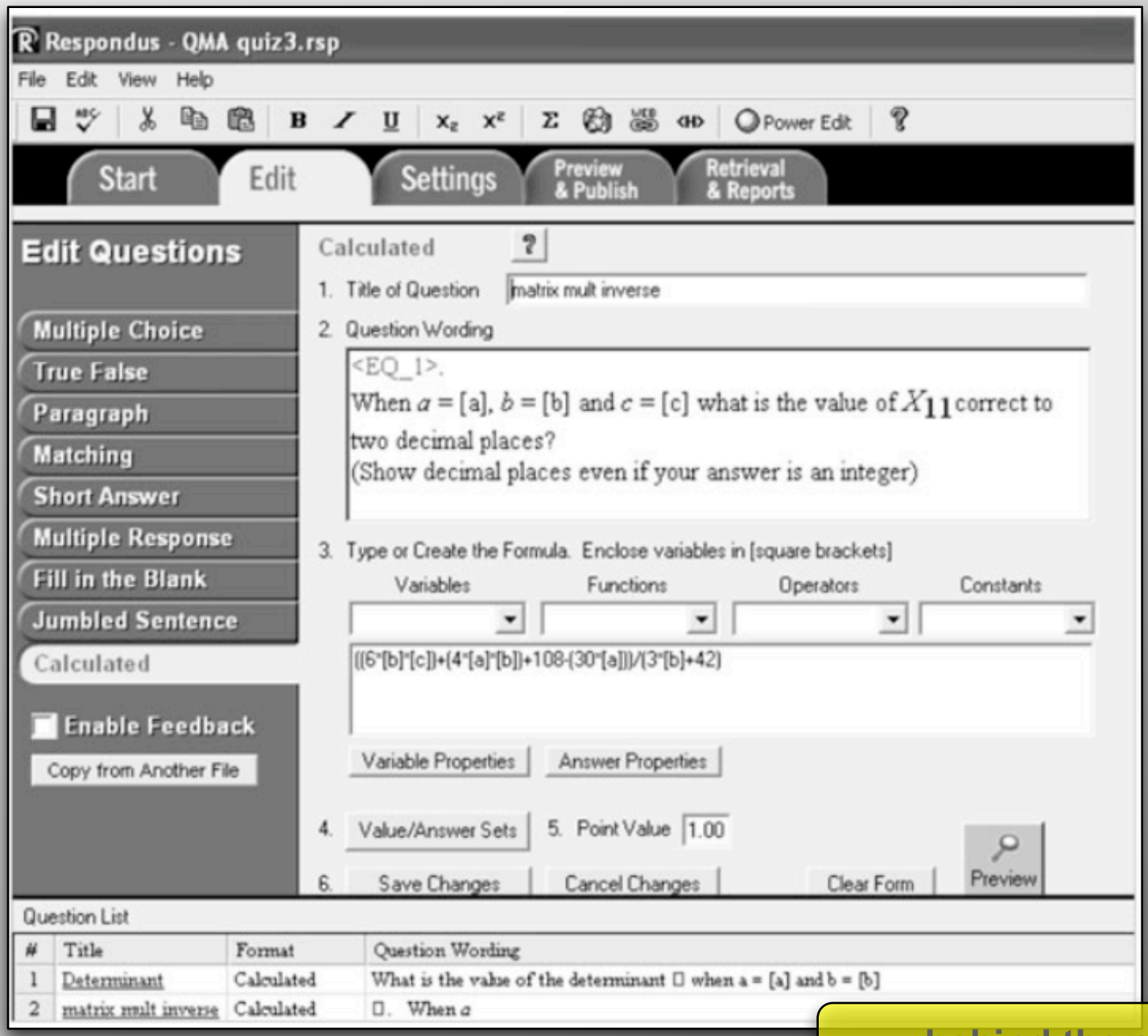
Correct Answer
3.29

Value/Answer Sets

Number of Sets 80 | Update Answers | Cancel | OK

#	a	b	c	Answer
1	3	2	5	2.13
2	-5	3	8	6.71
3	0	1	6	3.20
4	-3	2	2	4.13
5	2	-3	4	-1.45

automatic numbers ...



... behind the scenes

British Journal of Educational Technology *Vol 40 No 2 2009* 255–272
doi:10.1111/j.1467-8535.2008.00916.x

Does regular online testing enhance student learning in the numerical sciences? Robust evidence from a large data set

Simon D. Angus and Judith Watson

Simon D. Angus is a lecturer in the Department of Economics, Monash University, Melbourne, Australia; Judith Watson is a lecturer in the School of Economics, University of New South Wales, Sydney, Australia. Address for correspondence: Dr Simon D. Angus, Department of Economics, Monash University, Clayton, 3206 VIC, Australia. Email: simon.angus@buseco.monash.edu.au

(shameless plug)

Feedback via SPAM

Administration in Large Classes

Reflections

When to use:

- Low-cost, **personalised** feedback

Why it is so good:

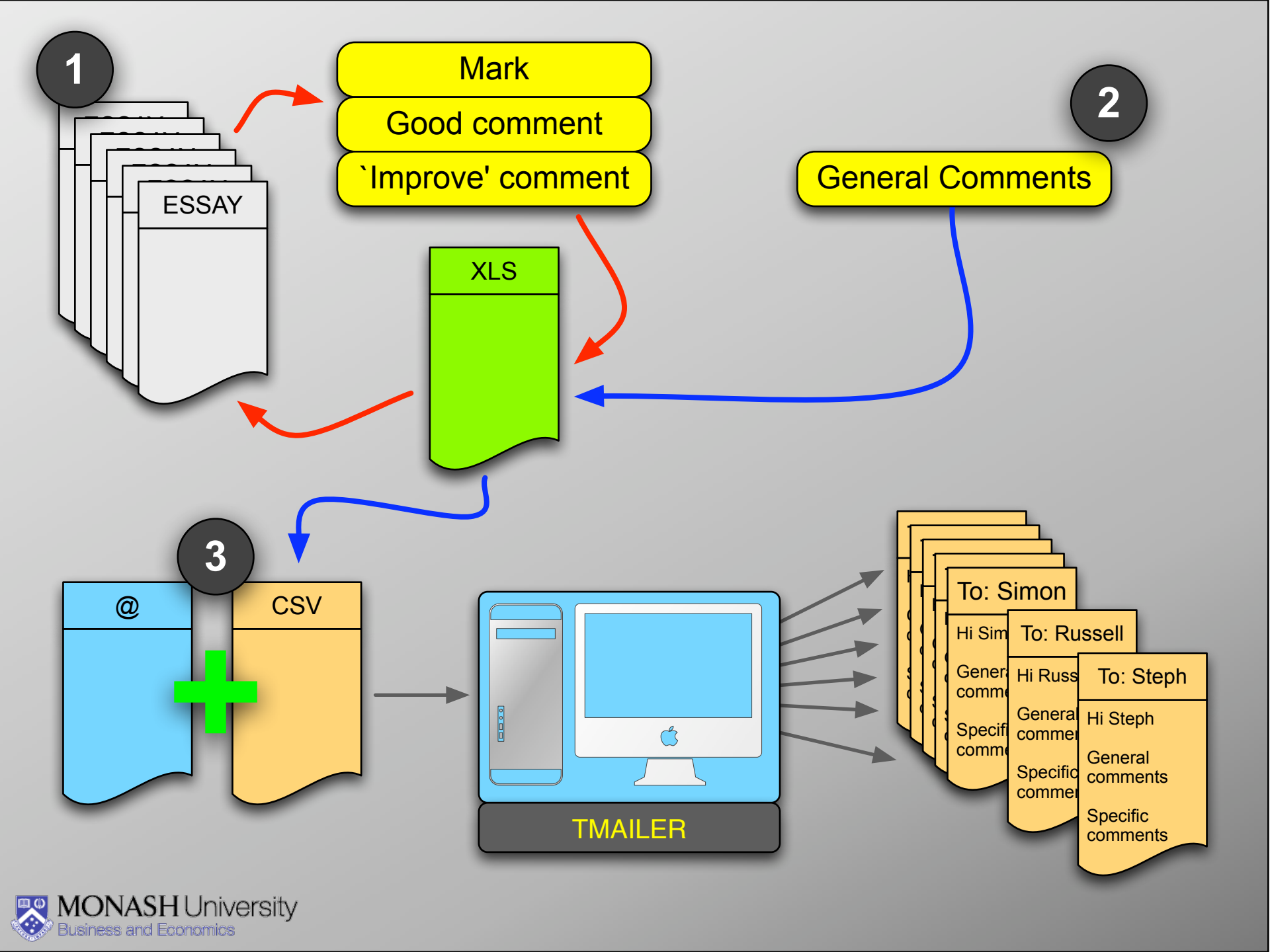
- Students really love it (see quotes)

On the other hand:

- Everyone gets a 'do more of' and a 'do less of' comment .. novelty?!
- Setup? (easy when you've done it once)

Thank you for in-depth response to our essays. ***I must admit that I was surprised to have such good feedback as I have rarely had lecturers provide feedback at the level you have, from either Monash or Melbourne.***

Thank you so much for this feedback. ***I can honestly say it is the most in-depth analysis I have ever received for an assignment and will likely help me greatly improve on my form and structure for future assignments.*** *The flaws you pointed out about my report are things that I have noticed as well, but now that you have brought them to my attention I have more of an incentive to wrok on them in order to mprove the general quality of my work.*


1
ESSAY
Mark
Good comment
`Improve' comment
2
General Comments
XLS
3
@
CSV
TMAILER
To: Simon
Hi Sim
To: Russell
Hi Russ
To: Steph
Hi Steph
General comments
Specific comments

Telling the World about it

Administration in Large Classes

Reflections

When to use:

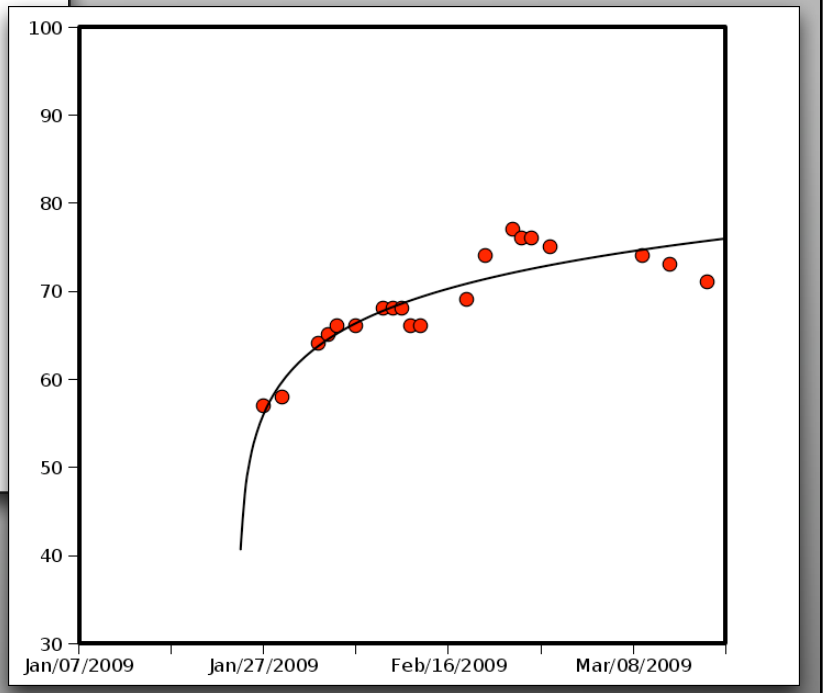
- New Unit introduction .. New staff, new content
- Starting a viral marketing campaign ...

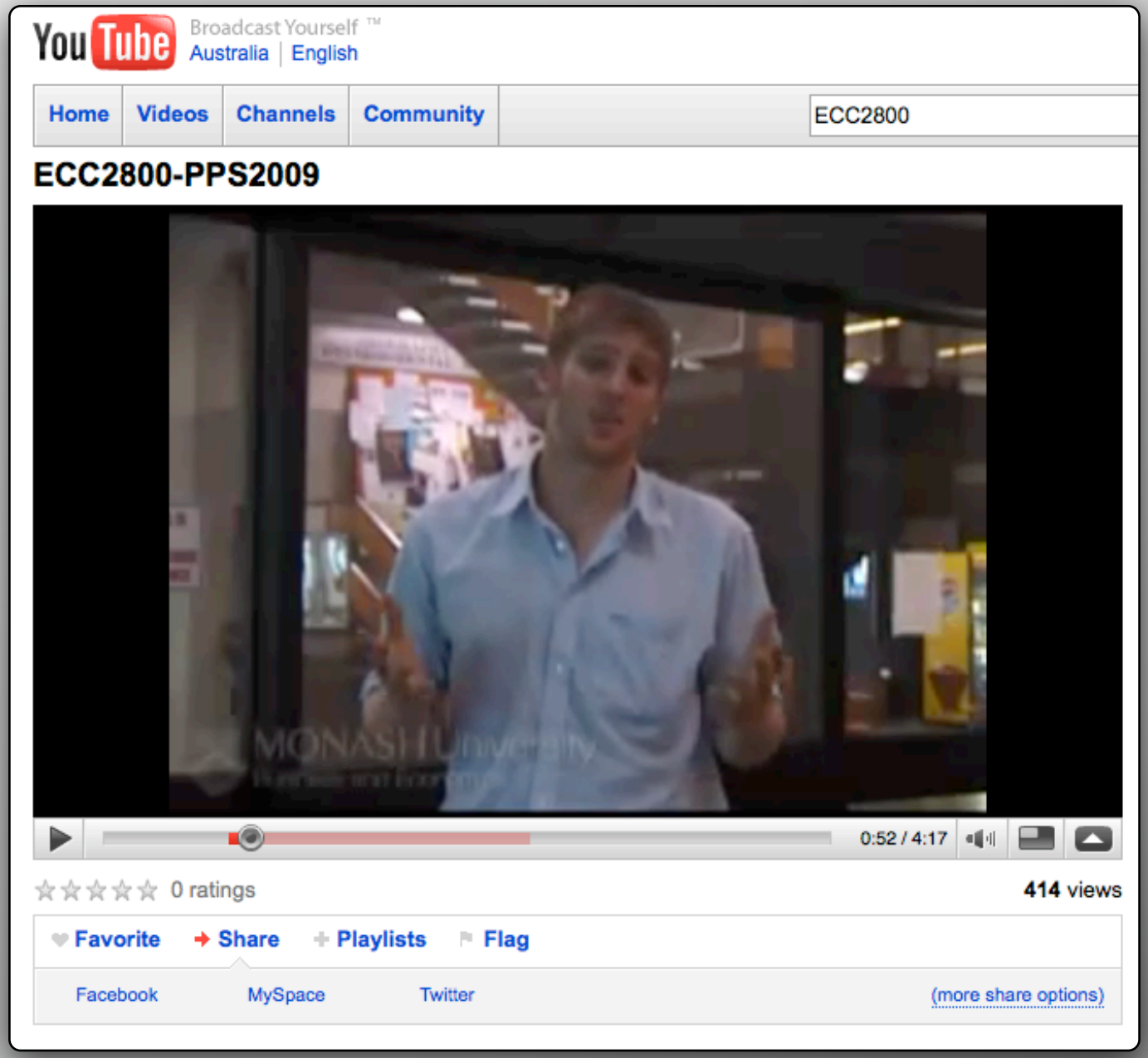
Why it is so good:

- Uses the media they use
- Could be big impacting
- Easy if you have Mac

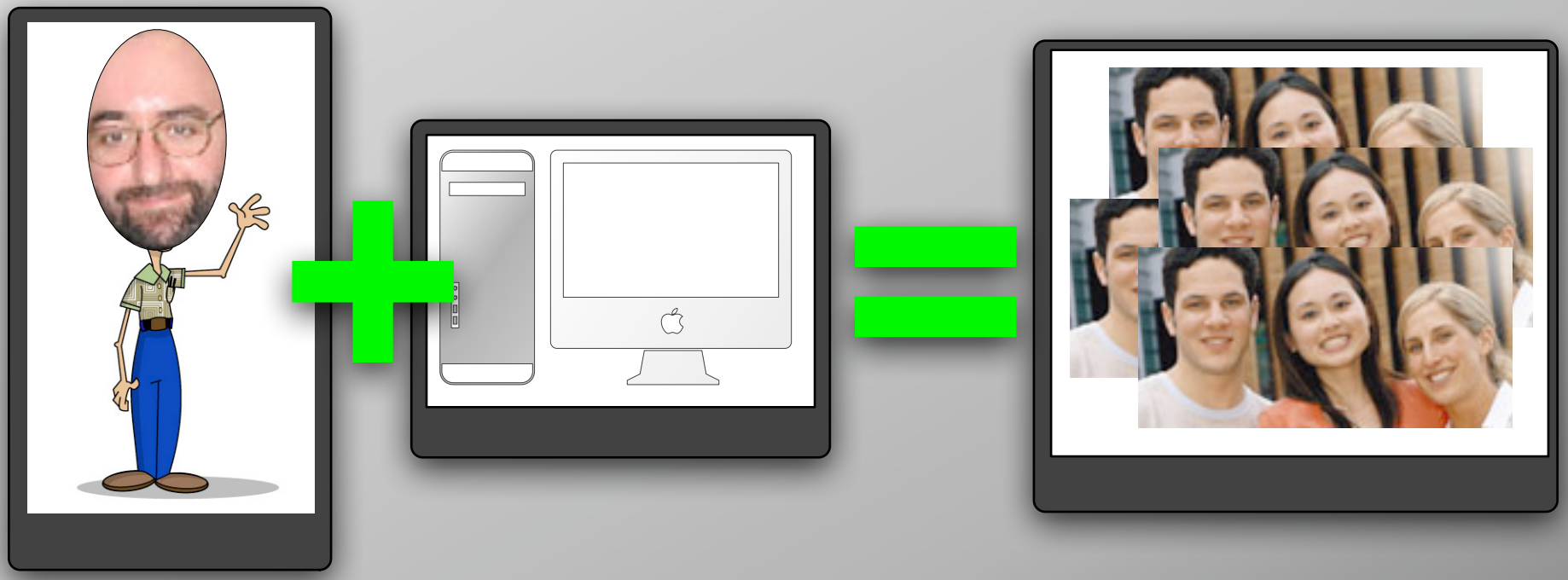
On the other hand:

- Needs to be done early enough ...
- Technical/software support? (Media students)




YouTube
Broadcast Yourself ™
Australia | English
Home
Videos
Channels
Community
ECC2800
ECC2800-PPS2009
MONASH University
0:52 / 4:17
0 ratings
414 views
Favorite
Share
Playlists
Flag
Facebook
MySpace
Twitter
(more share options)

Summing up

- Be willing to Experiment
- Work at one thing a session
- Use ITS (not TSG)
- Look for free solutions on the Web
- Make TSG compete
- Seek ideas from colleagues
- As Simon for help
- *Use a Mac*
- *..or Linux*

So ...
You CAN DO like Nerds do