



Changing Spaces

Using technology to enhance learning partnerships
through effective pre-lecture engagement (EPLE)

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Changing spaces: our need for change

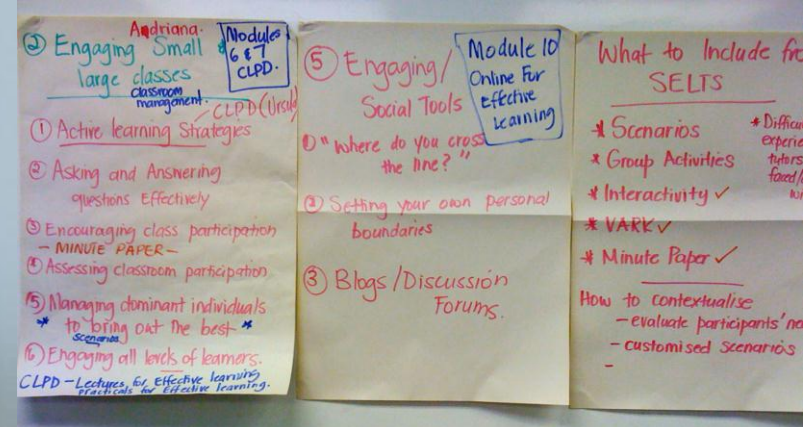


- Long contact hours
- Traditional face to face lecture format – teacher driven
- Student diversity of learning needs
- Time poor students and teachers
- Minimal opportunity for active learning pre and during f2f
 - Select and use appropriate tools to achieve our goals
 - Improve student engagement in first year human biology



What EPLE requires....

- Careful design (blueprinting and storyboard)
- Collaboration with colleagues
- Ongoing teacher evaluation
- Student induction
- Tangible online teacher presence



With EPLE

'...new concepts become more comprehensible and deeper understanding is easier to achieve when students master relevant prior knowledge.'

Kolari and Savander-Ranne (2007)

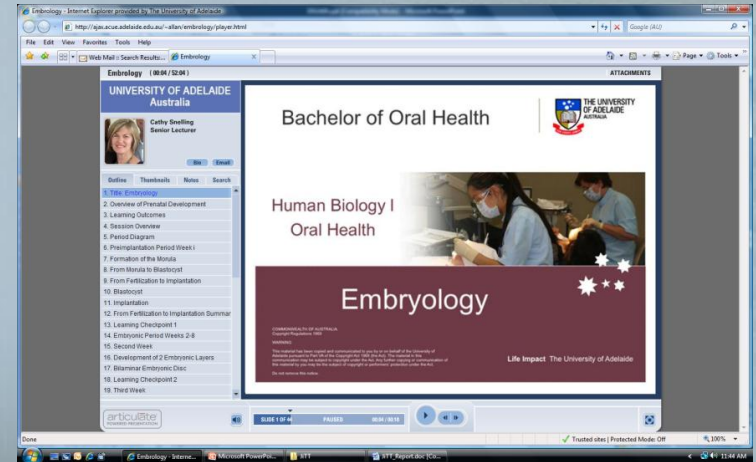
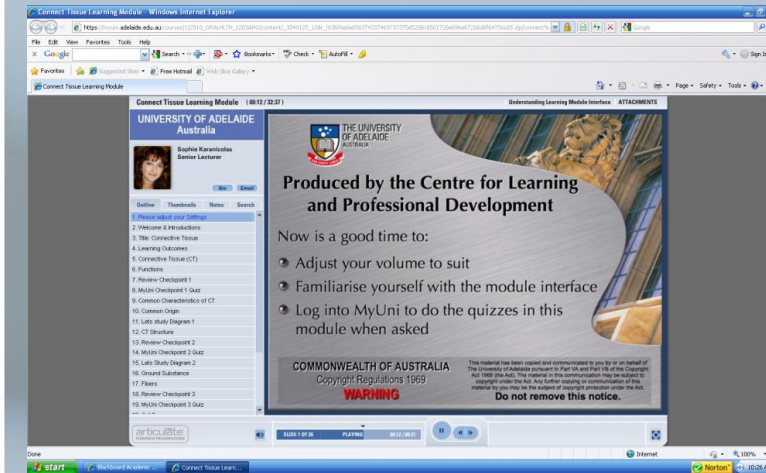


Interactive Learning Modules



knowledgebank.globalteacher.org.au

Developing & implementing the ILMS

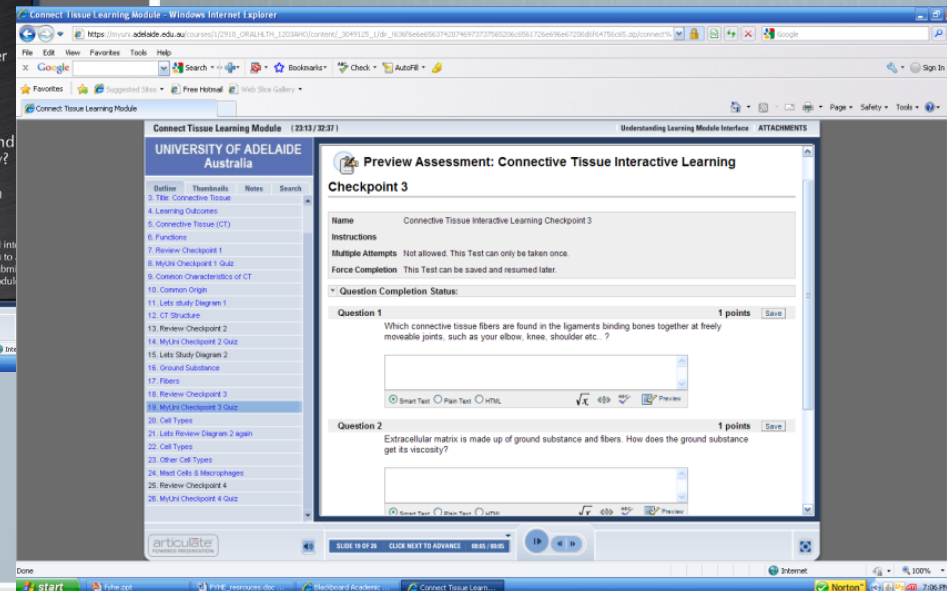
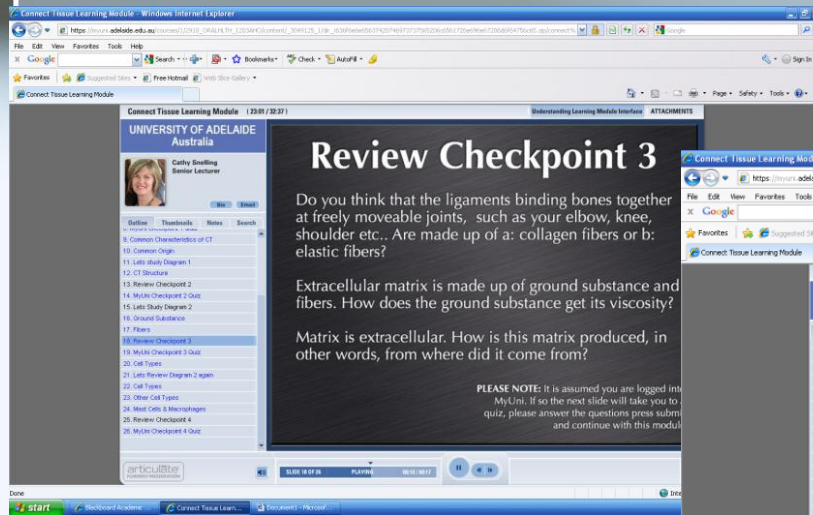


- Existing PPT lectures adapted to Articulate Learning software.
- Narrative recorded using an investigative questioning style to help clarify new concepts
- Key learning issues emphasised to highlight 'threshold concepts'
- Student access via LMS – Blackboard's MyUni

<http://ajax.acue.adelaide.edu.au/~allan/embrology/player.html>

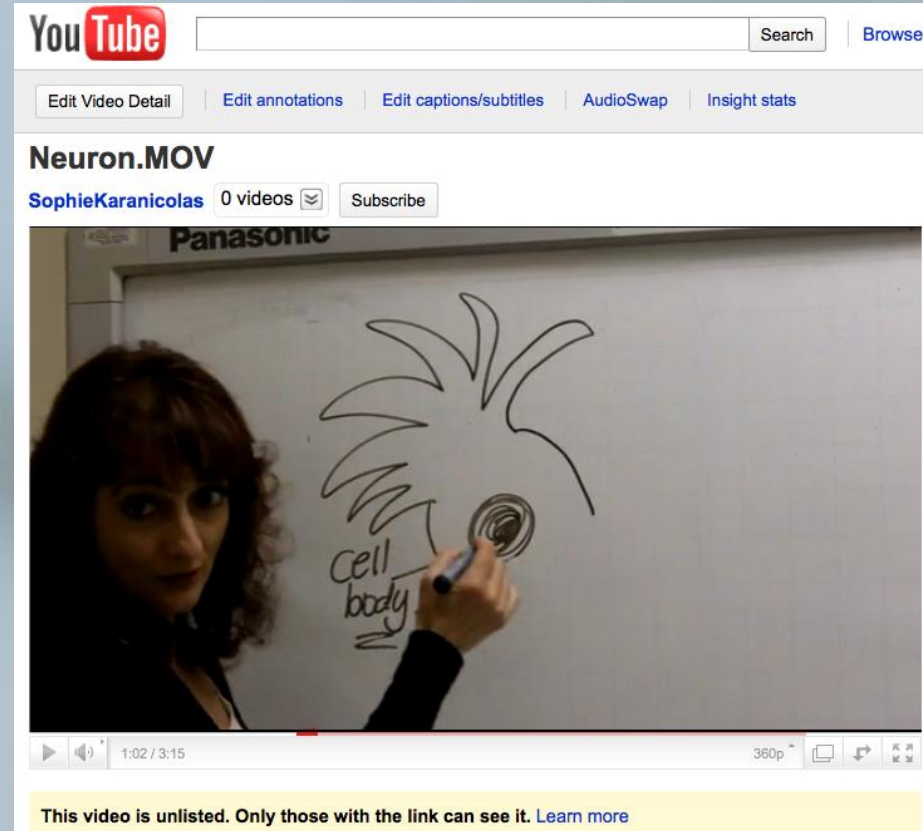
Using ILMS for Feedback

- Interactive assessment checkpoints undertaken at regular intervals (ie approx every 5 slides)
- Students receive immediate feedback
- “At risk” students or global learning issues identified



“Quick Bytes”

- Provide students with a video ‘online crash course’ introducing new concepts
- Embedded in ILM.

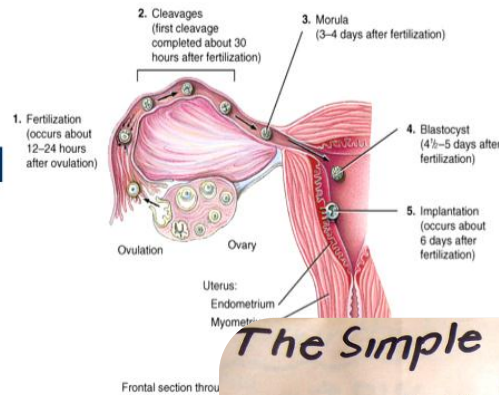


<http://www.youtube.com/watch?v=G2TvfgiNHCs>

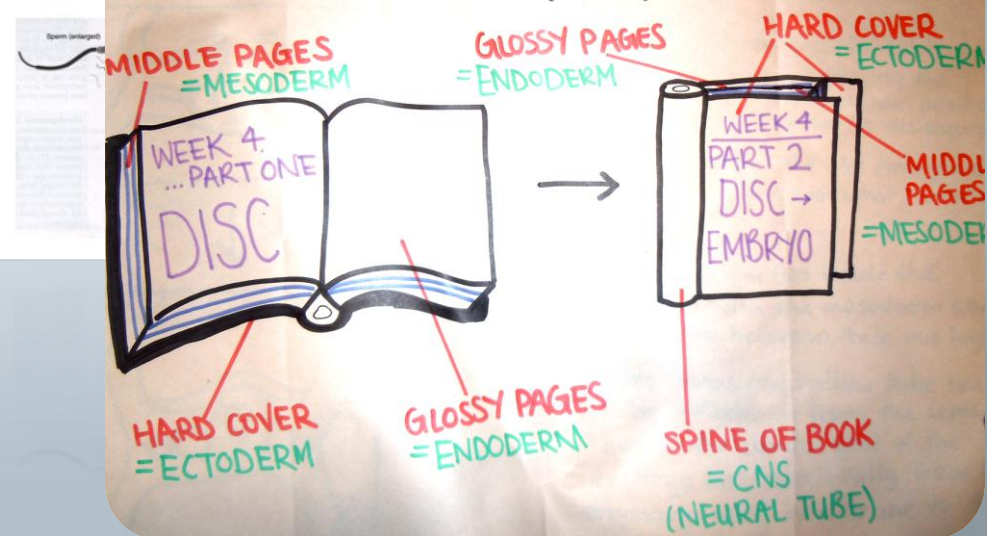
EPLE changes the f2f space

Checkpoint 1 (68%)

- The preimplantation period of embryonic development lasts for:
 - One hour
 - One day
 - One week**
 - One month
- The first stage of human development is known as the:
 - embryo
 - zygote**
 - blastocyst
 - foetus



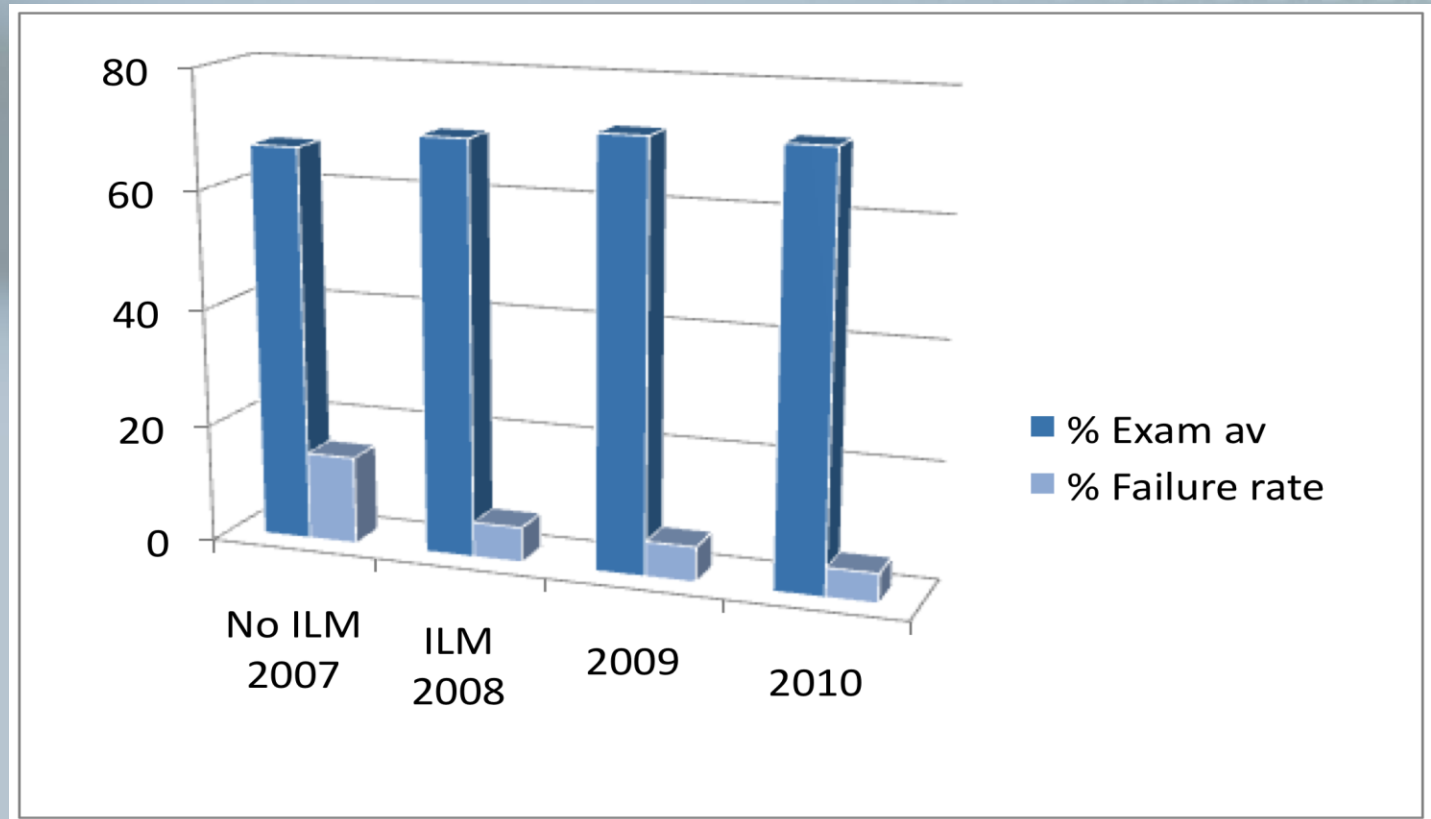
The Simple Analogy To Remember... ... WEEK 4.



Impact of the ILMs



Evidence of effectiveness



Evidence of effectiveness

Average completion rate: 95% 2008-2011

(No formal assessment linked to ILMs)

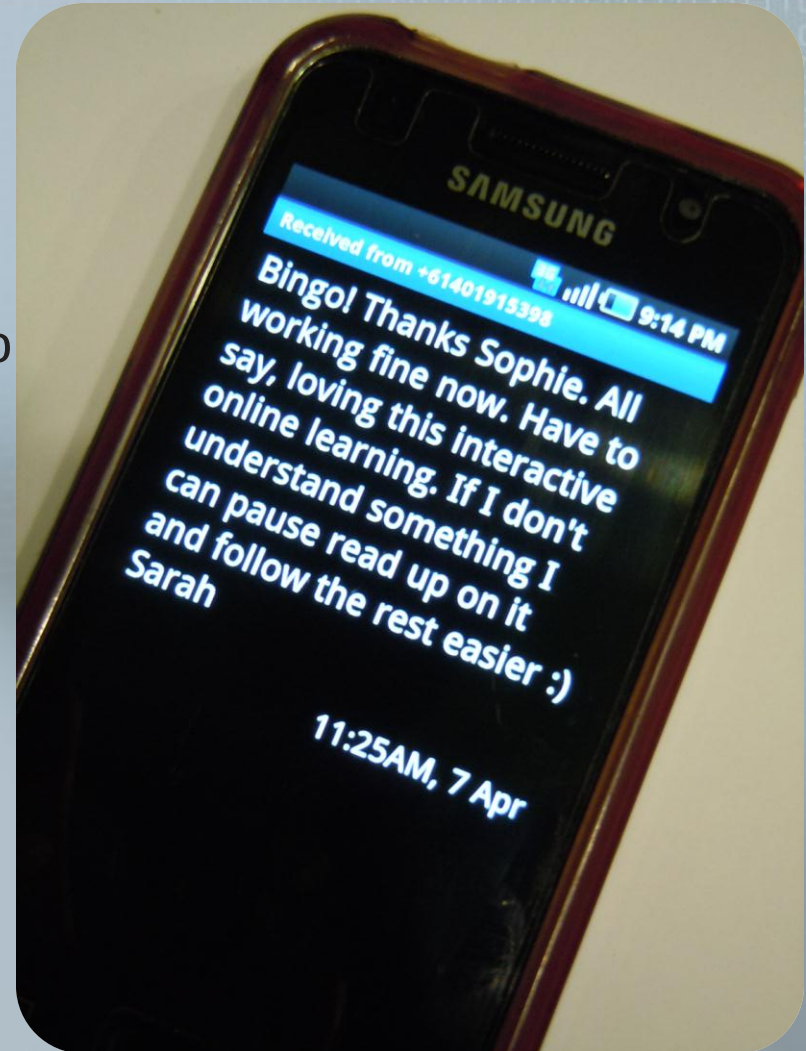
Human Biology SELTS:

'I receive adequate feedback'

2011: 100% BA

2010: 100% BA

2009: 100% BA



What our students think about ILMs

Student Evaluation of Learning and Teaching (SELT) 2007-2010 surveys and student emails elicited qualitative data:

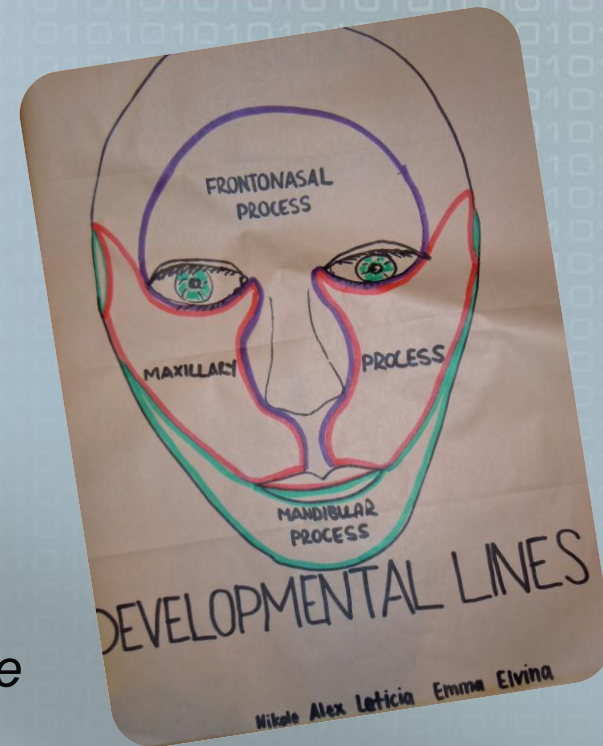
- *"I felt I had access to the tutors in my own home"*
- *"I was able to pause the ILM to reflect on fantastic analogies I will never forget"*
- *"ILMs are a convenient and valuable learning resource.. they help me to understand the topic better before the lecture"*
- *Having visual and auditory resources helps reinforce the message more effectively"*



What our students think about ILMs

Feedback from focus groups:

- *Immediate feedback on performance*
- *Make sense of their learning through both independent reflection and collaborative activities*
- *...a more effective learning environment - students felt that they learnt better through ILMs than traditional approach*
- *Improved students' engagement to the point where they were discussing content outside of class*
- *The dialogue of two lecturers was lively and entertaining, underpinned by their ability to provide effective explanatory images and metaphors.*



Benchmarking the ILMs

Salmon's 5 stage online learning model (Salmon 2006)

1	Access and Motivation	✓
2	Online Socialisation (culture building)	✓
3	Information Exchange (co-operation)	✓
4	Knowledge Construction (collaboration)	✓
5	Knowledge Development (development)	✓

Transforming the way our students learn and teach others!!!

The collage features several photographs of students in a classroom or lab setting. In the top left, two female students are smiling at the camera. In the top center, two female students are sitting at a desk, looking at a laptop screen. In the top right, two female students are standing and smiling. Below these photos is a large screenshot of an Articulate presentation titled 'Pre-malignant and Oral Cancerous lesions: A Guide for Oral Health Professionals' by Lizzie Peglidis & Emma Vasileff. The presentation is for the 'Bachelor of Oral Health' at 'THE UNIVERSITY OF ADELAIDE AUSTRALIA'. It includes a table of contents, a list of learning outcomes, and a list of topics to be covered.

Learning Outcomes

- Discuss the prevalence and survival rate of the different types of oral cancer.
- Recognise abnormal lesions/growth identify the different types of premalignant and oral cancerous lesions.
- Confidently conduct a comprehensive extra and intra oral soft tissue examination.
- Accurately record, refer, and manage patients with an abnormal lesion.
- Understand the role of the oral health professional in head and neck cancer screening.
- Discuss new treatment modalities for the detection of abnormal lesions of growth.

Topics to be covered:

1. Oral Health Elective III 2010 Pre-malignant
2. Learning Outcomes
3. General Information
4. Leukoplakia
5. Erythroplakia
6. ERYTHROPLAKIA
7. SQUAMOUS CELL CARCINOMA
8. SQUAMOUS CELL CARCINOMA
9. Oral Tumours Caused by the Human Papilloma Virus
10. HUMAN PAPILLOMA VIRUS
11. BASAL CELL CARCINOMA
12. BASAL CELL CARCINOMA
13. High Risk Sites of Premalignant and Cancerous Lesions
14. High Risk Sites
15. Check Point
16. Demonstration of an Extra and intra oral soft tissue examination
17. Demonstration of an Extra and intra oral soft tissue examination
18. Record Keeping
19. Check Point
20. Tissue Autofluorescence
21. Advantages
22. VELscope
23. VELscope
24. Check Point
25. Role of the Oral Health Professional

A learning partnership

What's next?

- Grant application to foster colleague development
- Survey Monkey now 'hosts' the checkpoints and has improved the data collection and analysis of student participation and learning
- Continuous improvement through evaluation and peer collaboration

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References

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- Kolari, S. & Savander-Ranne, C. (2007). Pre-lecture Assignments-a Method for Improving Learning in Engineering Education. *International conference on engineering education – ICEE*. 3 - 7 September 2007, Coimbra, Portugal.
- Salmon G (2006) *E-tivities: The Key to Active Online Learning*. Routledge Farmer: London and New York.

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