# **Online learning**

**Applications in teaching evidence-based practice** 

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Or ...

# 'E-learning and all that jazz'

A series of briefings in *Medical Teacher* 

Or maybe...

'Programmed Instruction, Computerized'

### In this session we'll try to...

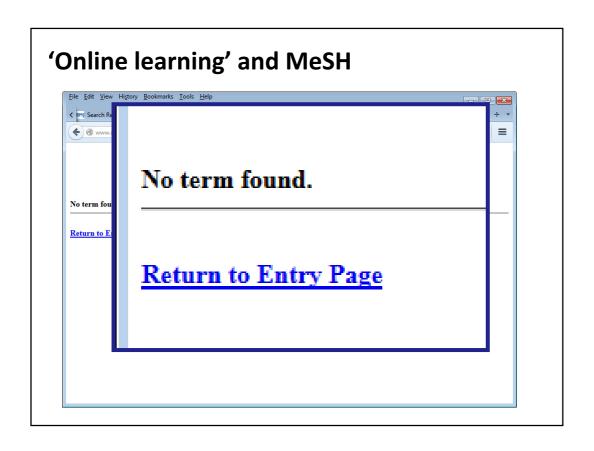
- Link to key concepts and themes of TEBP
- Clarify a few key terms and concepts
- Demonstrate a couple of examples
- Focus on managing online interaction

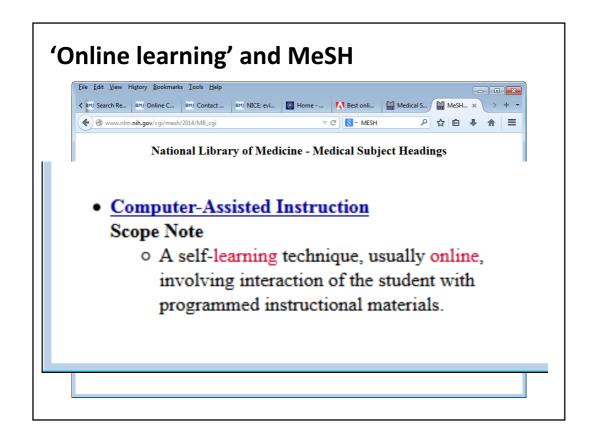
#### To help you ...

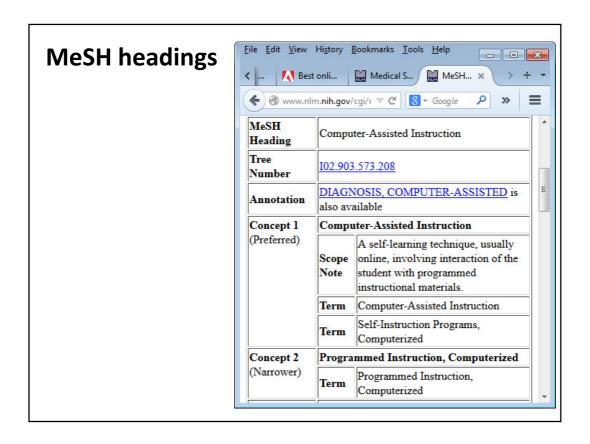
- Find and make sense of useful sources
- Raise awareness of skills in a particular online teaching role

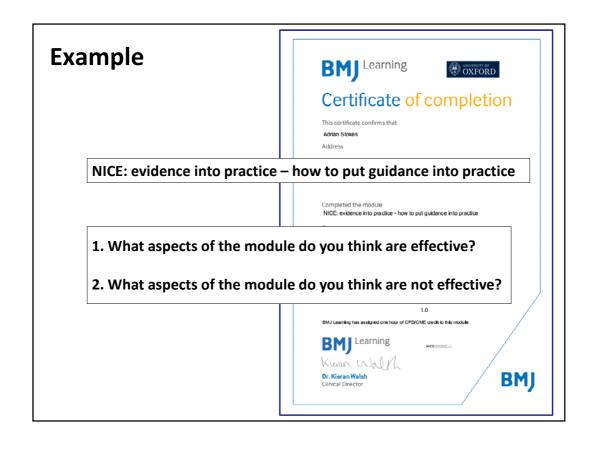
### Tricky terminologies ...

- E-learning
- · Blended learning
- **CBT**  $\triangleright$  Computer-based training
- CAI > Computer-assisted instruction
- CAL > Computer-assisted learning
- CBA ➤ Computer-based assessment
- Others?









### **Example**



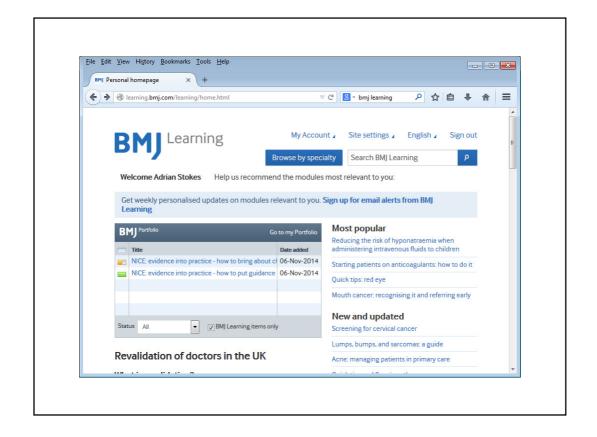
#### NICE: evidence into practice - how to put guidance into practice

Hospital Doctor/Secondary Care Physician - Trainee, Emergency Medicine, GB

"Excellent module, very useful. Gives really good advice about how to put evidence medicine into practice."

GP/Family Physician, Cardiology, GB

"very good learning module though some questions overlapped the subject e.g contraindication of drug to a patient will be automatically an exclusion criteria?"



# 'Educational technologies'

- The 'computer lab'
- Classroom-based technologies
  - Data projection
  - 'Interactive whiteboards'
  - Response systems



- Portable technologies
  - PDAs
  - Tablets
  - Smart phones
- Web-based technologies

And then...

Web 2.0

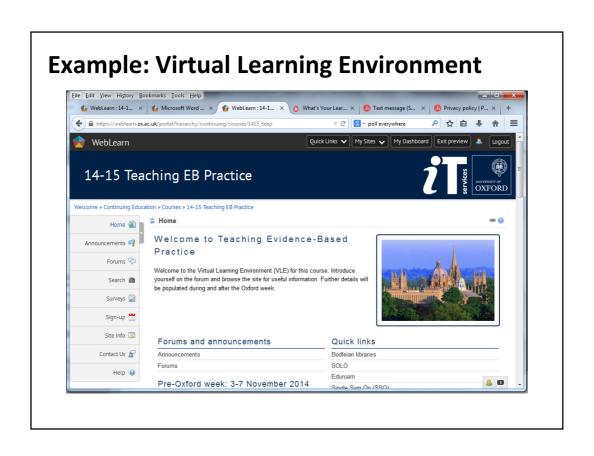
http://uk.youtube.com/watch?v=nsa5ZTRJQ5w

Social (and professional) networking

http://uk.youtube.com/watch?v=6a KF7TYKVc

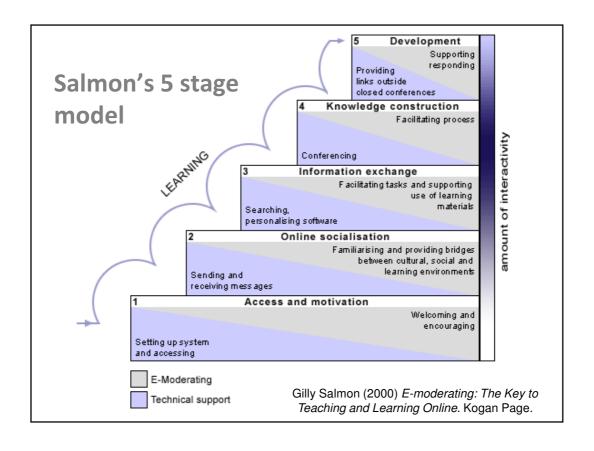
### The role of the teacher?

- Course author / editor
- Online tutor
- Online facilitator
- E-tutor
- E-facilitator
- E-moderator
- Etc.
- Etc.



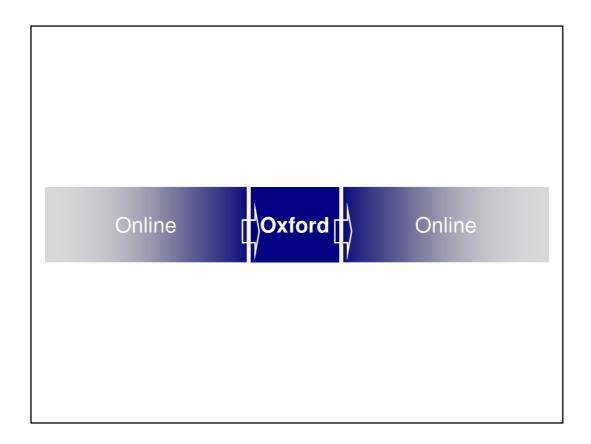
### Learning through 'discussion'?

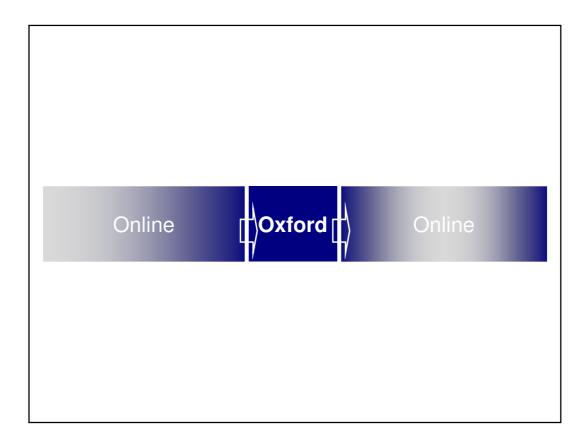
- 1. What are the differences between 'discussion' online and face-to-face?
- 2. How do these differences affect the learning/teaching process?



# **Facilitating online discussion**

- Prompting
- Moderating
- Summarising
- Weaving





# Myths?

- 1. Online learning is a single entity with homogenous effects
- 2. Online learning is cheap and easy to implement
- 3. Online learning is more efficient
- 4. Online learning enables new instructional approaches that transform the learning process
- 5. The "Net Generation" wants online learning

Cook, D. A. (2014). "The value of online learning and MRI: finding a niche for expensive technologies." *Medical Teacher* **36**(11): 965-972.

### The evidence?

 no difference in learner outcomes was identified across a variety of educational modes, including lecture versus online, direct versus self-directed, multidisciplinary versus discipline-specific groups, lecture versus active small group facilitated learning.

Ilic, D. and S. Maloney (2014). "Methods of teaching medical trainees evidence-based medicine: a systematic review." *Medical Education* **48**(2): 124-135.

### **References**

- Cook, D. A. (2014). "The value of online learning and MRI: finding a niche for expensive technologies." *Medical Teacher* **36**(11): 965-972.
- Ilic, D. and S. Maloney (2014). "Methods of teaching medical trainees evidence-based medicine: a systematic review." *Medical Education* **48**(2): 124-135.