

# Jumping the Hurdles

---

Constraints to e-learning uptake  
(and how they can overcome)



# E-Learning uptake...

---

- E-tools have been available for a number of years...
- Most people know about them...but incorporation is slow
- What are some of the barriers from the **tutor's** perspective...?



# My own observations...

---

- LMS used by many just to supply lecture notes, handouts and overheads or post notices.
- Regarding my own work with interactive problem-based scenarios. Lots of enthusiasm but little use by colleagues.



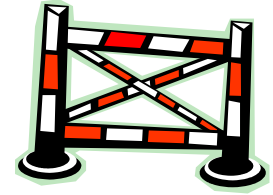
# Barriers from the individual tutor's perspective...

---

Assuming some barriers are already overcome...

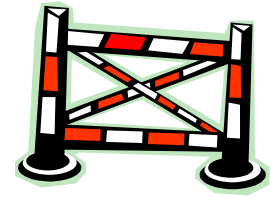
- The tools are available
- A delivery system is in place,
- The tutors are intrinsically interested (not anti-technology luddites)

# The First Barrier – Motivation



- Q. Incorporating e-learning is likely to improve my teaching, but what's the return on my "time" investment?

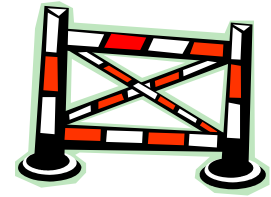
# The First Barrier – Motivation



Climbing over this barrier needs...

- Carrot
  - Job/personal/student satisfaction
  - Promotion and peer-esteem
  - Encouragement from higher powers
- Stick
  - Non-promotion
  - Complaints from students/Loss of students
  - Displeasure from higher powers
  - Peer-sneer

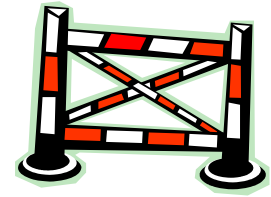
# The First Barrier – Motivation



- Can be a particular problem at Universities as academic staff are increasingly being employed as researchers first and teachers second.
- The PBRF score is a strong personal and institutional driver.

# The Second Barrier

## – Unfamiliarity

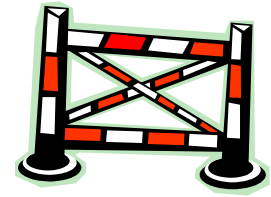


- Must become familiar with the technology **AND** familiar with the paradigm the tools facilitate?

Climbing over this barrier needs...

- Guided information
- Training
- Examples
- **Time** to learn and absorb

# The Third Barrier – Changing the course



- Embedding the technologies in your course by designing/redesigning courses

Climbing over this barrier needs...

- Designers/Graphic artists/video editors/IT people
- **Time** to redesign the course (or a segment of the course)



# Barriers to e-learning

---

**Even to the motivated teacher, TIME is a major issue.**





# Barriers to e-learning

---

- The literature supports that TIME is a major barrier...
  - Rogers, P.L., 2000, Barriers to Adopting Emerging Technologies in Education. *Journal of Educational Computing Research* 22 (4): 455-472
- My own research also supports this..

# eCDF Project

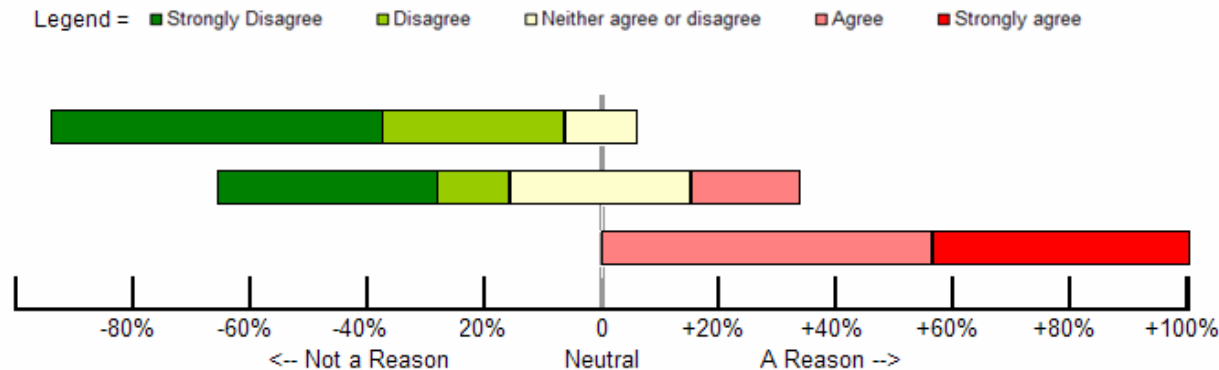
- Tools for interactive scenarios/workbooks
- Workshops and Seminars given on roll out



# Follow up Survey (1)...

- Web-survey conducted amongst Seminar/Workshop attendees 5-8 months after event
- Respondents = 46 (approx 18% of attendees). Of those...
  - 21 hadn't explored the eCDF package further (and selected some reasons why)
  - 25 took a closer look (and gave some opinions on intended use and barriers)
- Some preliminary results...

Chart 1 - Reasons for not assessing the eCDF package (PBLi and Challenge FRAP) post-workshop/seminar (n=21)



Five people cited reasons other than the above  
Comments showed at least 2 of these had an understanding of the package  
and it was relevant to 1.

# Follow up Survey (2)...

**Chart 3**  
**Opinions on barriers to Adopting PBL-interactive for Classwork**  
 from those who have assessed the software package post workshop/seminar (n=25)

**STATEMENT**

Legend = ■ Strongly Disagree ■ Disagree □ Neither agree or disagree ■ Agree ■ Strongly agree

No time for teachers to develop scenarios and embed them in courses. (n=23) (no opinion = 2)

Software is too complicated to use. (n=21) (no opinion = 4)

Manuals are too hard to follow. (n=18) (no opinion = 7)

Help files not detailed enough (n=17) (no opinion = 8)

No support from information technology services (n=19) (no opinion = 6)

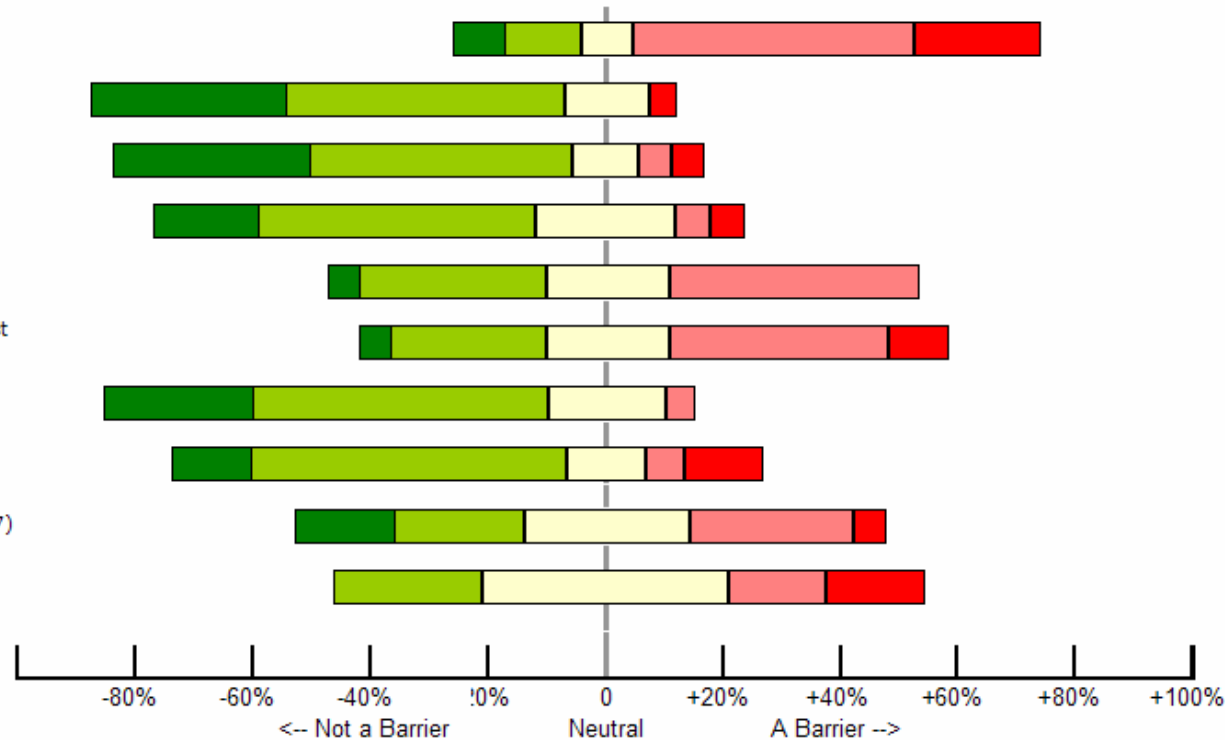
No support (courseware developers/graphic designers) to assist teachers in developing scenarios. (n=19) (no opinion = 6)

Not enough examples provided. (n=20) (no opinion = 5)

Not enough icons provided. (n=15) (no opinion = 10)

Not enough hands-on training available. (n=18) (no opinion = 7)

Student authentication and registration for the Server-based player is not integrated into our Learning Management system (e.g. WebCT/Blackboard or Moodle). (n=12) (no opinion=13)



# Follow up Survey (3)...

**Chart 5**  
**Opinions on barriers to Adopting Challenge FRAP for Classwork**  
**from those who have assessed the software package post workshop/seminar (n=25)**

**STATEMENT**

No time for teachers to develop templates and embed exercises in courses. (n=18) (no opinion = 7)

Software is too complicated to use. (n=16) (no opinion = 9)

Manuals are too hard to follow. (n=12) (no opinion = 13)

Help files not detailed enough (n=12) (no opinion = 13)

No support from information technology services (n=15) (no opinion = 10)

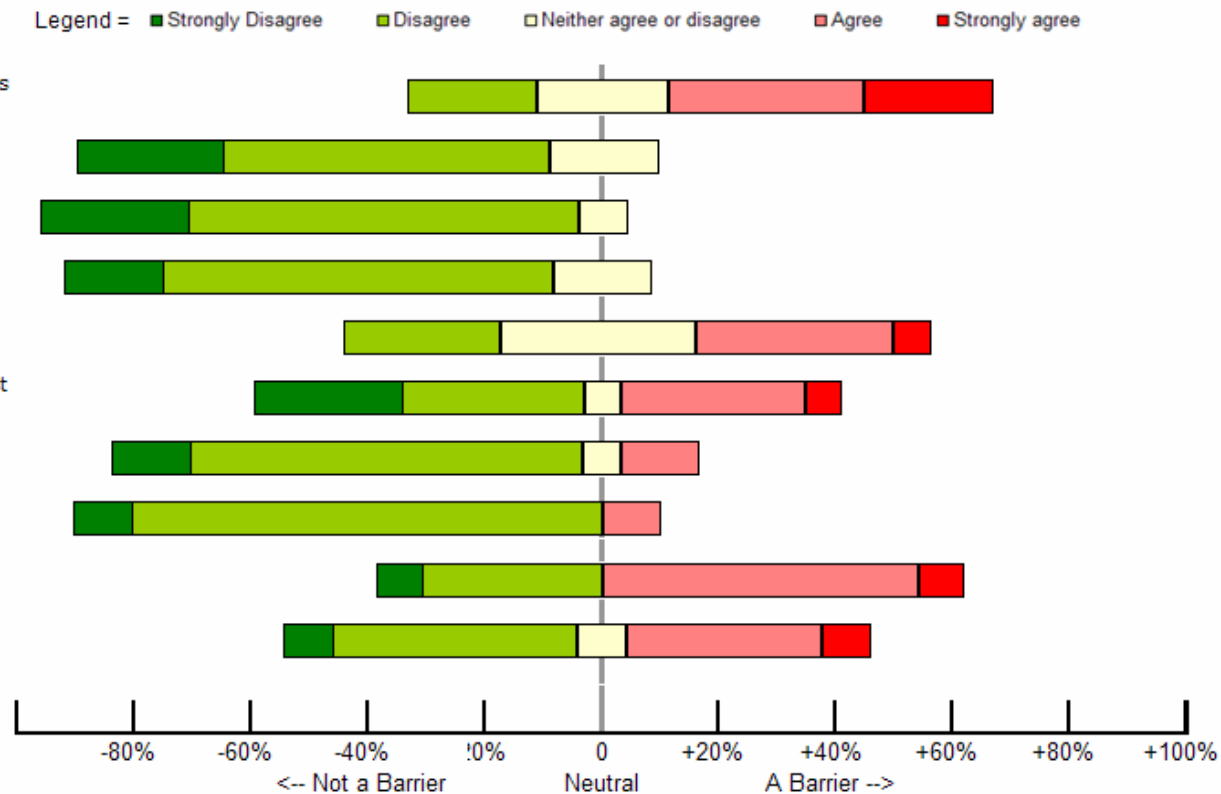
No support (courseware developers/graphic designers) to assist teachers in developing scenarios. (n=16) (no opinion = 9)

Not enough examples provided. (n=15) (no opinion = 10)

Not enough icons provided. (n=10) (no opinion = 15)

Not enough hands-on training available. (n=13) (no opinion = 12)

The fact that the software (and resultant FRAP file) is client-based, and not a web application. (n=12) (no opinion=13)





# Conclusion?

---

Giving tutors...

- more time (less teaching/admin)
  - more support (designers, developers)
- will lower the barriers to e-learning