Using the Virtual Environment to Link Teaching and Learning:
A Trip to the (Virtual) Zoo

Tina Brock

University of California, San Francisco

July 2013

Let's try this again...

The Cool Wall

- Please note & rate at least one experience/ activity/speaker/ discussion point/ quote/meal/etc. from the conference:
    - Seriously Un cool
    - UN COOL
    - COOL
    - SUB-ZERO (ideal)

Objectives

- By the conclusion of this session, the engaged participant will be able to:
    1. Describe ways to use virtual environments to optimize adult learning strategies
    2. Discuss how holistic curricular management informs both teaching and learning
    3. Identify disruptive technologies that may serve to bridge teaching and learning for interprofessional education

Why the zoo?
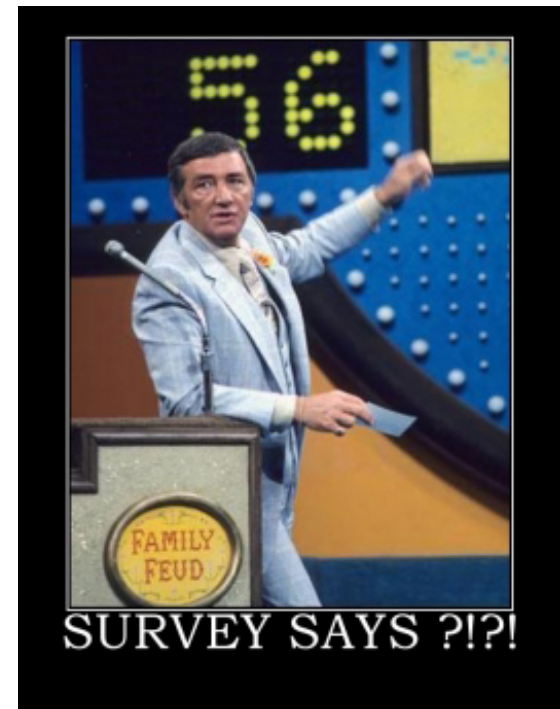
The ONE thing that ENGAGES
# today's learner most in a given situation…

Learners said…

1. **Relevance** to pharmacy in general (41%)

2. Teacher's enthusiasm/ passion (28%)

3. **Interactive** exercises (11%)

4. **Connection** to other subjects /tasks (9%)

5. Intensity of own interest in subject (9%)

Teachers said…

1. Teacher's enthusiasm/ passion (31%)

2. **Relevance** to pharmacy in general (29%)

3. **Interactive** exercises (16%)

4. **Connection** to other subjects/tasks (11%)

5. Intensity of own interest in subject (10%)

Why the zoo?
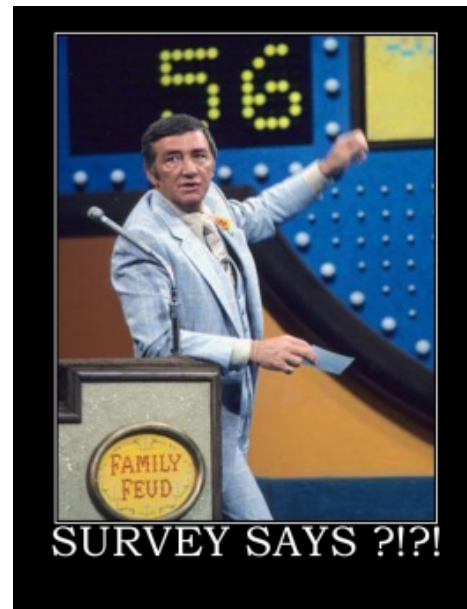
What motivates adult learners?

RELEVANCE
(elephants)

ENGAGEMENT
(doves)

CONNECTIONS
(butterflies)

Map of our zoo

EFFICIENCY

INNOVATION

EFFICIENCY side

- Ideally, you build this side first
- Activities generally occur INSIDE the box
- Home of slow-moving animals
  - Sloths
  - Tortoise
  - Banana slugs
- Must protect them from the headless monster?!

EFFICIENCY

Headless monster

On the road to nowhere

Collaborative Learning Environment (CLE)

Curricular management

Curricular delivery

Assessment

Evaluation

CPD

Practice-based systems

Mahara

Moodle

Qualtrics

MediaSite

Ilios

E*Value

EPIC

ExamSoft

B-line
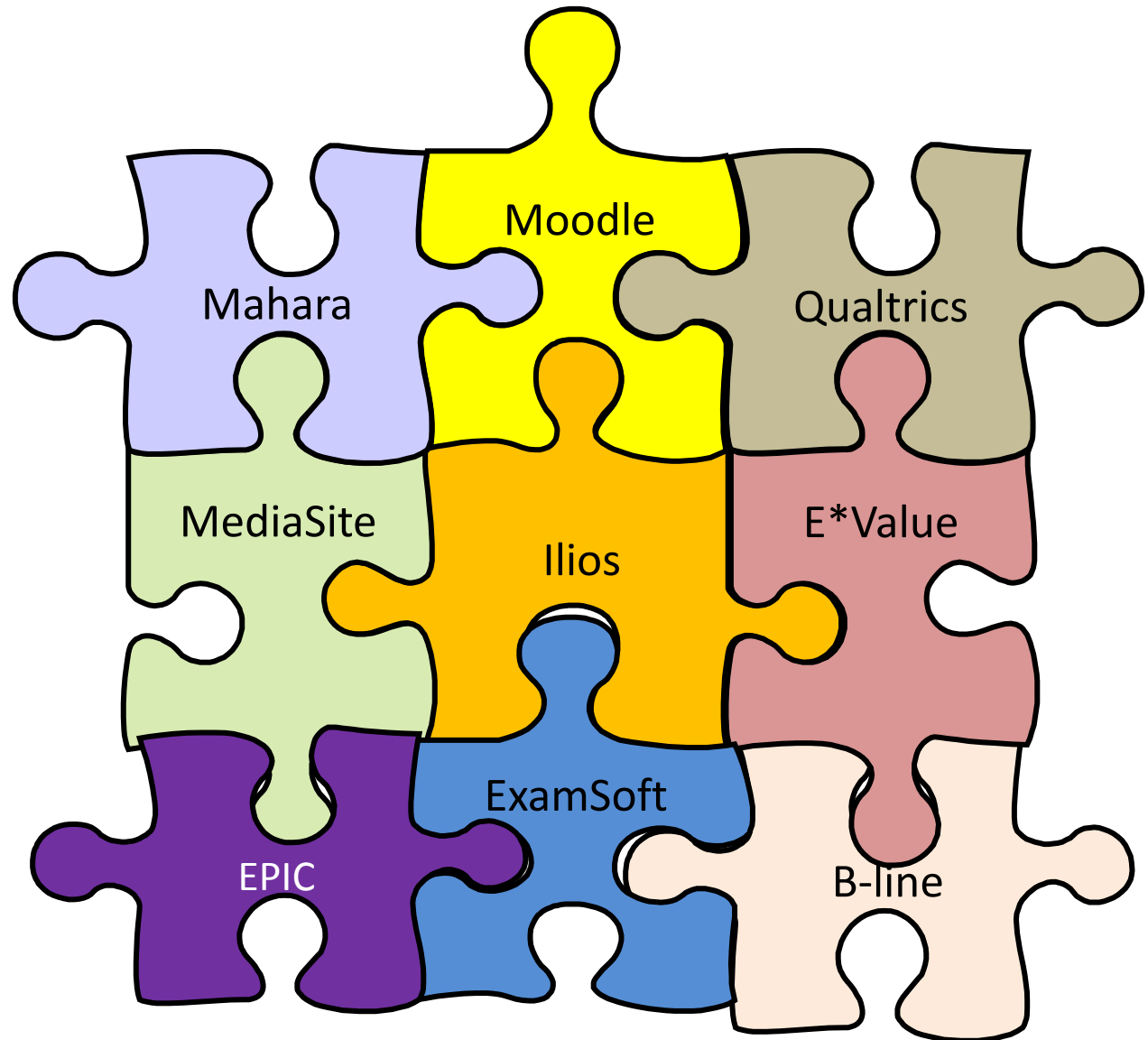
Students –
The *Learning* Dashboard

- What is this course about and how does it relate to my degree? (course summary)

- What do I do today/this week? (calendar)

- What will I learn in class? (session details)

- What are my assignments? (learning materials)

Course Directors –
The *Management* Dashboard

- How do I visually organize my courses & activities?
(course & program administration)

- How do I manage my learning materials?
(learning materials/digital asset management)

- How can I track and manage my learners?
(student management & scheduling)

- Where & how is my discipline taught in other courses/sessions/pathways?
(*intra*school collaborations)

Administrators –
The *Leadership* Dashboard

- What % of our sessions are lecture-based? (reports & analytics)

- In which courses, do we teach about health care delivery systems? (accreditation standards)

- What % of our core curriculum maps <u>solely</u> to scientific & clinical foundations, 1 of 6 total domains? (programmatic outcomes; resource allocation)

- How is pharmacology addressed in SOP vs SON, SOD and DPT? (*inter*school collaborations)

Ilios

Collaborative Learning Environment (CLE)
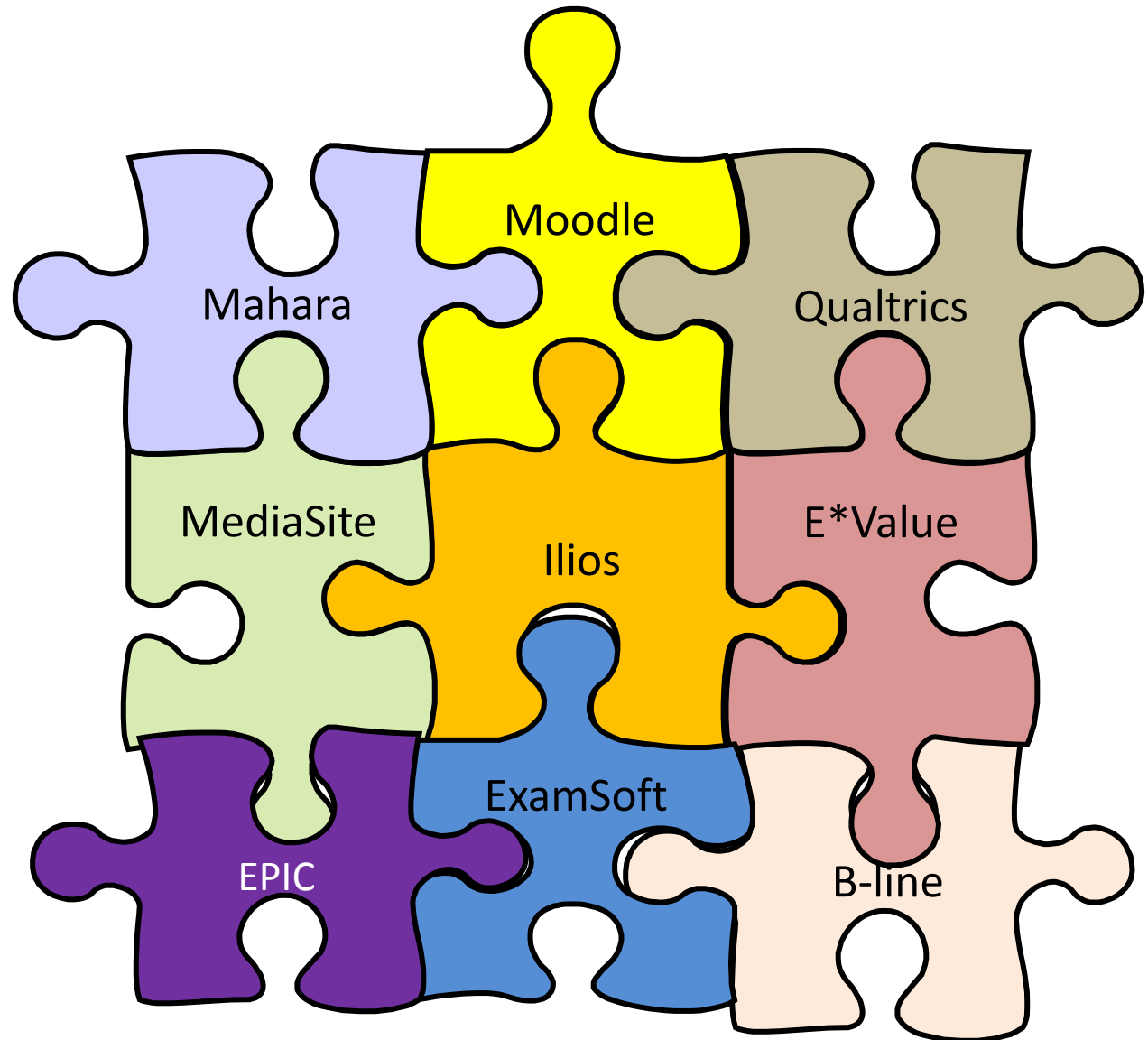
Results from Year 2

- All (55) core didactic courses have mapped learning objectives

- User interface improvements

- Staff and students can query the system
  - One scientist identified 70% unintentional overlap with another course.
  - One clinician used the information to submit an educational grant – and was funded!

- We have a better idea of where resources are needed/wasted and how to address this in our pending curriculum redesign

Task-shifting

- A school of clownfish is always built into a hierarchy with a female fish at the top.   When she dies, the most dominant male changes sex and takes her place.

- The CLE project has helped us to better define and communicate the responsibilities of course directors.

- It has also helped us advocate for a stronger, centralized model of educational staff support.
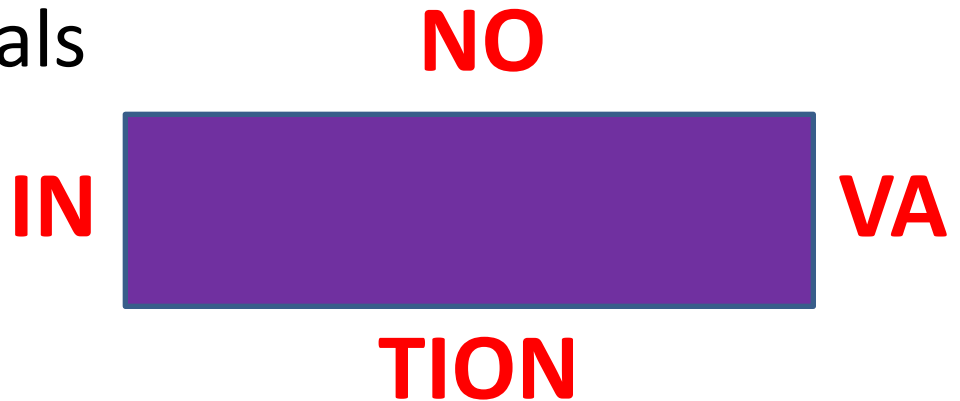
Beware of honey badgers...

They have no regard for any other animal.

INNOVATION side

- Can further inform efficiency
- Occurs OUTSIDE the box
- Home of faster animals
  - Cheetah
  - Antelope
  - Marlin
- Difficult to sustain fast movement for long periods

NO

IN VA

TION

Why pay tuition when you can get the MOOC for free?

- Massive(ly) Open Online Courses
- "MOOCs are likely to be a game-changer, opening higher education to hundreds of millions of people." *– New York Times*, July 2012
- Controversial – but clearly a disruptive technology and we can probably learn a lot from studying them
- 3 initial players in US

A veritable stampede!

June 2012 — Coursera approaches UCSF

OCtober-January 2012 — Course development

April 2012 — Coursera launches first course

coursera

July 2012 — Coursera & UCSF partnership announced
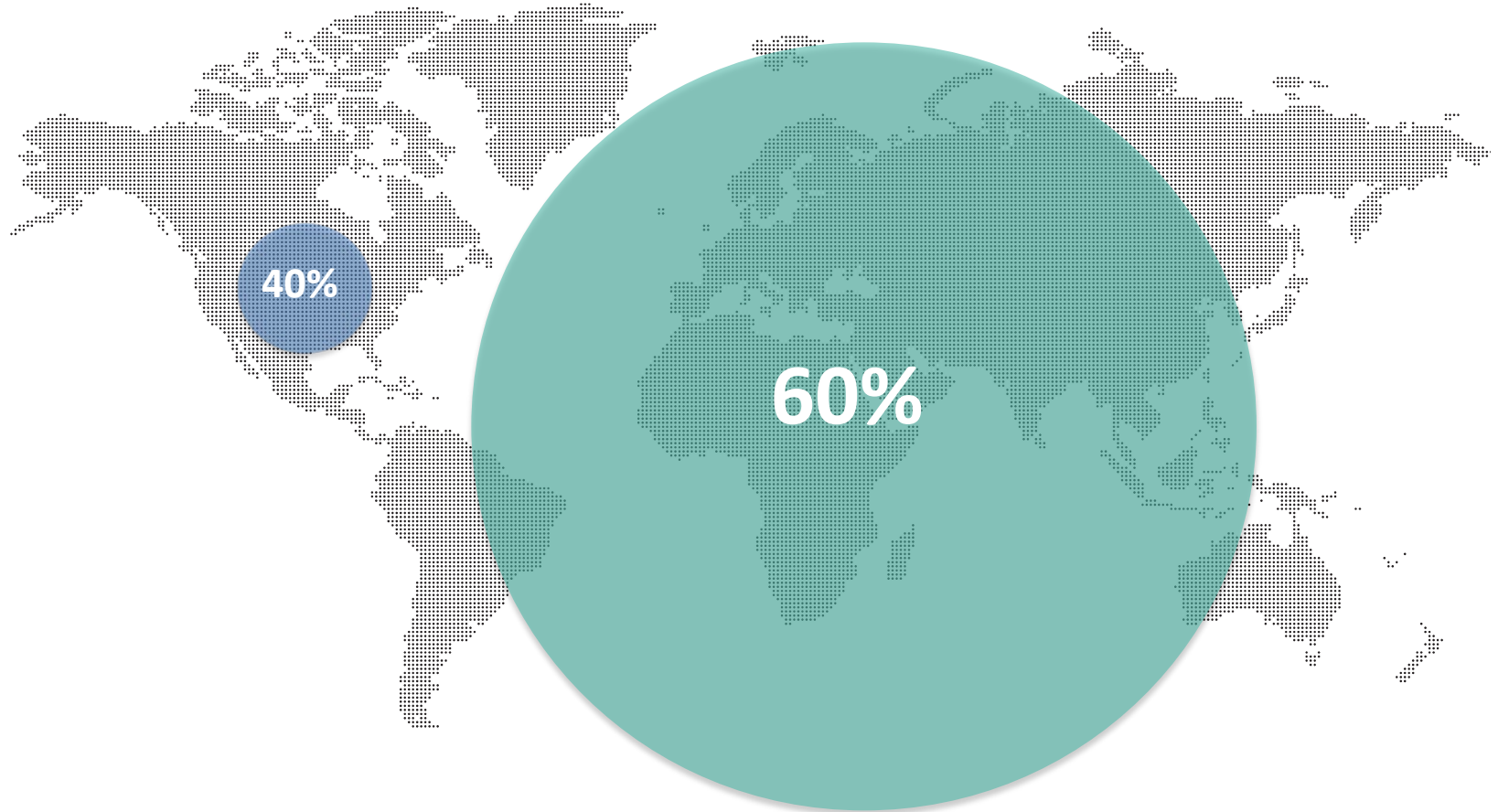
January-February 2013 — UCSF launches three courses

2012 | 2013

Quick decisions

- Who's on the team?

- How can we support the faculty?

- Where's the money coming from?

What were our results?

40%

60%

>100,000 learners from 160 countries

Commitment:Completion

7%
completion

34%
video

44%
quiz

62%
peer eval

Distractions

What we've learned so far:

- UCSF instructors really, really want instructional design support

- It is possible to repurpose the learning materials developed for Coursera for use in our traditional courses

- Many colleges have contacted us about licensing the materials

Curious?

- Consider enrolling in a MOOC about… *Instructional Methods in Health Professions Education*
  - https://www.coursera.org/course/instructmethodshpe

But don't miss the gorilla!