

# 2<sup>nd</sup> World Conference on Research Integrity



## Training for Responsible Research

Epigeum – online solutions

# Increase in research training needs, less money

- Government & research funders wanted comprehensive training
- Increase in researchers
- Many are part-time - not easy to arrange workshops
- Many want online support 24/7
- Prospect of funding 'constraints'
- The pressure is therefore for universities to **'train more for less'**.

# Workshops expensive & difficult to arrange

## Example 1 - Base cost comparison - 1 course: Workshop vs Annual Epigeum license

1 University Workshop				Cost per head
£350	per day	20	students	<b>£18</b>

Epigeum Course (equivalent to workshop)				Cost per head
£87	per year	20	students	£4.33
£567	per year	150	students	£3.78
£990	per year	500	students	<b>£1.98</b>

## Example 2 - An annual training programme of 15 courses

University Workshops teaching 15 topics				Total Cost
20 students	15	workshops	£350	£5,250
150 students	112	workshops	£350	£39,200
500 students	375	workshops	£350	<b>£131,250</b>

15 Epigeum courses (equivalent to 15 workshops per student)				Total Cost
20	students	15 courses	£65	£1,300
150	students	15 courses	£57	£8,500
500	students	15 courses	£30	<b>£14,850</b>

## Example 3 - Building online courses in-house

In-house development
<p><b>£10,000 - £40,000 per course</b></p> <p>(variation based on quality and application of Full Economic Costing, eg £10k = basic html, £40k includes videos and simulations)</p>

Epigeum course licensing
<p><b>£87 - £990 per year per course</b></p> <p>(variation is number of users)</p>

# Consortium approach

- Epigeum + 7 leading UK universities
- Cambridge, Durham, Birmingham, Cardiff, Kings, Reading, UCL
- 10 online courses for researchers
- Media-intensive approach to content
- Now licensed by over 50 graduate schools
- International 'Gold' Award – IMS Consortium





# Blended Learning delivers better results than purely face to face

- Blended learning more effective than face to face.
- This is because learners absorb basic concepts online first.
- They enter the workshop more knowledgeable, motivated and better able to participate in detailed discussion of advanced concepts and issues relevant to their own interests.
- In short, they learn more, work harder and enjoy the training more.



# Technology better measures engagement in learning

- Trainers don't know if learners understand all concepts.
- The only way is ask questions, or set a task where learning is applied.
- Most conventional workshops don't set tests.
- Feedback often discussion, but dominated by a few.
- Online assessment tools enable assessment of all learners.
- Results can lead to significant changes in teaching style, content and outcomes.



# The courses work!

They work! Post course surveys indicate unusually high satisfaction rates.

- **Purely online delivery:**
  - Oxford University. 90% using GCP online rated the courses as 4 or 5, out of 5.
  - We were surprised. Subject is not popular– compliance driven and arguably dry.
  - The researchers liked the material as it was unusually rich in video and multi-media, was well-written (not patronising) and the online delivery was easily and conveniently accessible.
- **Blended delivery:**
  - Imperial College London –post course survey -‘Intellectual Property’ course
  - Students consistently scoring 4.5 and 5 out of 5 for the experience



## Optimum approach is ‘blended’ – but online should precede face to face

- Pre-workshop preparation most effective use
- We do not recommend the courses as optional, post workshop study.
- This relegates trainer to remedial task of communicating basic concepts, and constrains the recycling of deeper learning.





# Likely adoption rates of online courses

Compliance-driven	100% adoption
Optional <i>Departments integrate to taught programmes</i>	50-100% adoption
Purely voluntary	5-25% adoption

*Note – A 5% adoption rate can still represent a quantum increase on workshop attendance.*