2nd 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

<table>
<thead>
<tr>
<th>1 University Workshop</th>
<th>Cost per head</th>
<th>Epigeum Course (equivalent to workshop)</th>
<th>Cost per head</th>
</tr>
</thead>
<tbody>
<tr>
<td>£350 per day 20 students</td>
<td>£18</td>
<td>£87 per year 20 students</td>
<td>£4.33</td>
</tr>
<tr>
<td>£567 per year 150 students</td>
<td></td>
<td>£990 per year 500 students</td>
<td>£1.98</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>University Workshops teaching 15 topics</th>
<th>Total Cost</th>
<th>15 Epigeum courses (equivalent to 15 workshops per student)</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 students 15 workshops</td>
<td>£350</td>
<td>£15 courses</td>
<td>£65</td>
</tr>
<tr>
<td>150 students 112 workshops</td>
<td>£350</td>
<td>£15 courses</td>
<td>£57</td>
</tr>
<tr>
<td>500 students 375 workshops</td>
<td>£350</td>
<td>£15 courses</td>
<td>£30</td>
</tr>
<tr>
<td>131,250</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Example 3 - Building online courses in-house

<table>
<thead>
<tr>
<th>In-house development</th>
<th>Epigeum course licensing</th>
</tr>
</thead>
<tbody>
<tr>
<td>£10,000 - £40,000 per course (variation based on quality and application of Full Economic Costing, eg £10k = basic html, £40k includes videos and simulations)</td>
<td>£87 - £990 per year per course (variation is number of users)</td>
</tr>
</tbody>
</table>
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
 Departments integrate to taught programmes 50-100% adoption

Purely voluntary 5-25% adoption

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