THETA 2013

The Notion and Development of Academic Analytics

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Presentation Overview

✓ Context

✓ What we did and why

✓ How we did it

✓ Results, and conclusions
Context

- Why academic analytics:

  - The student’s reported feedback:
    - *Your teachers don’t use enough technology in their teaching and when they do, they don’t use it well enough!*

  - The reality check:
    - *Finite resources available to support the increased academic uptake and usage of ICTs in teaching delivery*
Context

- Why academic analytics?
  - Key Performance Indicator: *Increase the uptake and usage of the tools and technologies within the LMS*
  - Support *increased uptake and usage of information and communication technologies (ICTs)* in student’s learning and academic’s teaching experiences
Why academic analytics?

- Use analytics to measure student’s performance

- Why not use them to measure academic teacher usage as the key interface with the student!

- Enable academic learning and teaching leaders to be better able to target finite learning and teaching support resources to areas of most need
Context

- Why academic analytics:
  - The reality:
    - professional development of academic teachers best occurs within the context of their teaching practice supported by their line managers and academic learning and teaching leadership
How did we do it?

- Building on previous work
  - UWS & GU 2008 benchmark project
- LMS Audit Project (late 2010)
  - Revised LMS Framework and methodology
# LMS Academic Usage Framework

<table>
<thead>
<tr>
<th><strong>Content</strong></th>
<th><strong>Communication &amp; Collaboration</strong></th>
<th><strong>Assessment</strong></th>
<th><strong>Explicit Learner Support</strong></th>
</tr>
</thead>
</table>
| • Course Profile  
• Lecture/Tutorial Materials  
• Media & Interactives  
• Scholarly Resources  
• Lecture Capture  
• External Link | • Announcement  
• Course Forums  
• Course Post  
• Group Forums  
• Group Posts  
• Blogs  
• Wikis  
• Wimba Classroom  
• Groups | • Assessment Material  
• Assignment drop box and RAP  
• Quizzes/Test  
• SafeAssign  
• Grade Centre | • Other Resources Materials  
• Organisations (Auto-enrolment) |
Process

- Data Mining
- Data Validation
  - Improve accuracy and identify limitations
## LMS Usage Checking

### Academic Group: ALL COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>School</th>
<th>Campus</th>
<th>Staff Count</th>
<th>Enrolment Count</th>
<th>Course Join</th>
<th>Standard Folder</th>
<th>Non-standard Folder</th>
<th>Extension Folder</th>
<th>Content</th>
<th>Communication and Collaboration</th>
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</thead>
<tbody>
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<tr>
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<td>CM</td>
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</tr>
</tbody>
</table>

**Legend:**
- **Standard Folder**
- **Non-standard Folder**
- **Extension Folder**
- **Content**
- **Communication and Collaboration**
- Methodology
  - Identify “Usable” Course Sites
    *Populated with instructors and enrolled students*
  
  - Identify “Active Course Sites”
    *Sites contained more than a course outline/profile indicating effort made by the academic to develop their course site*
some results

**Usable Course Sites**

Total Average of Usable Course Sites by Academic Faculty/Department/School etc Academic Grouping

- 47%
- 19%
- 19%
- 16%

2008-2011 averaged

**Active Course Sites**

Overall Percentage of Active Course Sites by Grouping
...some results

The Percentage of L@G Tools Usage by Grouping in Semester 1, 2011

% of the total usable course sites in each group

- Grouping One
- Grouping Two
- Grouping Three
- Grouping Four
- Conclusion and Questions (?)
THANK YOU