Towards e-learning sustainability:
Designing and reusing student-centered learning scenarios

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12 - 13 November, Ostrava
Sixth annual international conference
VLE's

- Student **access** to course contents
- **Reuse** of digital contents
- Teacher-student **communication**
Traditional Classroom

Traditional use of Technology
Knowledge construction (collaboration)
- Promote the design and reuse of activity-based learning scenarios
- Document learning contexts and strategies
- Increase active e/b-learning pedagogies
- Share good practice

- Reduce the time and effort taken to develop active learning scenarios
New Built in Learning Environment

Students

Teacher

LAMS

SD4L Portal

Actividades Combinadas

Inquiry of Evaluation of PAC

Site news

More about LAMS-ct Workshop

Certificados de presença

In Quarta-feira de Janeiro, 2016

Inquirito de Avaliação do PAC

I Inquirito de Avaliação do PAC

Students
LAMS – Learning Activity Management System

Introdução do sistema

Activities Toolkit
Noticeboard
Tool for displaying HTML content including external sources such as images and other media.

Chat
Chat and Scribe
Data Collection
Forum
Forum & Scribe
Gmap
Multiple Choice
Notebook
Noticeboard
Q & A
Resources&Forum
Share Resources
Spreadsheet

Properties
Methodology

- Design
- Implementation
- Reuse
- Store/Share
How did this work out for teachers?
Integral reuse

Types of reuse

**Contexts**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Information and Communication Technologies</th>
<th>Electronic Tools Applied to Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>Microsoft Access</td>
<td>Translation Projects</td>
</tr>
<tr>
<td>Pedagogical Framing</td>
<td>Introduction</td>
<td>Conclusion</td>
</tr>
<tr>
<td>Duration</td>
<td>3 hours (2 sessions)</td>
<td>1.5 hours (1 session)</td>
</tr>
</tbody>
</table>
Changes in the nature of tasks

Types of reuse

Contexts

<table>
<thead>
<tr>
<th>Subject</th>
<th>Information and Communication Technologies</th>
<th>Business English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme</td>
<td>Microsoft Access</td>
<td>Study of technical vocabulary</td>
</tr>
<tr>
<td>Pedagogical Framing</td>
<td>Introduction</td>
<td>Conclusion</td>
</tr>
<tr>
<td>Duration</td>
<td>3 hours (2 sessions)</td>
<td>1.5 hours (1 session)</td>
</tr>
</tbody>
</table>
Partial reuse

Types of reuse

D3-CAR1 - "Usabilidade"

D2-CA2 - "e-Business"
<table>
<thead>
<tr>
<th>Types of reuse</th>
<th>Contexts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject</strong></td>
<td>Business English</td>
</tr>
<tr>
<td><strong>Theme</strong></td>
<td>Writing and reading English language</td>
</tr>
<tr>
<td><strong>Pedagogical Framing</strong></td>
<td>Conclusion</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>25 min.</td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>Branches (groups - divergence)</td>
</tr>
<tr>
<td></td>
<td>Convergence (presencial forum)</td>
</tr>
<tr>
<td><strong>Information and Communication Technologies</strong></td>
<td>Interface usability</td>
</tr>
</tbody>
</table>
How much time did you **took to design** your learning scenario?

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 to 5 hours + 2 afternoons + one night</td>
<td><strong>One hole day</strong></td>
<td>Can’t tell exactly</td>
</tr>
<tr>
<td><strong>± 15 hours</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How much time/effort did you **save when reused** a learning scenario?

<table>
<thead>
<tr>
<th></th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>70%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Effort</td>
<td>50%</td>
<td>70%</td>
<td>50%</td>
</tr>
</tbody>
</table>
How did this work out for students?
Evaluation of pedagogical strategies

Evaluation of activities

- Strongly Agree
- Agree
- No opinion
- Disagree
- Strongly disagree

Future expectations

<table>
<thead>
<tr>
<th>Enjoyed participating</th>
<th>Stimulating</th>
<th>Useful</th>
<th>Helped me to learn</th>
<th>New learning format</th>
<th>Repeat this subject</th>
<th>Repeat other subjects</th>
</tr>
</thead>
</table>
## Evaluation of LAMS

<table>
<thead>
<tr>
<th>LAMS evaluation</th>
<th>Future expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>long learning curve</td>
<td>would like to repeat</td>
</tr>
<tr>
<td>easy to use</td>
<td>teacher should use more often</td>
</tr>
<tr>
<td>enjoyable</td>
<td></td>
</tr>
<tr>
<td>flexible</td>
<td></td>
</tr>
<tr>
<td>restrictive</td>
<td></td>
</tr>
<tr>
<td>attractive interface</td>
<td></td>
</tr>
<tr>
<td>adds value to Moodle</td>
<td></td>
</tr>
</tbody>
</table>

- **Strongly Agree**
- **Agree**
- **No opinion**
- **Disagree**
- **Strongly disagree**
• Increase of the sustainability of e/b-learning practices

- Return On Investment: from 40% up to 70%.
- Increase teacher availability to do/develop new projects.

• Enlargement of the concept of reuse

- There is more potential in reusing pedagogical strategies than in reusing just learning contents.
- Teachers collaborate with other groups from different areas of knowledge.

• Improvement of teachers’ pedagogical skills

- Knowledge construction based on peer’s shared knowledge and work (good practices).
- Opportunity to adjust previous errors.
- Opportunity to uncover pedagogical models (templates).

• Refinement and perfection of pedagogical strategies

- Development of student hard and soft skills.
- Enlargement of student motivation through diversified learning structures.

• Scarcity or inexistent sharing habits

Foment trust and cooperation amongst teachers.

• Capability to manage complex pedagogical structures

Sharing Knowledge about how to manage learning environments (reinforcement and motivation strategies for students).

• Protection of authors rights

Foment teachers’ awareness.
Include technical protection mechanisms.
1. Technical and pedagogical **training**

2. **Development of an e-Repository**

Stimulate design and share habits
THANK YOU!

questions

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