Seamless access to OER with mobile technologies

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Contents

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• My research on OER
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  – Authoring of OER in authentic learning scenarios
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    • Seamless access to OER with mobile technology
• Future research
Ubiquitous support of lifelong learners with mobile technologies

Lifelong learning is the ongoing, voluntary, and self-motivated pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, rather than competitiveness and employability.

1. Communication in the mother tongue
2. Communication in foreign languages
3. Mathematical competence and basic competences in science and technology
4. Digital competence
5. Learning to learn
6. Social and civic competences
7. Sense of initiative and entrepreneurship
8. Cultural awareness and expression

Commission of the European Communities: "Adult learning: It is never too late to learn". COM(2006)

Objectives of the research

1. Develop artefacts and software prototypes that allow the implementation of educational designs in which the learners connect experiences across contexts.

2. Providing suitable combination of multiple devices to foster creation of personal learning ecologies.
What is lifelong learning?

“Lifelong learning is like a never ending personal revolution.” ~ @BryantMcGill, Voice of Reason
Thee pillars for lifelong learning

LIFELONG LEARNING

MODELING FEEDBACK

Reflection  Self regulation  Awareness

LEARNING TO LEARN
Authoring of OER in authentic learning scenarios

Mobile Authoring in Authentic scenarios


Mandela’s Memorial City Hall, Cape Town
06/12/2013
Authoring of OER in authentic learning scenarios
Mobile usage habits in lifelong learners

Habits in lifelong leaners

In physical spaces

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
<th>Listen</th>
<th>Watch</th>
<th>Write</th>
<th>Read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having breakfast</td>
<td>12.24</td>
<td>8.16</td>
<td>8.84</td>
<td>29.24</td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td>37.4</td>
<td>1.36</td>
<td>0.68</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>Sitting in the sofa</td>
<td>34.01</td>
<td>44.89</td>
<td>50.34</td>
<td>62.58</td>
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<tr>
<td>Having lunch</td>
<td>11.56</td>
<td>10.88</td>
<td>8.84</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>During coffee/tea</td>
<td>19.72</td>
<td>11.56</td>
<td>27.2</td>
<td>38.77</td>
<td></td>
</tr>
<tr>
<td>Watching TV, during advertisement time</td>
<td>12.92</td>
<td>15.64</td>
<td>32.64</td>
<td>47.61</td>
<td></td>
</tr>
<tr>
<td>In the bathroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having shower</td>
<td>23.12</td>
<td>0.68</td>
<td>0</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Sitting on the toilet</td>
<td>11.56</td>
<td>10.2</td>
<td>21.08</td>
<td>33.33</td>
<td></td>
</tr>
<tr>
<td>Making up / shaving</td>
<td>18.36</td>
<td>1.36</td>
<td>1.36</td>
<td>2.72</td>
<td></td>
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<tr>
<td>Brushing your teeth</td>
<td>16.32</td>
<td>2.04</td>
<td>2.04</td>
<td>4.76</td>
<td></td>
</tr>
<tr>
<td>In my room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waking up in the morning in bed</td>
<td>18.36</td>
<td>2.72</td>
<td>7.48</td>
<td>25.84</td>
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</tr>
<tr>
<td>Getting dressed</td>
<td>19.72</td>
<td>0.68</td>
<td>1.36</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>Sitting at my desk</td>
<td>37.41</td>
<td>29.92</td>
<td>51.69</td>
<td>54.42</td>
<td></td>
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<tr>
<td>Lying on bed anytime</td>
<td>34.69</td>
<td>34.01</td>
<td>33.32</td>
<td>50.33</td>
<td></td>
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<tr>
<td>Going to sleep at night and in the bed</td>
<td>28.56</td>
<td>21.76</td>
<td>23.12</td>
<td>42.85</td>
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</tbody>
</table>

The Lifelong Learning Hub
Identify your learning goals

- Artistic
- Attitude
- Career
- Education
- Family
- Public Service
- Pleasure
- Physical
- Financial

MY GOALS
Identify daily learning environments

- Daily physical spaces
- Transitions
- Waiting times
- Frequently used devices
Daily physical spaces
Transitions
Frequently used artifacts
Waiting times
Setting goals with 3LHub

Tap a new NFC tag

Set aside time

Goals are listed
Track learning activities with 3LHub

Tap to start

Tap to stop
Visualize learning analytics

Percentage of time for learning

Learning patterns

Estimated VS accomplished
The LifeLong Learning Hub (3LHub)

Free BETA app

Open source code

Extensions


What I am doing now?
A questionnaire to repository owners
Open Discovery Space Project

Do you think an app could increase the access rates to your repository?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Would you consider providing an application interface (API) for accessing to your repository from other sites and apps?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
Application Programming Interface in Open Access Repositories

Playlists

/api/v1/playlists/<path:topic_slug>/exercises

/api/v1/playlists/<path:topic_slug>/videos

/api/v1/playlists/library/list

/api/v1/playlists/library

http://www.ocwsearch.com/api/search

http://api-explorer.khanacademy.org/
An Ecology of Resources for Lifelong Learners
What is next?
Traditional education

- Industrialized
- Built for Scalability
- Suited for the creation of „comparable” people
Can we really compare these students?
How long does it take you to complete an assignment?

http://www2.johnabbott.qc.ca/~geoscience/ME/WorldLanguageFamiliesMap.htm

Experimental study

LACE | Learning Analytics Community Exchange

Focussed investigation, analysis and discussion drives desirable change.

- Control group. No treatment
- Treatment 1. Makes estimation
- Treatment 2. Measures with 3LHub
Questions?

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