Long-tail learning

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Three phenomena and opportunities

- Web 2.0 communities
- Creative commons
- Low price computers
Serious Web 2.0 communities
EduCities Since 2000

By Tak-Wai and colleagues
Model

• Ownership mechanism: Learning by being a teacher
  – Self-generated topics
  – Self-generated/collection materials
  – Self-managed learning activities
  – Collecting ➔ Understanding ➔ Telling it
## Diversity coverage of content

<table>
<thead>
<tr>
<th>Others</th>
<th>K-12</th>
<th>Humanity</th>
<th>Blended</th>
<th>Scientific</th>
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By Robin Lin
• 13 and 23 years old
• Teaching programming language
• Migrating from the learning of programming to the learning of Egyptian history (e.g. pyramid)
Age distribution of course providers

By Robin Lin
Implications

• Ownership
  – increased the intention to learn – by either collection, reorganization, or self-generation

• Audience
  – The learners become the audience of personal learning

• Serious Web 2.0
  – clearly identified learning goals & planned learning activities through which formal learning may be injected with passion
Relationship between “head” and “long-tail” learning

Transforming learning to self-directed experience
Train and Railroad Hobbyist

• Over 567,000 hits of “trains railroad” in Youtube
• How can we exploit the power of hobbies to enhance learning?
Train B&P — build and program it

- **Self-relatedness**
  - imagining and creating a world in the cyber environment

- **Problem solving**
  - Allowing programming to solve problems in the world which is not possible in the real world

- **Learning physics**
  - providing real and complex simulation of physics
Relationship between “head” and “long-tail” learning

Transforming learning to self-motivated experience
New culture on the tail: Creative commons
Creative Commons

• A licensing mechanism that allows creators to grant permission to others to copy, distribute, perform a work, create derivative work, or restrict usage of the creators’ works.

Attribution  Non-Commercial  No-derivation  Share-alike (derivation)
Creative Commons

Approximate Minimum Total CC Licensed Works as of July 2008: ~130 million

Minimum estimated CC licensed works
2003-2007: End of year
2008: Midyear
Creative Commons (CCs)

• Works with Creative Commons
  – Images: Insects in CCs, Architecture in CCs, Wildlife in CCs in Flickr
  – Music: Jamendo.com, ccmixter.org, opsound.org/
  – Academia: Papers in CCs
Implications

• Remix culture becomes the reality of current cyber communities
  – Intellectual work can be collaboratively created, shared, assembled and renovated
  – Increase of the amount of sharable works on the tail
  – Quality of work is not always guaranteed
Open Questions

• Should the remix culture of CCs exist in education systems?
  – e.g. let students modify others’ work

• Does the remix culture enhance the collaborative learning process?
Storytelling with CCs

• Create your own sketch stories by yourself or using others works on the Web

Images with CCs in Flickr
Storytelling with CCs

• Remix everyone’s contribution in a story board
Storytelling with CCs

• Make a movie for stories with open music on the Web

Open music on the Web
Relationship between “head” and “long-tail” learning

“head”

“long-tail”

Enriching: Remix culture
Low-price computers
Online learning material and tools
One-to-one learning: The scenarios where students bring handheld devices fitted with wireless communication capabilities and apply these devices for various learning activities.

ASUS Eee PC (USD. $240)   Intel Classmate PC   MIT OLPC (USD. 150?)
Open questions

• When the long-tail knowledge is available in classrooms, do our classrooms develop students with sophisticated epistemological belief which is needed in the life-long learning?

  – From believing in authority to comparing multi-sources

  – From simple matching to elaborative learning
Web and Peers as components of collaborative pedagogies

– Using personal devices in classrooms
  • to find resources on the Web,
  • to contribute their personal findings,
  • to compare and integrate different findings

– In order to develop sophisticated epistemological belief that turn passive information receivers into active critical thinkers.
Web and Peers as components of collaborative pedagogies
Relationship between “head” and “long-tail” learning

Development: Sophisticated epistemological belief

Enriching: Remix culture

Transformation: self-motivated/directed experience
Summary

Development: Sophisticated epistemological belief

“head”  “long-tail”
Why people provide courses?

- Self-fulfillment
- Job-related and job-extended
- Group sharing

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<th>Job Description</th>
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<th>Total</th>
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<tr>
<td>2. Assistant</td>
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<td>1</td>
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<td>3. Interpreter</td>
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<td>4. Students</td>
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<td>2. Job-related and job-extended</td>
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<td>3. Group --sharing</td>
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<table>
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<td>2. Appealing expression</td>
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<tr>
<td>3. Dialogue</td>
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<tr>
<td>4. Extension of real-world teaching</td>
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</tr>
<tr>
<td>5. Learning community of similar interests</td>
<td>chengshan cybertrek lili</td>
<td>3</td>
</tr>
</tbody>
</table>

By Shelley Young and Robin Lin