The Library and Higher Education: where and how to rethink relationships

UFP’s Erasmus Staff Week for Librarians

Workshop on 5\textsuperscript{th} May, 2015

Luis Borges Gouveia
lmbg@ufp.edu.pt
The Workshop

- Title: *The Library and Higher Education: where and how to rethink relationships*

The Library has always been a central place for higher education. When digital emerges as the main informational support, there are a number of considerations that are no longer valid, both for physical setting and related services.

As within this context, this presentation discusses some of possible paths for libraries and also the roles that we need to address in current higher education libraries.

By other hand, higher education itself is on a fast track for change. This will poses a number of challenges that the library has to provide answers to, in order to maintain its status with the academia most flagship places.
Workshop conducted by

- Luis Borges Gouveia is an Associate Professor of Knowledge Management, Science and Technology Faculty at University Fernando Pessoa
- Among his research interests are the impact of digital information and information society issues in our day-to-day life.
- He publishes 15 books and was involved in several projects concerning the use of information in e-learning and e-government settings
  - More information is available at http://about.me/lbgouveia
Schedule, Tuesday 5\textsuperscript{th} May

From 14:30 till 16:30:

• The digital challenges
• The changing issues
• The academic library with the collaboration of Olinda Martins, PhD student

• \textit{Be free to interact whenever wanted}
• \textit{The main idea is to discuss}
Internet as *a brave new world*

- As stated Aldous Huxley (1894-1963), *the defence of a Paradise-enginerring world setting can not be a viable substitution for people and its emotional links* (he is in favour of universal happiness, not a perfect and pure true)
  – See more at [http://www.huxley.net/](http://www.huxley.net/)
The easy part...
Some ideas of such a world...

- Highly networked
- Fast paced
- Ongoing change
- Mutating workplace (leisure also?...)
- Do it now, everywhere, with available tech, no time waste, and resources efficiency
- Action
  - Collaboration oriented
  - Life long learning
  - Self learning
- Be prepared for
  - share, cocreate, be creative, reuse, and stay with high mobility
Digital challenges
A definition...

• Describes any system based on discontinuous data or events.
  – Computers are digital machines because at their most basic level they can distinguish between just two values, 0 and 1, or off and on. There is no simple way to represent all the values in between, such as 0.25.
  – All data that a computer processes must be encoded digitally, as a series of zeroes and ones.

• The opposite of digital is analog.

Spread the word (on that case, the bit)

- Bit: binary digit
- First computer, then networks
- First some data, then many data
  - On such days almost all the data that matters
- First some information, then those information we need to access
  - On such days almost all the information with value
- And knowledge?
  - We are working on it...
T. S. Eliot (1888-1965): The Rock (1934)

Where is the Life we have lost in living?

Where is the wisdom we have lost in knowledge?

Where is the knowledge we have lost in information?

Information society

- a society where information and communication technology are the primary resource to exchange digital information, and to support interaction between individuals using practices and methods in permanent change

(Gouveia and Gaio, 2004)
Information society

Heavy use of ICT (computers and networks)

Growing use of digital

Network organisation
Once upon a time...
the computer
The computer without a mouse!
The computer without a mouse! ... How to use it?
The computer without a keyboard!
The computer without keyboard!... How to use it?
The computer without monitor!
But... Where is the computer!
But... Where is the computer!
But... Where is the computer!
But... Where is the computer!

- Networked hidden
  and
- Transaction related

“somewhere among us”
Make us remember some religious stuff
the digital and rich information environments
The analogic and rich information environment
From the analogic to the digital “world”

• **learn**...
  – In the analogic, memorise to learn
  – In digital, forget to learn

• **work**...
  – In the analog, take time to work
  – In the digital, work without taking time
Some remarks

• With digital support
  – Space is extended
  – Time becomes a scarce resource
  – i.e. more reach, less time

• People in organisations
  – Less government
  – More governance
  – i.e. Distance can be less a problem than time (time to know, time to be, time to do, time to react,...)
  – i.e. Networks, instead of leadership (?)
Some remarks

• Again, the digital, time-space and people...
  – i.e. Increase information flux and interactions

• At the end of the day
  – Who pays the bill
  – Who controls it

• Has we take this into consideration when design our cities* for (?)
  – Diversity
  – Proximity
  – Centrality
  – Knowledge
  – A given strategy

*schools, libraries, ...
A number of challenges

• People skills
• [Social, economical, digital] gap
• Engage people
• What to know and how (wisdon?...)

But also
• Sense human presence
• Collaboration support (not just sharing or cooperation)
• Information visualisation & Knowledge representation
• Linking the real and the virtual (location devices, senses and get rid of web based as first tech proposal...)

Additional notes

• “perform” digital it is not just related with computers and networks

• We still be analogic, but our interaction are more digital than ever
Additional notes

• Knowledge rate substitution
  – Something between 20% to 25%
  – This means that we need to replace knowledge every 4 – 5 years

• As a result, a territory must be also organised with the ability to produce knowledge
  – Need schools, research and focus
  – Additional concerns to add to energy, water and other stuff...
  – ...and what is the role for libraries?
Additional notes

• A move from an offer oriented organisation to a client oriented strategy also has implications in the way we deal with information
  – New ways to deal with information discover
    • How to be discovered (offer side)
    • How to discover (client side)
  – Individuals can no more stand on their own ability; must rely mostly on their network connections
  – ...again, what is the role for libraries?
Digital literacy

“Digital literacy is the ability to understand information and —more important —to evaluate and integrate information in multiple formats that the computer can deliver. Being able to evaluate and interpret information is critical […] you can't understand information you find on the Internet without evaluating its sources and placing it in context”.

Paul Gilster

Being part of a bigger and complex set

- ICT Innovation (in ICT/ with ICT)
- Constructive Social Action
- Critical/Creative Thinking

Digital Literacy

Create

Understand

Use

Access

- Opportunity
- Distribution, Infrastructure, Tools

- Creativity
- Networking
- Simulation
- Decision-making
- Multi-tasking
- Input/Output skills
- Tools & Text Skills

- Appropriation
- Distributed Cognition
- Research / Information Fluency
- Citizenship
- Cultural Empowerment

- Judgement
- Pooling Knowledge
- Social Awareness & Identity
- Rights & Responsibilities

- Problem-solving
- Reflection
- Synthesizing
- Safety & Security

- Navigation skills
- Accessing skills
How much information?

• “2002 could be considered the beginning of the digital age, the first year worldwide digital storage capacity overtook total analog capacity. As of 2007, almost 94 percent of our memory is in digital form”

• Read more on http://news.usc.edu/#!/article/29360/How-Much-Information-Is-There-in-the-World

• Watch a video about the Martin Hilbert study: http://vimeo.com/20928251
Deal with it...

• Information overload
  – Issues of quantity (to much information to cope with...)
  – Issues of quality (to complex information to cope with...)
  – Issues of synchrony and trueness (can we deal with channel diversity and confirm information trueness...)

• How to deal with information overload?
  – Management (tasks, goals, time, information, relationships, attention, ...)
  – Relate, structure, prioritise
  – Say no!
  – Do not have it, link it!
  – Filter, discard
  – Share, collaborate
  – Focus and forget
  – Learn to network a lot
Turn knowledge into understandable information

• Translate it to real world relationships...
  – compare and relate
  – use multimedia and visual complexity

See http://www.visualcomplexity.com
With Internet the issue of publication also changes...

• See this 9:29 min video from Aaron Swartz – The Network Transformation
  http://www.youtube.com/watch?v=CzNXDdjtxQI&noredirect=1

*Internet activist* (1986, 2013)
Challenges

• Which can be the role of academic libraries
  – The same?
  – A reduced one as sustainability issues also implies less costs?
  – A different one, who extends information and knowledge discovery?
• A number of issues are in place
  – Growing cost of both paper based materials and its storage
  – A large digital database offerings with greater costs for professional (premium) services
  – The need to serve deep knowledge and service sophistication, implies more people and a lot more trained librarians (with free time to serve and interact with the academic community)
• A need also to rethink layouts, both physical and digital ones
Hope the workshop provide some value
...and enjoy Porto!