Learning Analytics – exploring the value of library data

Design4learning conference November 2014: Poster by Open University Library Services 2014 – Non Scantlebury, Richard Nurse
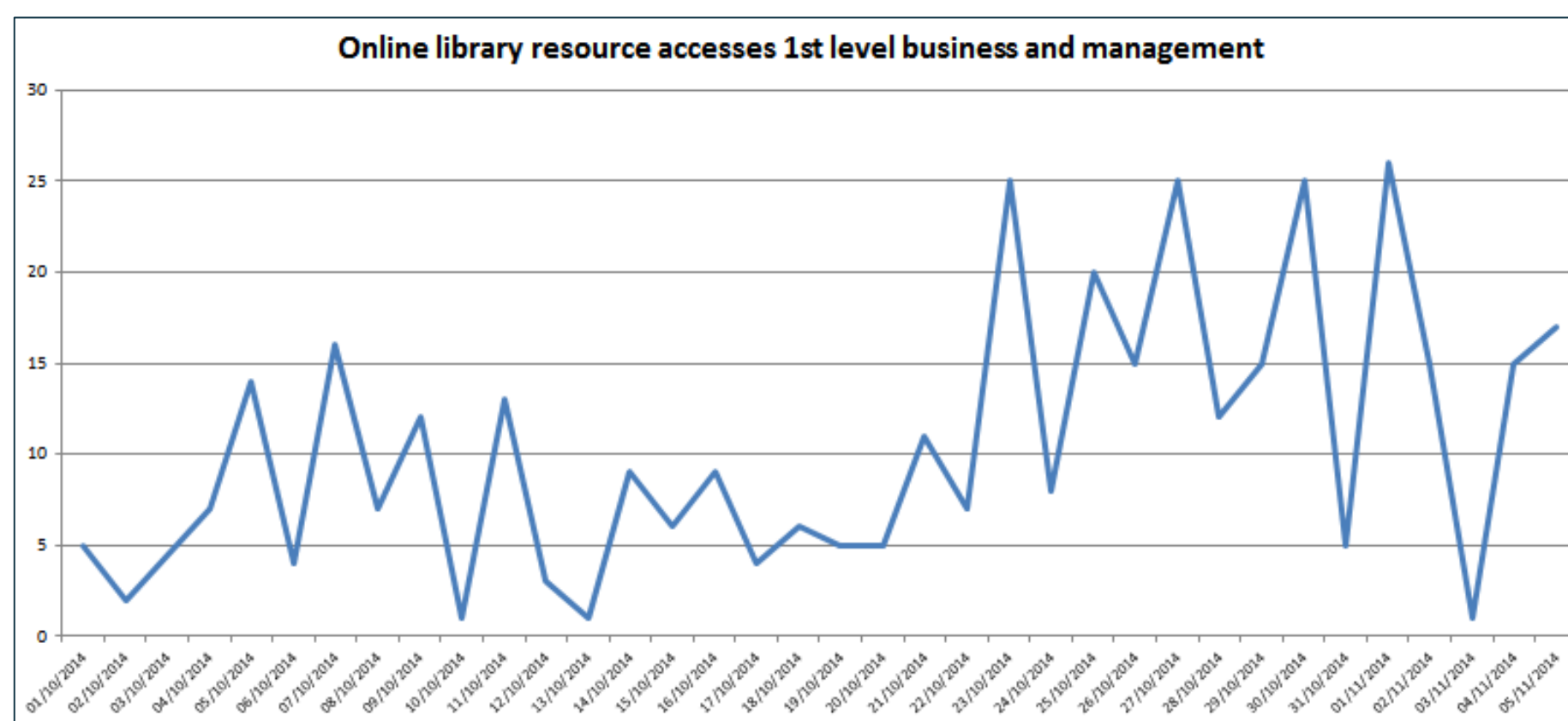
Libraries and the student experience

Libraries form a vital part of the student experience, whether as a physical space, a place to access resources or as an enabler of access to online resources. Supporting interactions between libraries and students are numerous library systems and technologies that have the capability to track student use. The potential of this extensive trail of data is being explored by some institutions including the Open University.

OU Library Services research areas

OU Library services for students are mainly online as all students study at a distance and don't visit the physical library. So there are no book loans, computer usage or visits. But there is extensive data on student access to online resources tracked through proxy servers and Athens systems.

Focus of the research is:
 A) to explore how library data relates to student demographic and achievement data to help to understand impact; and,
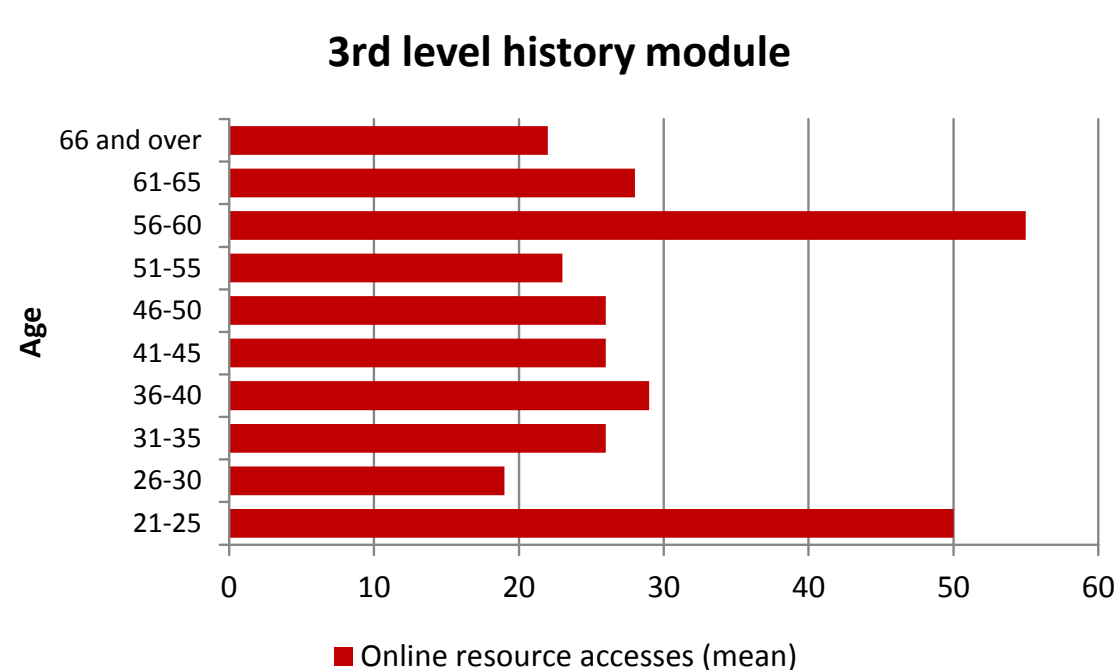 B) to make library data available to institutional learning analytics work

Online library resource accesses 1st level business and management

When does that assignment start? Are all my students doing the reading?, which ones aren't engaging?

3rd level history module

Age / Online resource accesses (mean)

3rd level history students use more online resources than 1st level health students – but why are there differences in use between age groups?

1st level health sciences module

Age / Online resource accesses (mean)

Working with experts in the OU's Institute of Educational Technology to match online library use against demographic and achievement data to investigate and working with Learning Analytics project team.

Student EZProxy log-file data on access to online resources made available to OU Analyse for institutional Learning Analytics work

OU Analyse

https://analyse.kmi.open.ac.uk/project_info

Streamlining library management of EZProxy log-files and combining with other data to improve usefulness

Are there differences in patterns between 'bricks-and-mortar' and distance learning library use?
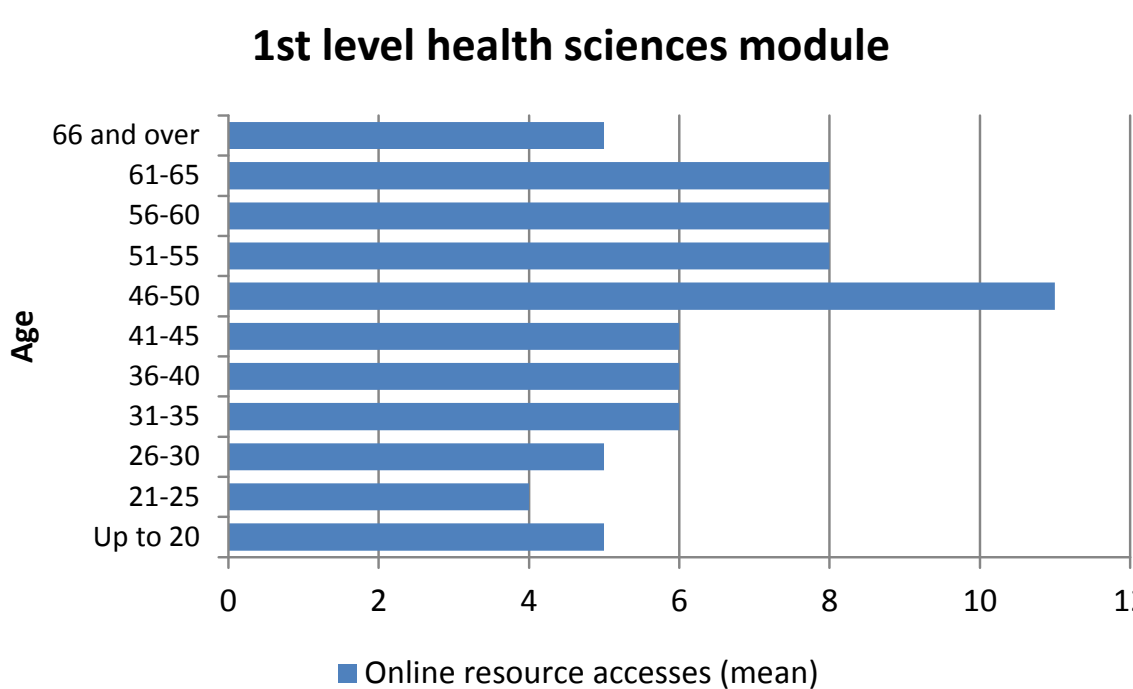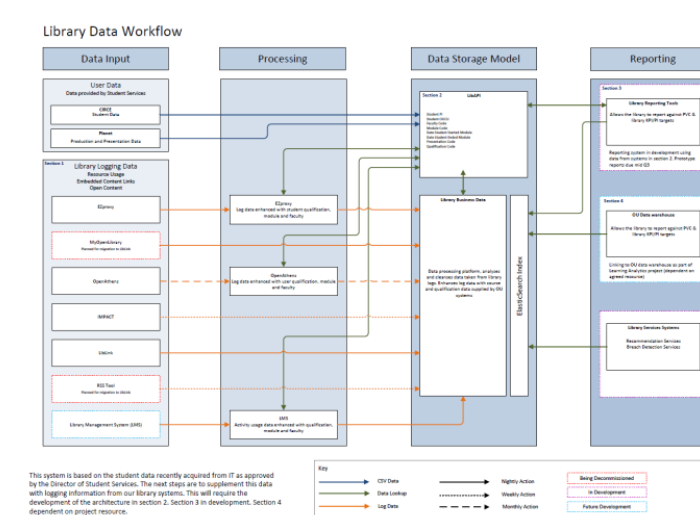
What does library use or non-use tell us about student chances of success?

Are library use patterns consistent with other indicators?

Is there a difference between online and physical library use as an indicator?

What can library data do for you?

Library activity and usage data
- Book loans, returns and renewals
- Access-control systems
- Computer booking systems
- Online resource usage
- Helpdesk enquiries and CRM
- Search and Discovery behaviour
- Website usage
- Reading list systems

What questions could you ask of library data?
- Are students engaging with the reading material set for them?
- If students haven't accessed the set text for their assignment is that an early indication that they won't submit the assignment on time?
- Are there some types of students (e.g. demographic categories) more likely to struggle to use the library? – do a large number of those category of students on Course G mean that you need to offer extra support?
- If students aren't using a particular resource should the library be actively flagging this with faculty and tutors?

Other work in the UK library sector

Pioneering work in projects such as the Library Impact Data Project at Huddersfield have shown clear correlations between library use/non-use and achievement. More recently the Jisc Library Analytics and Metrics Project has been exploring this space. Institutions are starting to see that library use data can be a useful element in their Learning Analytics portfolio. OU Library Services are continuing to explore this area.

Needham, Gill; Parker, Jo; Nurse, Richard; Scantlebury, Non and Dick, Sam (2013). Can an excellent distance learning library service support student retention and how can we find out? Open Learning, 28(2) pp. 135–140. http://dx.doi.org/10.1080/02680513.2013.847364

Library Analytics and Metrics project (jiscLAMP) aims to enable libraries to capitalise on the many types of data they capture in day-to-day activities, using this to support the improvement and development of new services and demonstrate value and impact in new ways across the institution.
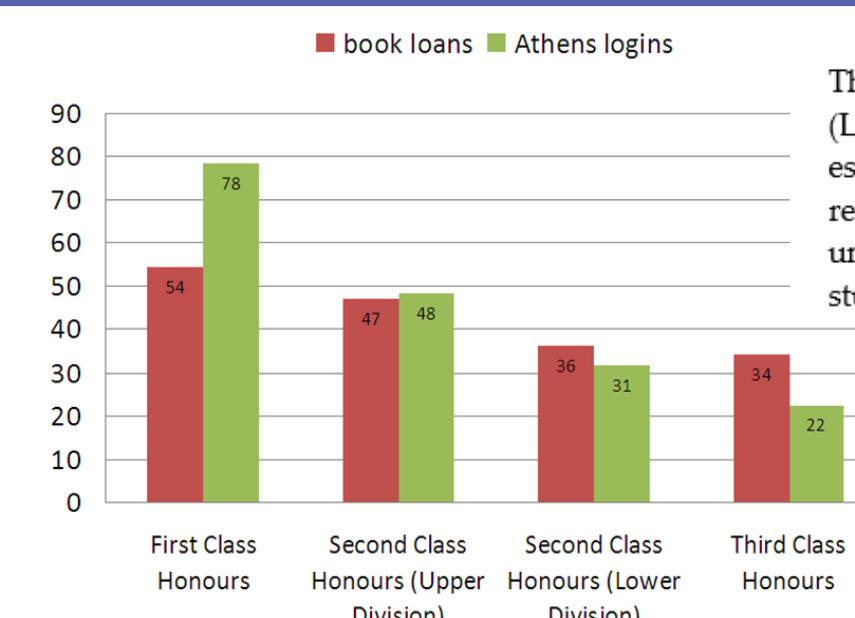
The project will be developing a prototype shared library analytics service for UK academic libraries. Initially this is being envisioned as a kind of data dashboard, bringing together disparate data sets and visualising them in an attractive and meaningful way.

LAMP

http://jisclamp.mimas.ac.uk

Is there a link between library use and student attainment?

Library Impact Data Project
book loans & Athens (2009/10)

First Class Honours / Second Class Honours (Upper Division) / Second Class Honours (Lower Division) / Third Class Honours

The first stage of the Library Impact Data Project (LIDP), based at the University of Huddersfield, established that a statistically significant relationship existed across a number of UK universities between library activity data and student attainment (Stone & Ramsden, 2013).

Stone, Graham (2011) *Looking for the link between library usage and student attainment.* In: CILIPS Annual Conference, 7 June 2011, University of Glasgow. (Unpublished)
http://eprints.hud.ac.uk/10655/