Communicating academic library impact through visualisation

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About Griffith University

Griffith at a glance

- Ranked in the top 3% of universities globally
- 50,000 students
- 5 campuses
- 200 degrees
- 200,000 alumni across 130 nationalities
- 38 research centres and institutes
- Rated 5 stars for graduate employability
- 4,000 staff
About us

- Debi Howarth Library Services Manager (Arts, Education & Law)
- Masami Yamaguchi (Librarian in Sciences)
Outline

- The importance of libraries
- Visualising impact of our work
- Case Study 1
- Case Study 2
- Case Study 3
- Discussion / Outcome
- Conclusion and what’s next
Introduction

The higher education environment changes have prompted academic libraries to demonstrate evidence of their value and impact to stakeholders.
Introduction

- Demonstrating our impact and values to student success and possibly retention
- Visualising data is an effective way to deliver important messages
Responding

- 2014-2015 - collected a variety of client feedback data
- Visualised - clients’ perception of library value
- Principles of visualising reflected in case studies
Impact and value of the academic library

- The *heart* of the university (Leupp, 1924)
- Contributes to student success & retention 
  (Brown & Malenfant, 2016; Oakleaf, 2010; Soria, Fransent, & Nackerud, 2013)
- Can be a transformational experience in the lives of its clients (Kuh & Gonyea, 2003)
- GU Library & Learning Services (LLS); awareness raising; influence decision making through collection of comprehensive and strong evidence
A picture paints a thousand words

- Numbers, and masses of qualitative text, “…have no way of speaking for themselves. We speak for them. We imbue them with meaning.” (Silver, 2012, p. 9)

- Visuals promote engagement with large data sets (Ware, 2004) and enhance ability to grapple with number complexity (Few, 2009)

- Can contribute to decision making only if data is skilfully selected and analysed
Choosing data to represent impact

- Effect and influence.....need to understand data choice & design principles (Brown & Malenfant, 2016; Dunlap & Lowenthal, in press)
- Process is complex
- Account for limitations e.g. causality (Azzam, Evergreen, Germuth, and Kistler, 2013)
Information visualisation

Why do we visualise?
- Engagement
- Comprehension
- Storytelling and Memorability
Information visualisation

Visualized information acts as a ‘hook’ drawing the viewers’ attention

Engagement

Visualised data engages viewers more effectively than numbers

Why do we visualise?

Comparisons will engage the individuals / a community in a more effective way

Lead to action, behavioural change


Information visualisation

Visualised data enhance memorability through connecting facts with stories

Visual stories are easy to remember and compelling

Why do we visualise?

Storytelling and Memorability

Strong engagement


Information visualisation

Why do we visualise?

“Help the viewer gain insight from the data”

Allow complex ideas to be communicated with “clarity, precision and efficiency”

Potential to contribute to good decision making

Comprehend large data sets in a short period of time


Methodology

- Assessing impact, clarifying client expectation, visualising information - influence service improvement
- Utilised exploratory research and case study
- Collection was via a short feedback survey; provided scope for the respondent to rate services, including workshop instruction (quantitative), and to write short response answers (qualitative)
- Thematic analysis applied to improvement processes (Braun & Clarke, 2006)
Case Study 1

“...The use of digital resources provided by the library shows a positive impact on student learning. There is a positive relationship between grade point average (GPA) and access to e-resources.”

Visuals

- Included posters, carry bags, postcards, coasters, and booklets
- Narrative structure - authentic student voice (quotations)
- Individualisation increases engagement when the data has meaning for the viewer (Hullman & Diakopoulos, 2011)
Case Study 2
Case Study 2

Presenting the engagement of LLS with students in Griffith Sciences included:

- Workshop and consultation attendance in Semester 1, 2014 and Semester 1, 2015.
- Participants’ information (affiliations, academic schools, LLS services and skill types accessed)
Case Study 3
Case Study 3

- PVC commissioned a series of visualised reports …*broken down by Academic Group/cohort*:

Included:

- Overall reach of LLS
- Reach involving digital learning objects and or digitally enabled approaches
- Impact data illustrating the correlation of LLS, normalised by entry score, to
  - GPA (success); and
  - Retention
Other examples of visualisations
Other examples of visualisations
Discussion Case Studies 1-3

- Large volumes of data visually represented
- Visualisation made information more palatable (Mayer, 2001)
- Varied representation reached sophisticated & casual audiences
- Visual messages influenced practice & prompted success in technology bid
- Case study 3 unexpected outcome of Case studies 1 & 2
- PVC (INS) “Awesome!”
Conclusion

- Visualised representations have been received positively.

- Visualisation works as an engagement and communication tool
  - LLS team members
  - Schools
  - PVC

- Next step for us is to examine the actual extent of audience engagement with visual representation