The ROI of Sustaining an Academic Library Makerspace

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CNI 2018 Spring
makerspace @ SDSU Library
Tactical Urbanism for Librarians – Karen Munro

- a reliance on ingenuity
- a preference for rapid deployment
- a willingness to experiment and revise in process
- a tolerance for error and perceived failure
- an ability to value intangible benefits such as new and improved relationships and proof of concept
- a willingness to start (and sometimes stay) small
Building Community
The Puzzle of Motivation – Dan Pink

• Autonomy, Mastery, Purpose create to intrinsic motivation
The Librarian’s Role

Makerspaces: a beneficial new service for academic libraries? - Robert Curry

• “...key question for academic library services is whether the makerspace itself is somewhere learning support from librarians can be ‘embedded’”
The Investment

• What is the library spending?
  • Funds
    • Student Staff = .75 FTE student worker
    • $8,000 per fiscal year for technology and materials
  • Time
    • .75 FTE librarians
  • Space
    • Overhead
    • Found furniture
Return of Investment in Library Land

- Literature review - ROI is hard to measure
- What does the library see as returned value?

\[
\text{SROI} = \frac{\text{Tangible + Intangible Value to the Community}}{\text{Total Resource Investment}}
\]
Tangible Value – Volunteer Hours

Student donate 3 hours/week to keep a library service desk open

Hours per Week

<table>
<thead>
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<th>Spring 2015</th>
<th>Fall 2015</th>
<th>Spring 2016</th>
<th>Fall 2016</th>
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Unique services that support the curriculum

28% of College of Engineering Design Day Spring 2017 projects

100 Astronomy 101 students used VR to learn Moon Phases
Space to try new technologies and services

Trainings

- Orientation: 390
- 3D Printing: 178
- Cutting Machine: 57
- CNC Machine: 51
- Sewing/Embroidery: 43

3D Printing Training

By Jenny Wong-Welch and Lindsay White
Some illustrations by Joey Casabia
Intangible Value - Recognition

buildIT Inspires Creative Thought

The SDSU Library provides new and innovative opportunities with its new 3D studio, buildIT.

By Kódia Dieno
Engagement with university community
Contribute to the Advancement of the San Diego Region

Maker Faire San Diego

STEM Camps & Field Trips
Supporting the library’s mission

• Library Service Pledge
  • Utilize innovative technology and strategies in our services

• Library Strategic Plan
  • Create a modern facility that leverages state-of-the-art space design, technology and innovation to meet the needs of our users.
  • Ensure that the library’s infrastructure (technology, tools, staff) supports 21st century teaching and learning needs.
Student Engagement
Sustainability – What works for us...

• Perpetual Beta
• Banana Principle

• Peer-to-Peer instruction

• Grassroots deployment
•Hands-on Engagement
Questions?

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• https://buildit.sdsu.edu/


Bibliography


