

WHAT HAPPENS AFTER YOU'VE SET UP AN ACADEMIC MAKERSPACE?

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REFERENCE & WEB SERVICES LIBRARIAN

LAWRENCE UNIVERSITY SEELEY G. MUDD LIBRARY, APPLETON, WI

OUTLINE

- Introduction/Background
- Our makerspace
- Projects from our makerspace
- Major challenges
- More lessons learned
- Questions & share your experiences

LAWRENCE UNIVERSITY AND THE SEELEY G. MUDD LIBRARY





**OUR
MAKERSPACE**

HOW WE GOT A MAKERSPACE IN JUST 4 EASY STEPS!

1. Organize faculty and staff
2. Research
3. Grant proposal
4. Identified and set up the space!

MAYBE NOT THAT EASY... INITIAL OBSTACLES

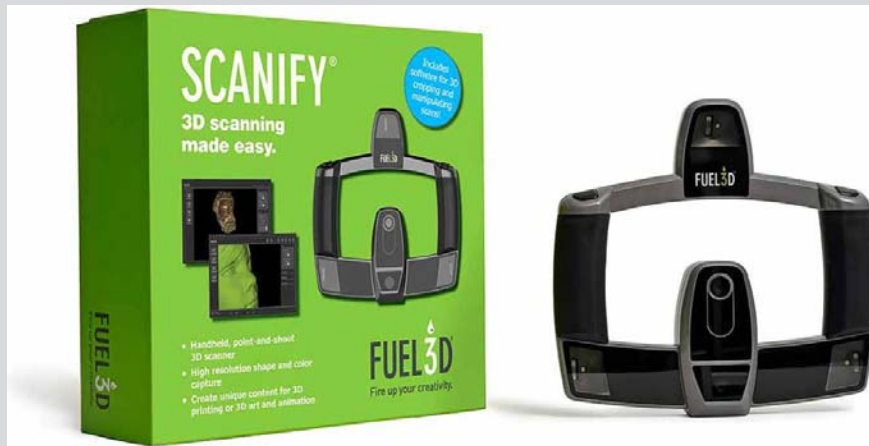
- Writing a grant proposal
- Setup of the space over summer
- Other duties
- Life
- Tech problems

**OUR
MAKERSPACE,
IN MORE
DETAIL**

3D PRINTERS



3D SCANNERS



SILHOUETTE CAMEO ELECTRONIC CUTTER



SEWING MACHINE



PAINING AND COLLAGE STATION



COLORING STATION



THE ACM GRANT

- Faculty career enhancement grant
- Faculty-focused space
- Award included money for equipment as well as a workshop and speakers

GRANT-RELATED EVENTS





**PROJECTS
FROM OUR
MAKERSPACE**

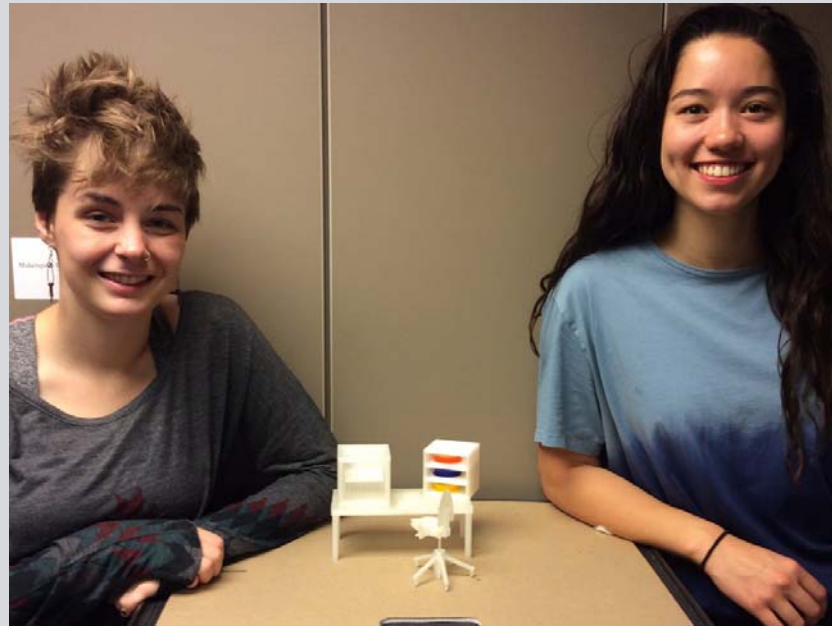
CHEMISTRY: INSTRUMENTAL ANALYSIS



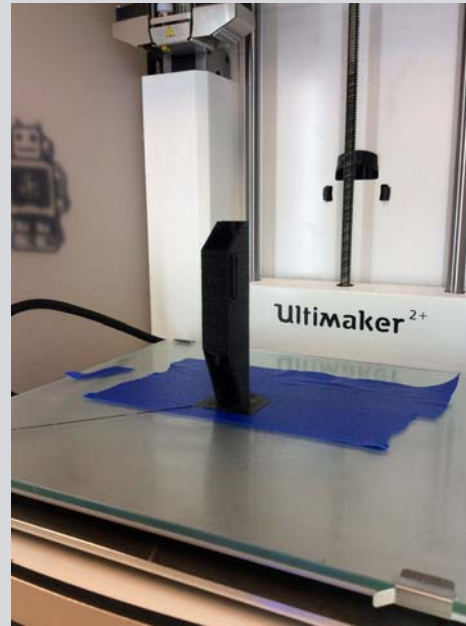
NEW MEDIA IN ART



TUTORIALS & INDEPENDENT STUDIES



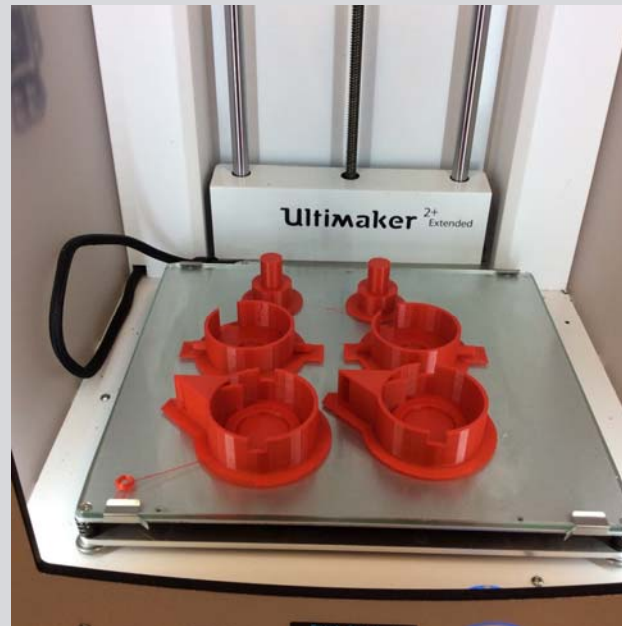
CELLO BOW GUIDE



COMPUTER SCIENCE: BRAIN WAVE HEADSET



INNOVATION & ENTREPRENEURSHIP: INNOVATION



<http://blogs.lawrence.edu/makerspace/assignments/>



CHALLENGES



**MAINTAINING
ENTHUSIASM**

FACULTY PARTICIPATION: MAINTAINING ENTHUSIASM

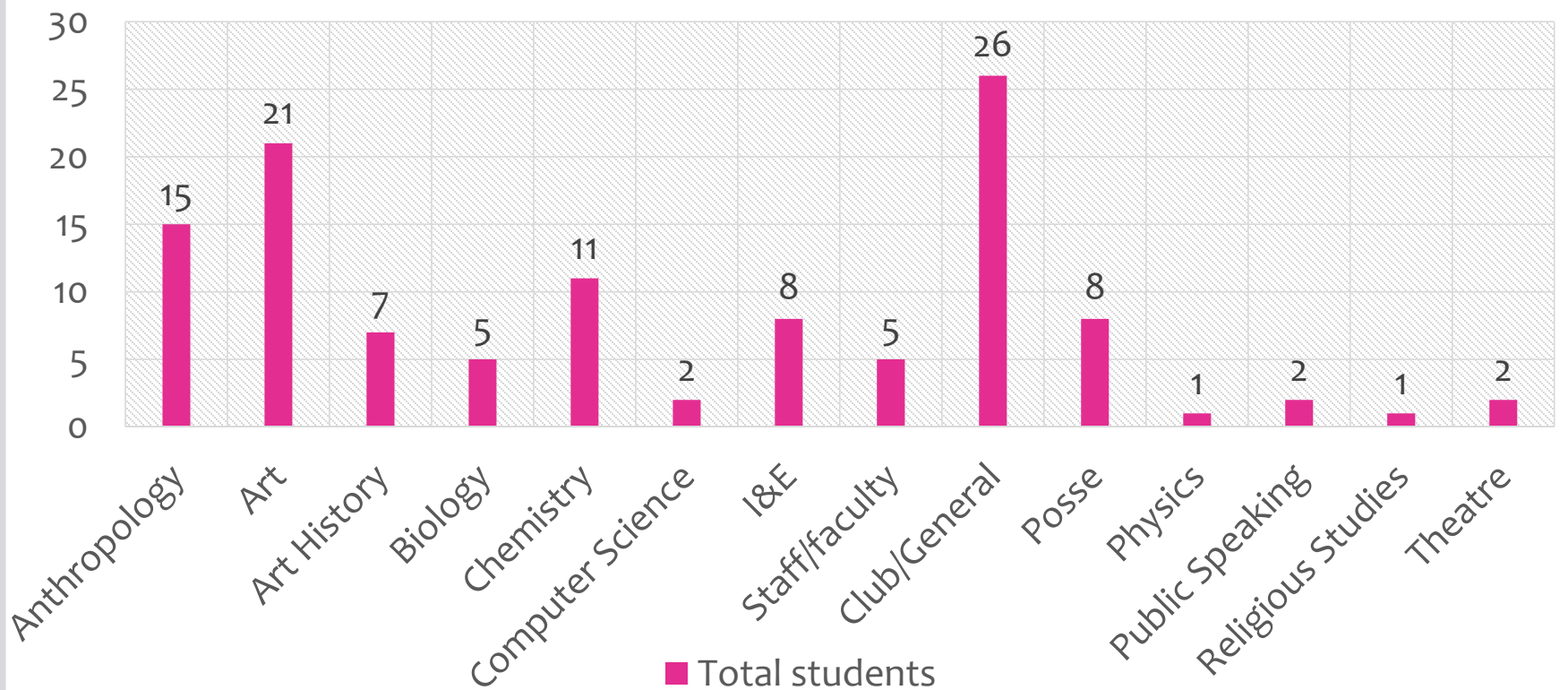
Department	Number of Classes Brought to the Makerspace
Anthropology	1
Art History	1
Chemistry	2
History	1
Innovation & Entrepreneurship	1
Studio Art	2

WHAT WE'VE DONE TO IMPROVE FACULTY PARTICIPATION

- Open houses
- Summer coffeehouses
- Discussion meetings
- Social media

TRAINED IN A CLASS OR INDIVIDUALLY

Breakdown by discipline of project as reported by students upon receiving access and training for the makerspace.



STEPS TO IMPROVE STUDENT & FACULTY PARTICIPATION

- Student-focused, not just faculty-focused
- Makerspace club
- Regular meetings
- Ask me about the Lawrence Makerspace!



**MAINTENANCE
& NEW STUFF**

EQUIPMENT MAINTENANCE, REPAIR, AND UPGRADES

- Warranty
- Customer support
- Upgrade when possible
- Part supplier
- Perform regularly scheduled maintenance
- Plan ahead

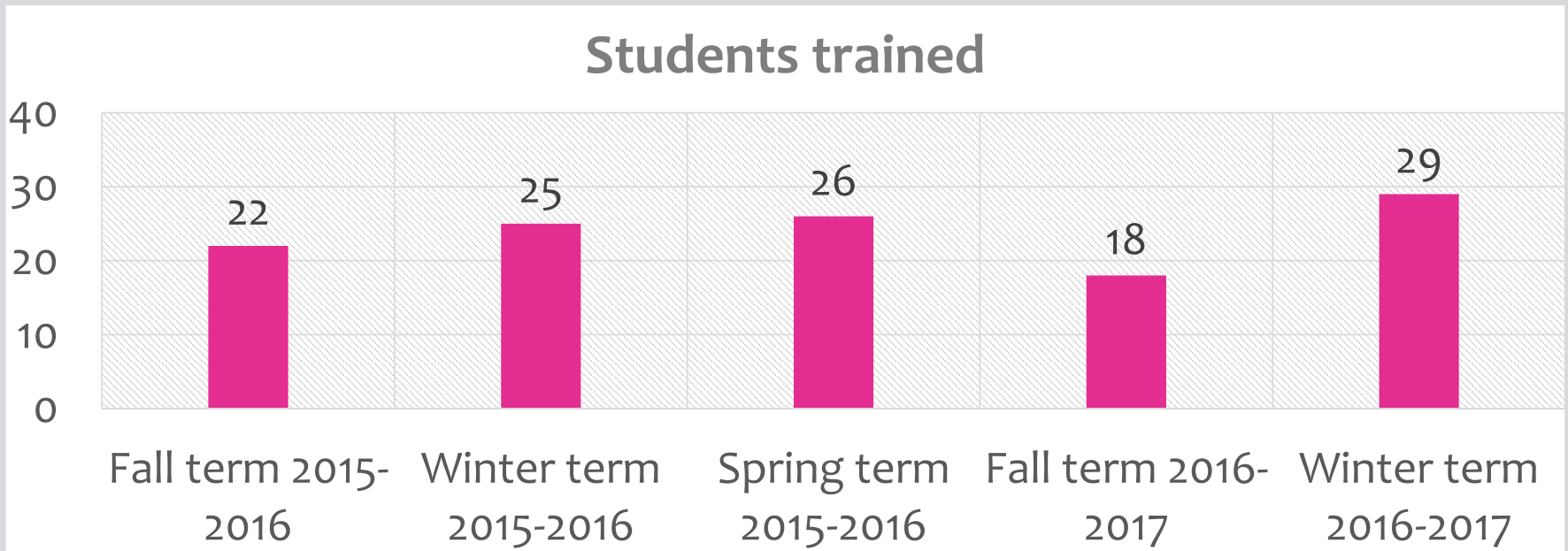
TRY TO MEET A DEMAND

- Laser cutter substitute
- Sewing machine
- Painting and collage table
- Simple creativity and making
- Still no laser cutter... Glowforge
- Initial makerspace demand



TRAINING

TRAINING



TRAINING CHALLENGES

- Time-consuming
- Documentation printed in advanced, and kept updated
- Work with the space
- Plan a training session all trainers will follow
- Schedule training sessions during set times
- Meet with classes- try to plan these over breaks when professors are creating syllabi



LESSONS WE'VE
LEARNED

MORE CHALLENGES (AND SOLUTIONS)

- Usage stats
- Roles established
- Space organization
- Usage stats
- Designate time to work in the makerspace
- Be flexible
- Documenting usage
- 3D design is hard
- Money!

IS IT WORTH IT?

Yes!

QUESTIONS & SHARE YOUR TIPS