Makerspaces in the Library and across the disciplines and the community

A Tale of the Central Coast
What is a Makerspace?

• The term “makerspace” is relatively new.

• The term makerspace (also which may be referred to as a Fab Lab or hackerspace) refers to a space where individuals can meet to learn new skills or hone one’s skills, utilize tools and technologies, and make some product.

• These spaces can be free to users (students and community members) or may require a usage fee.

• According to Make: magazine, these spaces began cropping up informally from 1997 to present, with 2005 as the first time the term “makerspace” was used in this regard, in Make: ("Is It a Hackerspace, Makerspace, TechShop, or FabLab?")
WHAT DOES a makerspace DO?

• The available literature generally focuses on makerspaces as spaces of potential and innovation, not easily tied down to a one-size-fits-all model.

• Some library makerspaces are more geared toward STEM, offering such cutting-edge technological tools as 3-D printers. The 3-D printer is a popular item for burgeoning library makerspaces. (Libraries that could afford them, anyway!)

• Other makerspaces may be more ‘low tech,’ and focus more on arts and crafts.
HOW DO THEY START?

• Makerspaces, as I observed early in my research, also appeared to operate via:
  • Grants (Seems to be the most popular method)
  • Donations
  • or Specially earmarked budgetary funding.
WHERE ARE THEY?

• Much of the attention has been on makerspace activities being pioneered in public libraries, though more academic libraries have been embracing makerspaces and their potential as laboratories of innovation and sparks for innovation.

• As academic library director John Burke points out, however, academic libraries are the perfect hubs for the innovation expected from makerspaces: “Given the interdisciplinary nature of most academic libraries, they remain open to the whole campus community... [and it] can be argued that they are the best place to have a makerspace on campus” (“Making Sense: Can Makerspaces Work in Academic Libraries?”).
HOW do I get started?

• Planning!
• FIND SUPPORTIVE COLLEAGUES!
• I had a highly supportive dean who encouraged me to attend Internet Librarian 2015, where I learned about real-life examples of makerspaces in action.
Our first crack at a makerspace at ahc: the MAKERSPACE/CAKERSPACE

- Our campus library became involved with makerspaces by starting simply.
- The “MakerSpace/CakerSpace” was the first official makerspace our library would host.
- We soon decided the best route would be to host a makerspace where participants would design their own cupcakes and in thus doing, come away with a delicious new skill.
- Members of the Friends of the AHC Library volunteered to bake cupcakes and bring them in, along with a multitude of decorating supplies.
LEVEL OF INSTRUCTION?

• Once the theme was selected, an important question arose: how much in-depth instruction did we want to provide for our makers?

• We reached out to several experts in this field, though unfortunately their schedules precluded their attendance.

• Ultimately, this worked out quite well, as it led us to a more hands-off approach to the makerspace and a more low-stakes approach, perhaps, for makers, a low-stress environment.

• People were encouraged to come when they pleased and to stay as long as they pleased (and as long as the event was going).
ADVERTISING

• We advertised through a flier we made (see next slide) and in an email to all staff.
• The fliers were also posted up through the library and around campus on bulletin boards and on some department and tutorial center boards (wherever departments were comfortable allowing us to post up the fliers).
• As the date of the makerspace came closer, students would come up to the Check-Out Desk and the Reference Desk and inquire about the upcoming makerspace and what a makerspace was.
• The email mentioned the makerspace as part of a larger celebration of Library Week.
ADVERTISING

• Email to all staff:

“National Library Week 2016 is here with the theme ‘Libraries Transform.’ Together with the American Library Association and the Friends of the Allan Hancock College Library, the AHC libraries will launch this campaign to raise awareness of the changing roles of libraries and the ways in which libraries are transforming to meet the digital and print information needs of our students.

“During the week of April 10-16, we invite you to celebrate the contributions of the AHC libraries and librarians to our campus. From free access to books and online resources for students, faculty, and staff to information literacy instruction, our libraries help every student to succeed at AHC. Check your mailbox for a “Because…” postcard (4 different ones!) highlighting the importance of our libraries. Posters with the same theme will be hung around campus. Starting on Monday, April 11th stop by the Santa Maria library to see our displays, find out the top ten frequently challenged books in 2015, and check out the new book shelves. On Tuesday, April 12th we will hold a CAKErspace event in the Santa Maria library lobby. Throughout the week students will be encouraged to tell us why the library is important to them and will get a chance to win a graphic novel.”
**MakerSpace/CakerSpace**

A Makerspace is a place where people (makers) meet to be creative, fashion new things, and pick up new skills. On April 12, the Library staff invites you to be a maker at a makerspace (or CAKErspace!).

**What:** A makerspace dedicated to designing your very own cupcake.

**Where:** The AHC Library lobby

**When:** Tuesday, April 12, from 11 a.m. to 1 p.m.

**Cost:** Free! All materials will be provided, including cupcakes and frosting.

Go ahead and play with your food! Come to the library and indulge your creative side by designing a cupcake!
Scheduling

• When and where?
• We began by treating this as a typical event (this would change later)
• Scheduled on Tuesday, April 12, from 11 am to 1 pm
• Tuesdays were identified as fairly busy days on campus with more chances for student interaction
• Took place in the Library Lobby (a location we could control)
• No sign-ups necessary
• No cost to participate
Setting up/SUPPLIES

• Three large tables were ordered and delivered by the college custodial staff (and were also scheduled to be picked up post-event).

• To keep to a small budget, we estimated the cupcake decorating supplies would not exceed $60, and the Friends of the Library generously agreed to fund reimbursement costs up to that amount.

• This budget was an estimate, as we had never held a makerspace before and estimated that basic cupcake decorating supplies should run relatively inexpensive, if purchased in bulk.

• Friends of the Library members would bake five to six dozen cupcakes (60-72 in total). This would thus limit the total number of makerspace participants to a manageable number.
Cupcakes of various flavors were set out on trays (vanilla, chocolate, strawberry, and carrot cake), alongside many decorating options.

These edible options included:
- various flavors of frosting,
- food dye (to give each maker the opportunity to craft a truly unique cupcake),
- sprinkles,
- colored sugar, and
- edible accoutrements such as candy moustaches and candy glasses (for the inner hipster)
THE CAKERSPACE BEGINS

• The CakerSpace was scheduled to begin at 11 a.m.; however, the makerspace area was set up by 10:30 a.m., and students were already lining up and ready to begin early!

• This would serve as an important lesson for us. In future makerspaces at the library, the makers were under no obligation to arrive at the beginning of the event, and they were welcome to stay at the makerspace as long as the makerspace was active.

• This led us to alter future makerspaces from two-hour planned events to all-day long events, running from the late morning (approximately 10 a.m.) to closing time (approximately 9 p.m.). This would also help us to provide opportunities for both our daytime students and our evening students to participate in future makerspaces.
CAKING
CAKERY
LESSONS LEARNED EARLY

• This makerspace would help set another important guideline for future makerspaces at the library:

• Though the staff left samples to provide maker inspiration, there was no one person leading the event, and all supplies were set out on the tables for makers to use at their leisure.

• We provided all the tools for the makers (in this case, the cupcakes, cutlery for frosting application and food dye mixing, and other edible decorations) and a space in which to be creative.

• These simple, low-stakes elements helped to make this makerspace (and future makerspaces) successful.
LESSONS LEARNED

• Makers wanted to start as early as possible, and stay as late as possible, too. This realization led us to dramatically change the scheduled hours of future makerspace events to be inclusive not only for our daytime students but also for our nighttime students.
Lessons learned

- Advertising makes a difference. Student representatives and staff advisors of the student government attended the makerspace event to support the library and because they were curious.
Lessons learned

• Makerspaces do not need to be high-tech. Our event was very low-tech, and that lack of complexity likely made many first-time makers more willing to jump in and participate.
Lessons learned

• *Students appreciate a stress-relief activity and a staff hands-off approach.* Quite a few of our makers expressed gratitude for the makerspace as a stress-relief activity and a pleasant break from schoolwork. They also liked the autonomy provided to them and thrived independently.
Lessons learned

• There does not need to be a designated formal makerspace instructor. As long as materials, suggestions and samples are provided, makers will find their way.
Lessons and takeaways

• Students appreciate this surprising and perhaps unusual space to be creative
• They reallllly appreciate that it is free
• They enjoy creating
Lessons and takeaways

• People want to help! For our library makerspace activities past and upcoming, staff and faculty from some of the following areas have been great partners: staff and faculty from the STEM Center, the Physics Department, Industrial Technology, Fine Arts, and more.
Some Makerspaces over the last 2 years

- We have expanded beyond library-only makerspaces.
- These have included collaborative holiday events with our off-campus partners as well as on-campus makerspaces open to all, such as the Harvest Festival Makerspace on October 12, 2018 (which drew at least 100 participants).
MakerSpace/LoveMakerSpace

A makerspace is a place where people (makers) meet to be creative, fashion new things, and pick up new skills. On Tuesday, February 14, the Library staff invites you to be a maker at a Valentine makerspace, aka LoveMakerSpace!

What kind of Valentine will you make?

What: A makerspace dedicated to designing your very own Valentines
Where: The AHC Santa Maria Library lobby
When: Tuesday, February 14, from 11 a.m. to 8 p.m.
Cost: Free! All materials will be provided
An Example

(allbeit a bad one) - Staff

I... you... this... dinky...

Hey, guy... The extinct... but you're

con iets...
Makerspace: Edible Science

Liquid Nitrogen Ice Cream

March 30th, 2017
12:00-1:00 p.m.

Location: Library Patio

Free Ice Cream!!

Edible molecule-building will also take place in the Library lobby between 11 a.m. and 8 p.m.
Verdict? The ice cream was pretty good! There's no danger of it putting Coldstone's out of business, but you get the point.
December 9, 2017
10 a.m. - 3 p.m.

Make your own greeting cards, ornaments, cookies, gifts, and other holiday treasures!

Santa Maria Public Library
421 S. McClelland Street
Santa Maria Valley Discovery Museum
705 S. McClelland Street

Make your own holiday treasures!

MAKER SPACE

Invite the mobile makerspace to your school!

Makers: bring your ideas to life using our state-of-the-art mobile Makerspace. Allan Hancock College will bring tools, supplies, and mentoring to your school so you may make the perfect gift.

Contact: rma@hancockcollege.edu or call 805-922-6966 ext. 3487

Funding will be provided by Innovation Maker 3 (CCC Maker) grant #16-203-001, awarded by the California Community College Chancellor’s Office, Workforce and Economic Development Division, to the Sierra Joint Community College District.
Fun Maker events continue!

• Maker events this past year have ranged from weekly evening hours in the CAD lab to Culinary Arts makerspaces (make your own cake and brunch), Ceramics makerspaces (make your own ceramic bowls), Electronics makerspaces, and the continued tradition of the Liquid Nitrogen Ice Cream Makerspace, which saw 187 sign-ins, with an estimate of closer to 300 attendees!
Looking for expansion

• For us, it started in the library. Then we looked beyond the library’s pop-up makerspaces, and we looked at outside partnerships.

• Our dean recommended another fan of makerspaces, a professor in the Industrial Technology (IT) Department and CTE (Career and Technical Education) liaison. (Note: we’ll come back to this at the end – cast a wide net for partners!)

• We teamed up with IT to apply for the California Community Colleges CCC Maker grant in late fall of 2015.

• This was the first time in the college’s modern history that the Library and Industrial Technology teamed up to apply for an interdisciplinary grant.
Sometimes you fall – and that’s OK!

- We did not get the first planning grant we applied to in fall of 2015. The Friends of the AHC Library continued encouraging and supporting the library’s pop-up makerspaces, though!

- But Industrial Technology and the Library began working closely together to find upcoming maker events and we set a new goal: be more prepared for the December 2016 CCC maker grant application.

- We teamed up again in December of 2016 to apply for the California Community Colleges CCC Maker grant (preliminary grant) again.

- This time, we got it! The preliminary planning grant was for $40,000.
A Perfect Confluence

- Right as the library was beginning to offer informal makerspaces to the campus and community, the California Community College Chancellor’s Office was cooking up some makerspace plans itself.

- In 2016, the “California Community College Chancellor’s Office, Workforce and Economic Division funded the $17 million CCC Maker Initiative for three years under the Doing What Matters for Jobs and the Economy framework. We believe that creating a college maker culture will enable students to explore, create and connect in new creative ways and this will more effectively prepare them for meaningful careers.”

  (https://cccmaker.com/about/ccc-maker-initiative/)
CCC Maker Initiative

• This initiative identified a problem: “California’s education pipeline is not keeping pace with the skills and education required by employers, entrepreneurship among young adults has declined, and instructional delivery methods of the past are being replaced by more accessible, inexpensive and plentiful sources”

• And identified makerspaces as a valuable part of the solution: “With 2.1 million students, California Community Colleges represent the largest and most diverse education system in the United States. With a goal of closing California’s middle-skills gap, a successful model could positively impact many students, preparing them with 21st Century Skills, growing STEM/STEAM fields, fueling job creation and strengthening regional economies.” (https://cccmaker.com/about/ccc-maker-initiative/)
CCC Maker Goals

• The mission of the CCC Maker Initiative is to “build a community of college makerspaces that welcome non-traditional students, support faculty in embedding making into instruction and offering adaptive curriculum, and partner with businesses to produce innovation-ready graduates inspired to contribute to the creative economy.”
Among other things, this initiative also seeks to

• Nurture and build a maker culture in the CCC system, and encourage and support innovation, making and entrepreneurship in the classroom;

• Build a community of practice that welcomes non-traditional students; encourages building community within each college’s regional ecosystem; supports faculty in embedding making into instruction; and partners with business to produce innovation-ready graduates
CCC Maker Initiative Cont.

• Creates relevant career pathways “and stackable credentials, promotes student success and gets Californians into open jobs”

• “Shares best practices in infusing making, innovation and entrepreneurship into students’ college experiences to prepare them for STEM/STEAM careers”
Yes!

• We wholeheartedly agreed: schools and students needed a chance to remember the power of making, of building, of creating, and recognizing the incredible opportunities and advantages for those who had the opportunity to work on extra creative problem-solving in a makerspace or maker-friendly classroom.

• With this in mind, we continued to research and to offer pop-up makerspaces at the library as well as confer with partners and work to plan makerspace events together.
Learning and Refining

- Once we received the seed grant, we knew we would be operating on a whole new level.
- There was a steep (though fun) learning curve as we strove to refine our bigger-picture understanding of the idea of the makerspace, what a makerspace could be, and what makerspaces looked like in action.
Learning and Traveling

- Part of this research involved a March 2016 trip to Edwardsville, Illinois (closest airport: St. Louis, MO) to attend the US FLN (Fab Lab Network) Symposium, hosted by Lewis and Clark Community College’s St. Louis Confluence Fab Lab.
Learning

- We learned a lot, saw many very neat tools and came away wanting a whole lot of the neat toys, er, learning equipment. This included stepping inside a mobile makerspace (something our group would later also adopt), virtual reality welding machines, CNC routers (I definitely designed a wooden sign that says “Platform 9 ¾”), and much more.
Tools
Learning

• … Also, it SNOWED
Partners

• Attending the USFLN was a great way to begin networking within makerspace communities and get a sense of what other makerspace-embracing communities and schools are up to.

• Now it was time to take that knowledge and bring it back home and work to cultivate our own maker community movement.
Locating Partners and Community of Practice

• As mentioned before, one of the key elements of the CCC Maker grant was establishing a community of practice (CAP) or a coalition of willing partners who wanted to work together to bring a makerspace to the college and community.

• Our IT partner (and later, project director of the grant) Bob, reached out to representatives of the local public library (Santa Maria Public Library or SMPL) and the local discovery museum (Santa Maria Valley Discovery Museum, or SMVDM).

• They decided to come on board as partners and locations to place the student interns, as well as become recipients of seed funding.
Looking for expansion

• The AHC Library and its partners at the Santa Maria Public Library and Santa Maria Valley Discovery Museum next began utilizing the aforementioned lessons while working on an application for the large grant (for the CCC Maker grant), at a value of up to $350,000.

• We worked closely with the college’s Grants office and the wonderful grants staff to craft thoughtful and meaningful responses on the grant application.

• (In general, grants for makerspaces tend to focus at the connection between the creativity fostered in makerspaces and the skill sets employers are looking for, the problem-solving skills and hands-on experience needed for real-world work)
Submitting a grant app

- Part of the formal process of applying to the CCC Maker grant included finding local partners in K-12, the community at large, local industry, students/staff/faculty constituents at our school, and more. We had already identified partners in the SMPL and SMVDM, so it was time to plan a large-scale maker event to fully introduce the concept of the makerspace to the college and community at large.

- The capstone project for this included our innovative idea to host a “Maker Weekend” throughout our community in early May.
At the Maker Weekend...

• Over the course of two days in early May of 2017 (Friday through Saturday), we had makerspace activities.

• On Friday in the college’s Industrial Technology building (with jewelry making, laser engraving, antique typewriters, an electronics tear-apart station, building tin can robots, string and hammer sewing, museum, button-making, and more)

• On Saturday, we had concurrent makerspaces at the SMPL and SMVDM, with the following activities: jewelry making, crochet, electronics tear-apart stations, antique typewriters, button-making, laser engraving, and more.)
The process also included attending and presenting at a large meeting of all CCCs applying for the grant, at Skyline College in San Mateo in May 2017. Afterwards, we attended and tabled at the annual Maker Faire.

We presented the following 3-slide presentation there – within no more than 3 MINUTES!
AHC Makers!

School name: Allan Hancock College
Location: Santa Maria, CA
Team members: Bob Mabry, Trevor Passage, Susie Kopecky, AHC faculty volunteers, Mary Housel and the staff of the Santa Maria Public Library, Chris Slaughter and the staff of the Santa Maria Valley Discovery Museum, and our many wonderful community partners, students, and volunteers.
We are excited about the huge turnout of the Maker Weekend, and we are excited to expand ‘making’ and creative opportunities for all residents of Santa Maria and the Central Coast. These opportunities will include possibility-laden partnerships with the local public library and local museum, free admission to special events at our partnering institutions, weekend hours at the AHC machine shop, a mobile makerspace, many internships with local industry, and much more!
If funded, we dream about: offering free admission to special ‘maker weekends’ at our partner institutions; offering courses linked to a maker lab, thereby encouraging creativity and problem-solving skills for students; utilizing a mobile makerspace to bring maker activities and opportunities to schools and communities across the Central Coast; supporting deep and meaningful partnerships with industry via funded student internships. Thank you, CCC Maker!!
Some of us were too excited NOT to show off our school and maker pride.
Then Came more great news

For the CCC Maker grant, schools submitted detailed plans for how they would implement a makerspace, along with a comprehensive plan and meticulously researched budget. The maximum possible amount awarded was $350,000.

And the school received... (drumroll please)
Really Great News

• **We received... $350,000!!!** (Max possible allotment!) WIN!

• We have been extremely excited to see where this project has taken us and will continue to take us

• In the 2017-2018 academic year, our project lead and assistant (Bob and Belinda) worked hard to sign up students for (paid) internships.

• We also helped to start an AHC Maker Club (librarian Trevor Passage is a faculty advisor) and continued to help plan maker events, both on campus and via the mobile maker van.
Central Coast Makerspace

• Since there is no one central location of our makerspace, in 2017-2018, members of the makerspace group sought out a way to describe and brand the confederation of makerspace spots that constituted our makerspace.

• Thus did we become the Central Coast Makerspace: A Northern Santa Barbara County Collaboration.
Community and faculty buy-in

• From the start, there were clearly identified partners on campus (some faculty, students, and staff) as well as off campus (the public library and the Discovery Museum).

• There was some interest by faculty in being involved with the makerspace. Now there are dedicated faculty who participate regularly with the collaborative makerspace, including directing monthly rotating makerspaces in the Ceramics Studio, Culinary Arts Lab, Library, CAD Lab, Electronics lab, and less regularly, with other campus entities such as the Winery, Welding, and more.
Staff and Admin Buy-In

- An issue our project director focused on was an apparent lack of long-term plans or clear buy-in from administration regarding the future of the makerspace.
- He invited key Maker Initiative TAPs (technical service providers) to visit the collaborative makerspace, and also invited our college president, who accepted.
- We were extremely excited that recently, the President wrote an article in a local newspaper about the power and potential of makerspaces, specifically here!
- The question of long-term space and support is ongoing
Sharing Successes

• It also didn’t hurt that the makerspace project lead was asked to write a paper on the experience thus far.
• This paper was then accepted and presented at the Summer 2018 ISAM (International Symposium on Academic Makerspaces) at Stanford University.
• Also over the summer, representatives from the makerspace collaborative from SMVDM and AHC presented on the makerspace at the MIRA conference (Makerspaces for Innovation and Research in Academics).
Getting the word out and continuous planning

• Even though the CCC grant does not last forever, our planning has no expiration date.
• Each week, Trevor and I meet with Bob (project director) in the library and discuss opportunities, challenges, significant budget updates, upcoming makerspaces for the week and month, goals, and ideas.
• We just found out this week that ITS and Public Affairs staff approved our request to have a specific makerspace page on our college’s website – YAY!
• Word is also shared via regular blog updates on the CCC Maker blog, https://cccmaker.com/space/allan-hancock-college/posts/
### Monthly maker calendar

- Each month, the makerspace grant project director sends out a calendar of makerspace events, locations, and times.
- He often follows up with all-staff emails.
- We also send individual event emails to welcome all.

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Outreach, or SLOWLY IT STICKS

• At first, many people were confused when we told them about our grand hopes for a makerspace – they weren’t sure what a “makerspace” was or why it should matter to them.

• In outreach efforts, it is very important to explain the concept of a makerspace in broad terms, i.e. “a place to learn something new,” “a place to be creative,” “a place to pick up or practice skills” etc.

• Meet people where they are in their understanding of it (e.g. one person asked “Oh, is it like arts and crafts?” and I said YES! ... and then expounded on it further.)
Making it real

• Anecdotally, we have noticed more students and visitors feel at ease with just jumping into the makerspace activities.

• Twice a month (on the first and third Wednesday), our college library hosts a pop-up makerspace. This runs at least 1-4 pm (when expensive or labor-intensive tools/machines are being used such as laser engravers or CriCut machines and student workers or staff need to be present) or 1-10 pm (library closing time) when it is a more low-tech makerspace (e.g. make your own bookmark)
Seeing an impact

- The makerspace, as envisioned through the CCC Maker Grant, should serve as an excellent center of informal learning as well as learn-by-doing techniques.

- This grant provides for paid student interns to work in the makerspaces and truly make an impact on the community. We see the numbers of people signing in and using the makerspaces, so the interest is palpable and clear.

- Anecdotally, we also see the social and emotional impact the makerspace has had. Unsolicited, people will come up to the staff and express their gratitude for the makerspace, with one person describing it as akin to “mental yoga,” and a way to take a break from stress and studies and just reset and recenter.
Impact cont.

• Student employment: a number of students who started as makerspace interns have since become gainfully employed by employers who were impressed by what they saw of the intern’s involvement with the makerspace.

• Future career training: some of the student interns see their time as excellent preparation for future careers, such as the Sociology major who enjoys working with all ages, in preparation for his career as an elementary teacher.

• One maker intern also used her experience as an intern to develop engagement ideas for biology and nature makerspaces (related to her major)
Challenges

Of course, certain challenges remain that we are working to solve. They include:

• Still not having one centralized, dedicated makerspace or administrative guarantee of institutionalizing such a project.

• Continued funding: once the fiscal year ends, so does the funding for the makerspace. Currently we are attempting to find the best and most sustainable solution, but it is not yet fixed.

• The onboarding process for the student interns (the finance system just changed and that has caused a slowdown in the process)
Challenges (cont.)

• Sustained partnerships: It is unclear how our current tripartite partnerships will hold up (AHC, public library, Discovery Museum). Currently, the college is the funding source for supplies, hours, staffing and interns for our two partners. Once the grant ends, they are not sure how they would like to remain associated with the makerspace. If they choose to go independent, they do not have funding sources secured.

• Placement and financial support of student interns: without the maker grant, an alternate avenue for employing and paying the student interns will need to be determined.
Idea going forward

- Our project director is looking into additional grants to help sustain the makerspace long-term.
- Writing curriculum for permanent makerspace classes.
- Partnering with instructional faculty to adopt maker activities in coursework.
- Community partners are being sought and invited to take an active role in sustaining the makerspace for the community.
- Tentative planning for some form of late-night make-a-thon or maker activity during the popular “Study-a-Thon” on campus (around finals in mid/late-May) – hopefully this will generate interest and buzz in the community.
- Plans to offer Professional Development sessions on the educational value of making and theories behind makerspaces as examples of experiential learning (theory-centered, Paget).
Big Idea Takeaways

• After each experience in our maker journey thus far, we have learned helpful lessons. Some of the best include:

• Share your interests with lots of people and then find partners and be willing to look in new places: had our dean not been aware that a professor of machining (in IT) was also into makerspaces, we may not have met a close friend and makerspace collaborator.

• Be willing to be flexible: all members of our core maker team tended to be flexible and open to constantly evolving ideas. If we hadn’t been so flexible, would we have been able to foster and encourage very non-linear thinking?
Big idea takeaways cont.

- Be patient – people may need time to digest a makerspace and its value
- Expect to be surprised by people’s positive reactions. They may not react this way for some time, but be prepared!
- Stay excited!
So You’re Saying It can be done?

• Yes!

• A makerspace can be as simple as an arts and crafts table or as complex as your budget and staffing allows

• Many people are excited for the potential of makerspaces, whether as academic inspiration tool, mechanism for getting various people together, a way to support interdisciplinary ventures, avenues for introducing students to new career paths, encouraging academic-industry partnerships, and much more.

• You’ve got this!
Now it’s your turn!

• Ready to be makers?
• Of course you are!
• Feel free to contact me with questions: Susannah.Kopecky@hancockcollege.edu