MAKERSPACE 101: Building, Sustaining, and Growing a Community Makerspace

Grant Goldstein, Prototype Lab Coordinator

Pam Petersen, Director of S.T.E.M. Community and Program Engagement

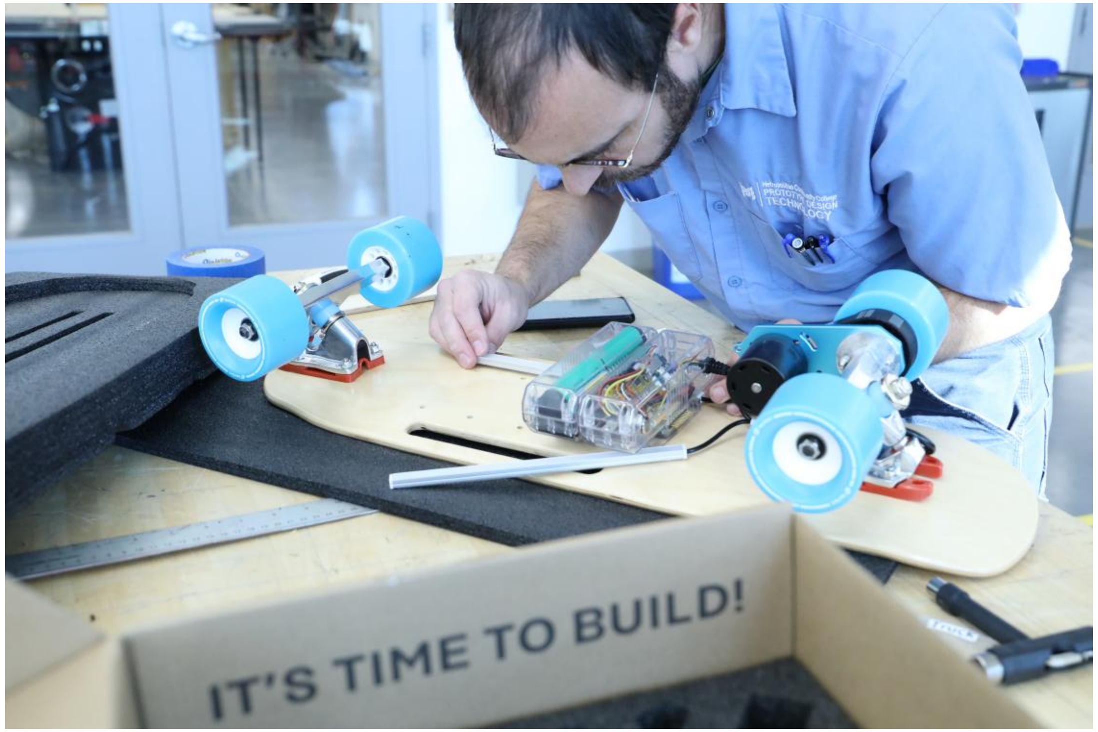
METROPOLITAN
Community College

Agenda

- Welcome & Introductions
- Why Makerspaces Matter
- Safety First
- General Operations
- Empowering Students & Members
- Programming & Innovation
- Workforce & Industry Partners
- Sustainability & Growth
- Discussion & Q&A

Metropolitan Community College

Why Makerspaces Matter



Community Colleges Fill Skills Gaps

Design, Test and Prototype solutions

Prototype labs foster regional innovation and entrepreneurship.

Safety First: Foundations

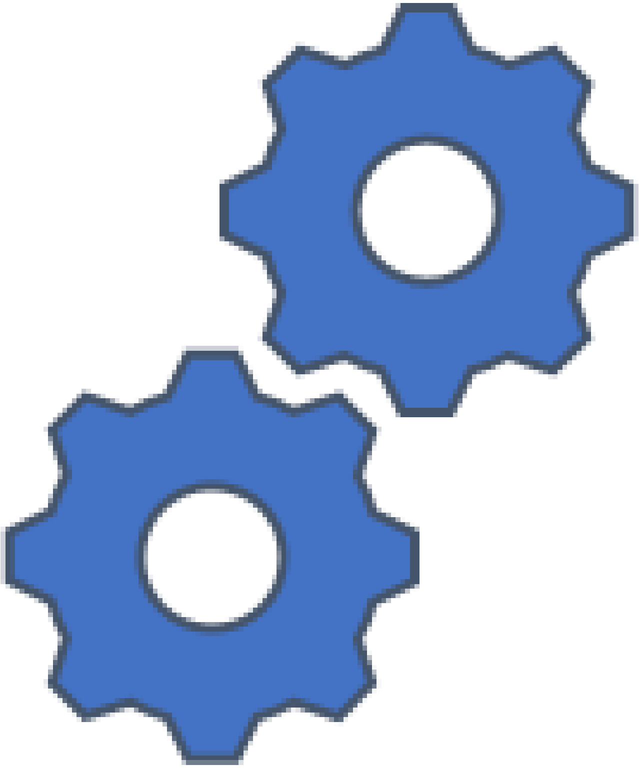
- Comprehensive training for ALL users!
- Mandatory PPE by work zone
- Maintenance schedule and tool calibration logs
- Clear signage, labeling, and visual warnings
- Risk management plans and emergency procedures

Active vigilance – everyone is responsible!

Safety First: Professional Readiness

- Safety equals professionalism – mirrors real-world industry expectations
- Builds habits valued by employers in manufacturing and design sectors.
- Safety certifications and check-offs can serve as résumé credentials for employees
- Embeds responsibility and teamwork into every project

General Operations



- Access management: student, faculty, and community user tiers
- Training: onboarding, safety sign-offs, advanced certifications
- Maintenance: inventory tracking, consumables budgeting, repair logs
- Staffing: coordinator, technician, student mentors
- Communication: digital signage, scheduling software, safety briefings
- Record-keeping: usage data, equipment hours, incident reports

Empowering Students & Members

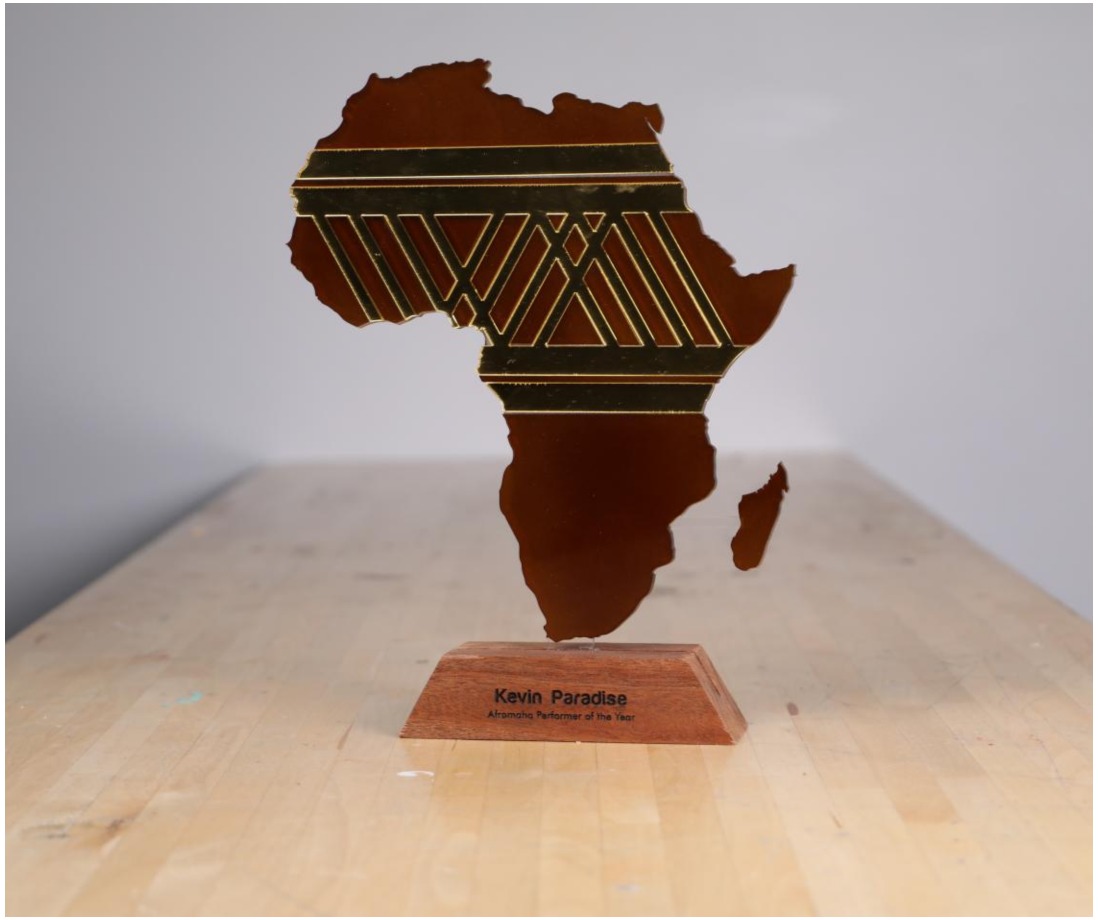
Member Pathway: Orientation → Foundation Classes (Machine specific) → Lab Fundamentals Classes

Community & Inclusion: Open hours for all skill levels; targeted outreach for women and underrepresented groups

Skill Development: Communication, design thinking — skills that translate directly to the workforce

“Cool Stuff Happens Here”

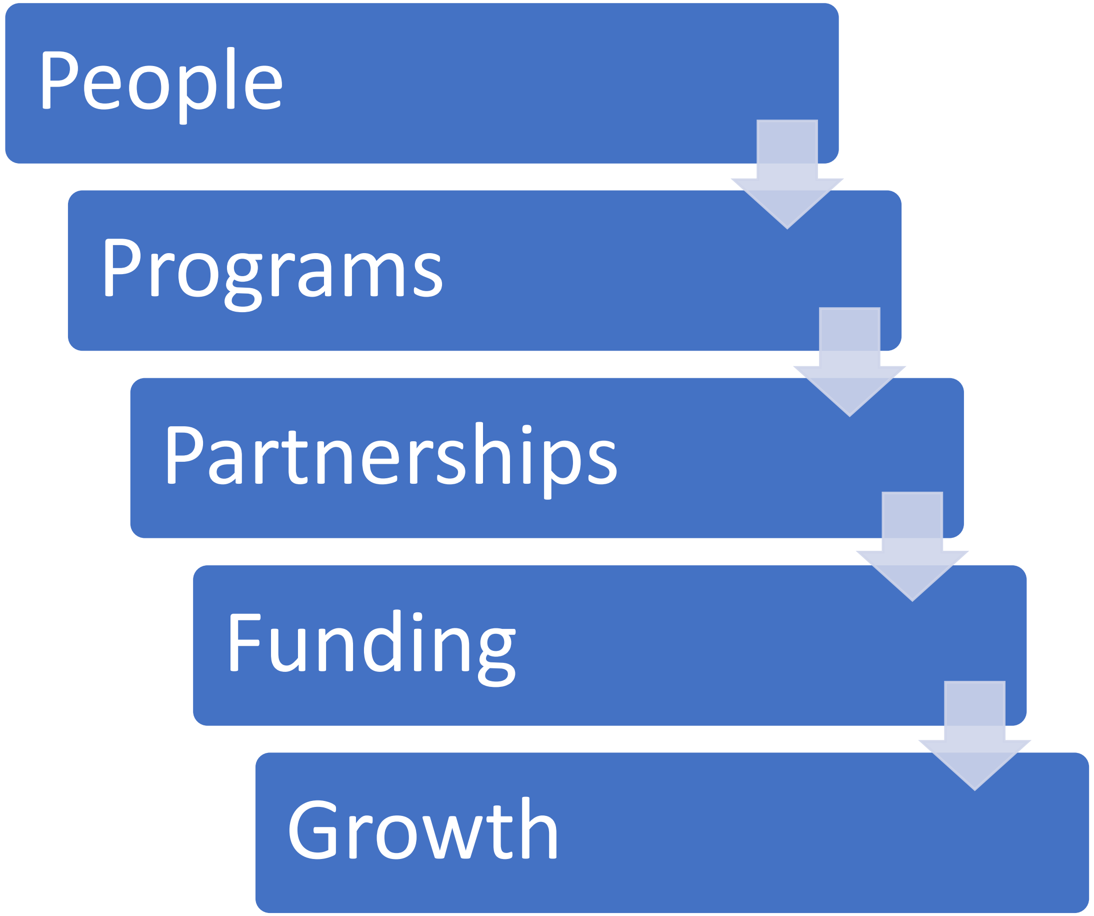
- Classes and workshops:
  - 3D printing
  - Laser cutting
  - Design thinking
- Community events
  - open houses
  - showcases
  - camps
- Continuous improvement: track what works, evolve based on feedback



Partnerships

Sustainability & Growth

- Funding: grants, corporate sponsorships, donors, workforce programs.
- Revenue: memberships, contract prototyping, noncredit workshops.
- Community Partnerships: K-12 outreach, entrepreneurship programs/camps, local innovators & artists.
- Continuous Improvement: feedback loops, equipment refresh cycles, advisory board input.



Metrics for Success

Number of trained students & active members

Prototypes completed and projects launched

Industry partners engaged

Community attendance & event participation

Success Stories

- Ron
- Young Couple
- Retiree
- Celeste

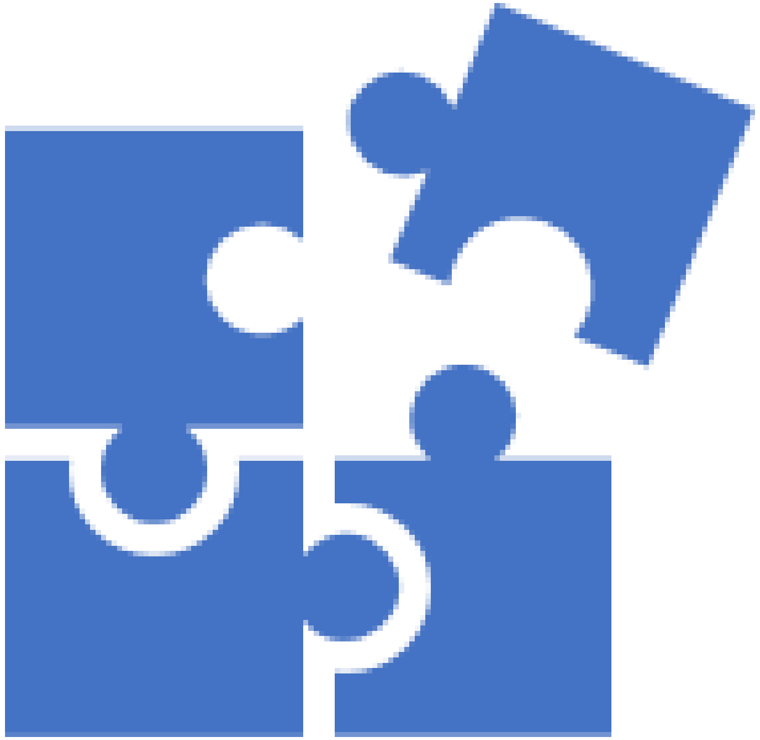
Discussion

- What skills or programs are most needed in your region?

Discussion

- What support do you need to lead in the makerspace?

Discussion



- What barriers exist (funding, access, staffing)?

Q&A and Call to Action

Makerspaces cultivate creativity, workforce readiness, and innovation.

Safety, community, and collaboration sustain the space.

Let’s continue to build the Midwest’s innovation ecosystem — *one prototype at a time.*

Photo of students/members holding completed projects.

BUILD. LEARN. INNOVATE.