Virginia Commonwealth University:
The da Vinci Center for Innovation
THE CHALLENGE

Twentieth-century talent requires twenty-first-century skills. Those skills are unevenly distributed. The Richmond region lacks the inclusion of women and underrepresented minorities (URM) in the science, technology and innovation enterprise and workforce. The community has voiced the need to address this gap.

VCU’S RESPONSE

VCU’s da Vinci Center for Innovation is on the front lines delivering innovation and entrepreneurship skills to a diverse learner population. The Center is a partnership among VCU’s Schools of the Arts and Business, its Colleges of Engineering and Humanities and Sciences, and VCU Health with the following charter:

The da Vinci Center for Innovation is prototyping the future of higher education through cross-disciplinary academic, experiential, and experimental learning opportunities. Measured by advancements in the human condition and the application of real-world knowledge and skills.

In response to community voice, the da Vinci Center is committed to increasing diversity and inclusivity in entrepreneurial and technical ecosystems to build the next generation of talent for innovation. A corporate and community advisory board maintains that voice and provides mentors and networks to support the program.

At a university, nurturing the creative innovators of the future who think beyond the box, can slip comfortably into collaborative efforts with diverse colleagues, and can work as easily for a start-up as starting a business begins with the curriculum.

The da Vinci Center curricula focuses on advancing innovation, creativity, empathy, and design-thinking through:
- a Masters in Product Innovation, including industry-recognized certifications in Scrum, design thinking, product ownership, and change management.
• an Undergraduate Certificate in Product Innovation that culminates in an industry-sponsored capstone project.
• a Graduate Certificate in Health Care Innovation, developed in partnership with the School of Nursing to meet an expressed industry need for innovation in health sciences.
• an undergraduate certificate in Venture Creation, which prepares students to own their own businesses.

The da Vinci Center integrated experiential learning into the curriculum and designed it to impart innovation, teamwork, resilience, and problem-solving skills and help business and community partners. The graduate and undergraduate product innovation credentials place students into multi-semester cross-disciplinary teams that work with industry and community partners across 16 economic sectors to solve the partner’s real-world challenges.

Curricular work is only the starting point.

In 2018, VCU’s Tech Transfer office handed off their Student Pre-Accelerator to the da Vinci Center to prepare students for entry into business acceleration programs. The program culminates in an annual Demo Day, where students pitch business ideas to potential funders and industry partners for seed funding. Since 2018, 116 student startups have been featured at Demo Day. VCU has provided them with $145,000 in startup seed funding. The student startups themselves have generated more than $5 million in external funding.

In response to the lack of diversity in the innovation workforce and entrepreneurial base, da Vinci partnered with VCU’s REAL, Activation Capital, an area Economic Development Organization and the Jackson Ward Collective, which supports local black businesses, to create the Entrepreneurship Academy to bring entrepreneurship skills to those most in need. Traditionally underrepresented students and community members take classes together, which are offered free of charge. Learners receive a series of micro-credentials and digital badges to document their progress. Offerings include:

• design thinking
• business model canvas
• business communications
• digital literacy

In addition to sharing a class, students and local entrepreneurs share an innovative retail lab and storefront on VCU’s urban campus. In partnership with Hourigan Construction,
the da Vinci Center opened the Shift Retail Lab in 2021. Shift is a multifunctional retail space where students and community members can showcase their work to gain insight and test their products, services and ideas with real-world customers. As a shared university and community asset for entrepreneurship, meetings and communal space, Shift hosted over 150 events and had more than 4,000 people visit this facility in 2022.

Finally, given the importance of moving innovation and twenty-first century skills into the regional talent pool, the da Vinci Center trains university and industry partners in critical innovation concepts like design thinking. The Center’s graduate students provide entrepreneurship training workshops to K-12 partners, which includes digital literacy, pitching, branding, marketing, and user experience. For example, the Center partnered with the Meadowbrook Academy for Developing Entrepreneurs in Meadowbrook High School. The partnership brought the students into the Entrepreneurship Academy, connected them with mentors and taught them the art of the pitch, including a Shark Tank-style pitch, which awarded four high school students with seed funds.

THE RESULTS

Building a diverse innovative, and entrepreneurial workforce with community partners, a dynamic, experience-based curriculum, and educating students and community members side-by-side benefits the community and the economy.

Talent

- The past 12 years saw 125 cross-disciplinary teams, 334 product innovation certificates, 102 Masters in Product Innovation, and 111 Venture Creation Certificates.
- The students are diverse.
  - Women are 58% of the graduate and undergraduate team members.
  - People of color comprise 66% of undergraduates and 52% of graduate students.
  - URM students comprise 36.5% of undergraduates and 34% of graduates.
  - 25% of the undergraduates are first generation.
- The Entrepreneurship Academy awarded 1,572 innovation micro-credentials to 150 low-income, first-generation students and 50 community entrepreneurs.

Community Benefits

- 50 community entrepreneurs trained.
- 258 innovation micro-credentials awarded to 204 K12 students
- 64 community and corporate partners served
Partnership with Jackson Ward Collective opened Shift to local black businesses

National Recognition

Shift was selected as honorable mention in the Urban Design Category as part of the Fast Company’s 2022 World Changing Ideas.

Why It Matters

“In this class, we have people who have worked a career for years, and we also have undergrads who don’t necessarily know what they want to do in the future. And then me, as a [Master of Product Innovation] student, just being able to work with people of all ages, all majors. I think I’ve improved my planning and overall leadership skills.”
- Julien Reininger, purveyor of Jacked! Jackfruit Jerky

LINKS TO FURTHER INFORMATION

Supporting Information:
- The da Vinci Center for Innovation

Articles:
- Meadowbrook High School Students Win Pitch Competition
- Design thinking as a 21st century skill
- Julien Reininger (MPI Alumni) Success Story
- Carlos Jiminez (MPI Alumni) Success Story

Videos:
- Introduction to the da Vinci Center
- Shelfies at Shift (Students present their products and services)
ABOUT APLU

The Association of Public and Land-grant Universities (APLU) is North America’s oldest higher education association. APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities in the U.S., Canada, and Mexico. The association's membership consists of public research universities, land-grant institutions, state university systems, and affiliated organizations.

APLU’s mission is to expand access and improve student success to deliver the innovative workforce of tomorrow; advance and promote research and discovery to improve society, foster economic growth, and address global challenges; and build healthy, prosperous, equitable, and vibrant communities locally and globally.

Based in Washington, DC, the association’s work is furthered by an active and effective advocacy arm that works with Congress and the administration as well as the media to advance federal policies that strengthen public universities and benefit the students they serve.

ABOUT THE IEP PROGRAM

APLU and its Commission on Economic and Community Engagement (CECE) established the Innovation and Economic Prosperity (IEP) Program to help higher education institutions codify, elevate, and advance their campus enterprise supporting economic and community development.

The IEP Designation Program recognizes institutions that have demonstrated a meaningful, ongoing and substantial commitment to economic and community development, growth, and economic opportunity.

The IEP Awards Program recognize exemplary and innovative projects in university-based economic and community engagement:

- Talent and workforce development
- Innovation, entrepreneurship, and tech-based economic development
- Place development through public service, outreach, and community engagement

Learn more at: www.APLU.org/IEP