

Proposal Summary
Meeting Date: 11/17/2016

**South Metropolitan Higher Education Consortium
(Prairie State College Foundation as fiscal sponsor)
Request # 115261**

Project Title:	SouthWorks Maker Entrepreneurship Programming
Duration:	12 months
Request Date:	9/2/2016
Request Amount:	\$55,844
Recommended Amount:	\$55,900
Program Area:	Education\Continuing Education\Adult\Entrepreneurship
Population Served:	General Public
Type of Support:	Salary Support\Program Staff
Grantee Location:	Chicago Heights, IL
Primary Contact:	Mr. Don Brozek

Project Abstract

The proposal is to develop and deliver entrepreneurship education with resources specific to making/manufacturing, with a separate track for artisans/crafters, to aspiring entrepreneurs who are not professionally trained designers or engineers.

Organizational Background (SMHEC)

Annual Revenue Sources

Grants	11%	Government	0%	Earned Income	0%
Fees	80%	Private Support	9%	Other	0%

Finances

	Budget	Actual	Actual
	06/30/2017	06/30/2016	06/30/2017
Revenues	\$137,234	\$134,758	\$144,258
Expenses	136,045	146,644	162,648
Surplus (Deficit)	\$1,189	(11,886)	(18,390)
Net Assets (reserve)	\$79,494	\$78,305	\$99,140

South Metropolitan Higher Education Coalition (SMHEC) is a 24-year old partnership of 11 higher education institutions in the Southland. It is an association but not a legal entity. SMHEC is a founding partner of the SouthWorks MakerLab Network, of which ten members have committed to create makerlabs on their campuses.

The consortium consists of five community colleges and six universities (public, private and for-profit). Its member schools provide a full range of higher education services to the region ranging from teaching to advanced research. SMHEC members are DeVry University, Governors State University, Illinois Institute of Technology (a/k/a Illinois Tech or IIT), Joliet Junior College, Kankakee Community College, Lewis University, Moraine Valley Community College, Prairie State College, St. Xavier University, South Suburban College, and University of St. Francis. SMHEC employees operate out of Governors State University and both it and Prairie State College have served as fiscal sponsors of SMHEC activity.

SouthWorks MakerLab Network is located in the southern and southwestern suburbs of Chicago (“the Southland”), which is comprised of municipalities in Cook, Will, Kankakee, and portions of surrounding counties. The make-up of the communities includes vastly diverse economies, including a significant number of struggling urban neighborhoods and rural populations. Nearly three-quarters of the census tracts in the Southland meet the U.S. Department of Commerce’s specifications for “disadvantaged area.” The rates of poverty, unemployment, housing foreclosures, and other indicators of economic distress are higher in the Southland than in any other sub-region of the Chicago metropolitan area.

Program Description

Gaps exist in the entrepreneurship ecosystem in the Southland. From five Small Business Development Centers ten years ago, the area is down to one part-time center at Kankakee Community College. In past months, the SBDCs at Governors State University and Joliet Junior College have announced closings.

A few entrepreneurship degree programs exist and a separate entrepreneurship center and small, desk-space incubator have come online over the past three years. However, no training or support exists for potential entrepreneurs going through the initial developmental phases once they have an idea. In particular, entrepreneurs whose business includes development of a physical product have found little support. The region has a strong manufacturing heritage and continues to possess resources and infrastructure that benefit physical product businesses. Unfortunately, it has lagged in support for this sector, resulting in a dearth of startups. The promise of makerlabs is that their emerging technologies have brought down the costs of starting up a product-based business. This provides an opportunity for more people to create their product and develop a business to support it.

In order to gauge demand and identify needs, last summer SMHEC ran a small maker entrepreneurship program. Besides a need for basic business and entrepreneurship skills/training, SMHEC found the following:

- Strong demand exists for training that is specific to product-based businesses. A Design Thinking for Entrepreneurs workshop attracted 30 participants.
- Demand was broad-based. Most participants with ideas were not professional manufacturers/technicians/designers. They were not industry experts/insiders.
- Prototypes are not part of their process. Most participants didn’t have a prototype and did not understand the benefit of creating one and going through the process. A few had investigated engaging a machine shop, etc. but gave up when they found it to be too expensive and/or too complicated.
- A product design process was not used. Many did not do customer research or product design. They had an idea but did not have the skills to build or test their idea. They did not know or implement the Design Thinking process to refine their product and their business model.

- Supply chain issues are not understood. None knew how to source inputs and how to deliver outputs. This issue is much more complex than a service or web-based business encounters, and it is much more critical to success.
- Product ideas ranged from consumer and industrial products to artisan-type products.

Based on the pilot, SMHEC believes an opportunity exists to provide support to imminent maker entrepreneurs who are not professional designers or engineers by developing a support community and delivering missing resources and tools for them to take action on their entrepreneurial endeavor.

The Maker Entrepreneurship program would provide resources for individuals with physical product ideas to create their prototype, develop a viable business model, and build a successful business. While professional designers, engineers, and manufacturers can benefit, SMHEC is targeting the non-professional who has a product concept but does not have market experience or design training. The program would deliver resources specific to physical product-based businesses and supplements the general business support currently available elsewhere. Participants would not be required to “enroll” in the entire schedule of events. They would utilize resources they deem appropriate to their individual situation. However, Design Thinking and Lean Startup components would be required that participants commit to the full schedule of that particular component.

A key component of the Maker Entrepreneurship programs is access to the makerlabs which provide ready access to equipment, software and a knowledgeable community so that users can quickly develop a physical embodiment of their idea, making it easier and more effective to have meaningful discussions with users, funders, partners, manufacturers, and other essential stakeholders. Makerlab users can also quickly and less expensively modify the prototype as they go through the product development process.

Besides the MakerLab activities, events and workshops will include:

- *Meet the Entrepreneur* and other informative and inspirational presentations and conversations that will build community and attract those interested in workshops. January to May.
- *Design Thinking Workshop* taught by instructors from Illinois Tech’s Institute of Design and IPRO, provides hands-on experience and training of the tools designers use to problem-solve and create innovative solutions. Design Thinking is a set of tools and actions to define and solve complex problems to ensure that the proposed product or service meets customer needs. Needs assessment, prototyping, iteration, and testing are taught. Participants receive feedback on their own ideas/prototypes. Monthly, June to September.
- *Lean Startup for Product-based Businesses* teaches a business planning process that emphasizes quickly testing hypotheses about the critical components of a successful business model and “pivoting” accordingly. Often used in digital startups, with some modifications it applies to product-based businesses. Four sessions, October to December.
- Other workshops to include *Intellectual Property*, *Manufacturing Issues* (e.g. manufacturability, quality control, regulations), *Supply Chain/Logistics* (e.g. sourcing materials, product delivery), *Financial Management*, *Crowdfunding*.

Finally, SMHEC has been granted the exclusive rights to provide Etsy’s training program in the greater Chicago area. Etsy is a large, prominent online marketplace for artisans and crafters to sell their handmade goods. Individual sellers create and manage their own “stores” and Etsy provides a number of back-office services. The primary mission of the program is to provide training to help makers/crafters succeed on Etsy. Etsy requires that the program is free to participants. The program is available to

anyone getting started on Etsy and the firm hopes to help low income makers seeking to supplement their income or create income.

SMHEC will supplement the basic Etsy program delivered during March and September with time and training in the makerlab for participants to develop their products and additional training in business fundamentals and for other sales channels, such as Amazon, eBay, Ponoko, and other online and physical marketplaces.

Given the Southland's demographics, the typical Maker Entrepreneurship participant is likely to skew toward lower financial resources, slightly less professionally-trained in design/engineering/technology, and more minority and first-generation than a typical makerlab user or tech entrepreneur might be. Working adults would predominate as life experience and skills obtained through their careers will provide numerous experiences from which innovative ideas may develop. They typically fall into two categories: part-time innovators with an idea but not the requisite skills, connections, and/or funding to develop a prototype and business; and, professional technicians whose career provides them with one aspect of the process but who does not have access to full breadth of resources or skills.

Etsy shops can be run part-time and with even less resources required than a full-time endeavor. As a result, participants in that program would skew even more away from the average. They likely would be less tech-oriented and more craft- and art-inclined, lower income, and likely more female. In addition, a stay-at-home parent can effectively run an Etsy shop, reducing the average age. On the other hand, retirees can also run Etsy shops effectively, potentially balancing the "stay-at-home parent" effect.

Expected Outcome

As SMHEC builds and refines programming, it will assess several assumptions:

- Entrepreneurs will understand the need for Design Thinking and Lean Startup tools. As tools for innovation and efficient startup, SMHEC believes both need to be accessible to untrained entrepreneurs.
- Access to the program and makerlabs encourages people who have product ideas but did not pursue them to now follow through on their plans.
- Lowering the barriers to entry, which a makerlab provides, will encourage more people to choose entrepreneurship.
- At least two-thirds of the participants will feel better prepared with improved knowledge and skills to pursue a successful entrepreneurial endeavor.

Program Budget

Major line items in grant request include:

- Partial funding of salary and benefits of Project Director who would develop and deliver much of curriculum and provide managerial oversight (\$26,294 or 47% of request)
- Salary of makerlab technicians who staff open lab time and lead some workshops (\$13,600 or 24% of request)
- Consumable materials used on lab equipment during makerlab workshops (\$5,600 or 10% of request)
- Promotion of Program and food offered at events (\$5,000 or 9% of request)
- Instructors of Design Thinking (IIT faculty) and Etsy (outside trainer) courses (\$4,000 or 7% of request)

Prior Grants

This would be CFI's the first grant for SMHEC. Between 1992 and 2011, Prairie State College received 5 grants totaling \$119,500.

Recommendation

As we seek to transition significant funding to advance our Entrepreneurship Education Impact plan from colleges and universities to community-based settings, the makerspace appears to be an attractive venue to consider. The "Maker Movement" is rapidly growing with community and regional "makerspaces" taking form. Many of these spaces support creation but struggle to advance commercialization. This opportunity links self-employment education to an emerging network of makerspaces that has the potential to transform a part of the region in need of economic development.

We recommend approval of this award to bring self-employment curricula to this makerlab network.

South Metro Higher Education Consortium (Prairie State College as fiscal sponsor)

Maker Entrepreneurship Program

9/30/2016

Total Project Budget

<u>Revenue</u>	<u>Funds Needed</u>	<u>Funds Requested</u>	<u>Funds Committed</u>
Coleman Foundation	55,844	55,844	
Private donations/grants			
Organizational contribution	30,228		30,228
Program Revenue	2,080		2,080
<u>Revenue Total</u>	88,152	55,844	32,308

<u>Expense</u>	<u>Project Budget</u>	<u>Coleman Funds</u>	<u>Other Sources</u>
<i>Personnel (salary/benefits)</i>			
Project Director (1/3 FTE)	31,872	26,350	5,522
<i>Event Expenses</i>			
Location expenses (@\$75/hr.)	22,650	-	22,650
Makerlab technicians (@\$40/hr.)	13,600	13,600	
Makerlab materials	5,600	5,600	
Food costs	5,080	3,000	2,080
Promotional/Marketing	4,000	2,000	2,000
IIT Faculty (Design Thinking Wksp)	2,000	2,000	
Etsy instructor	2,000	2,000	
Other	1,350	1,350	
Total	88,152	55,900	32,252