Fostering an Innovative and Entrepreneurial Mindset in Engineering Technology Education

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ASEE
Innovation Corps (I-Corps) Program

2011

NSF I-Corps
39 courses; 823 teams

2012

I-Corps for Learning
4 courses; 73 teams

2013

Lab-Corps
9 Labs; 3 courses; 36 teams

2014

I-Corps@NIH
4 courses; 59 teams

2015

I-Corps@DoD
pilot and
Accepting applications

2016

USDA I-FAST
pilot

2017

NSF I-Corps
39 courses; 823 teams

Advanced Research Projects Agency • ENERGY
U.S. Department of Energy
U.S. Small Business Administration
U.S. Department of Homeland Security
National Security Agency
United States of America
National Institutes of Health
NASA
United States of America
I-Corps™ for Learning History

<table>
<thead>
<tr>
<th>June 2013</th>
<th>June 2014</th>
<th>June 2015</th>
<th>June 2016</th>
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<tbody>
<tr>
<td>3 3 Cohorts + Pilot</td>
<td>73 Teams</td>
<td>234 Participants</td>
<td>18 Instructors</td>
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7-week Program

Educational Innovation

Customer Discovery

Kick-off Workshop

5 Online Sessions

Lessons Learned Workshop

100 Interviews

Readiness for Sustaining & Scaling?
I-Corps™ for Learning
Participant Segments

Current Profession Leaning (36%)

Entrepreneur Leaning (20%)

Both (44%)
Roughly 1-Year After the Course….

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<tr>
<th>Teams</th>
<th>Innovation Home</th>
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<tbody>
<tr>
<td>90% of PIs are still</td>
<td>60% home institution (PI)</td>
</tr>
<tr>
<td>73% of ELs involved</td>
<td>20% for-profit companies</td>
</tr>
<tr>
<td>50% have more people</td>
<td>8% non-profit companies</td>
</tr>
<tr>
<td></td>
<td>8% other institutional partners</td>
</tr>
<tr>
<td></td>
<td>4% other</td>
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Funding

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<tr>
<th>Teams</th>
<th>Innovation Home</th>
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<tr>
<td>50% have sought additional funding</td>
<td>76% have additional funding (new grants, home institution, venture capital, corporate partnerships, other sources)</td>
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<tr>
<td>59 requests → 14 approvals</td>
<td>22% of additional funds are revenue from customers</td>
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$3.6m
I approach my current role as a faculty member with an entirely new perspective. I infuse entrepreneurial mindset and learning into my teaching; I approach fundamental research problems with a translational research application and consider what sustainable scaling would look like from the beginning; and I am dedicated to bringing I-Corps like experiences for students and faculty at my university. I've also become involved in a start-up, which has been a direct outgrowth of our I-Corps project, and this has opened up several new pathways that will be infused in my career moving forward. Our start-up was recently awarded a Phase I SBIR to continue the efforts, and we've also attained interest from outside investors in moving our endeavor forward.
ViTAL
Bringing inclusion and accessibility to the digital classroom through touch

Jenna Gorlewicz, PI
Assistant Professor
Southern Illinois University Edwardsville

Corrine Mueller, EL
Graduate Assistant
Southern Illinois University Edwardsville

Dan Harres, M
CEO
Bitstream Technology

The Team

Our Technology
Leveraging commercially available tablets

Create
Automatically transform existing lessons into accessible content, easily create and customize new teaching materials.

Engage
Real-time display in-class promotes inclusion and peer-to-peer interactions with diverse learning styles.

Learn
Personalized content enables learning through sight: contrast and zoom, sound: dictation, and touch: tactile graphics.

Collaborate
Integrate, share and sync with digital classroom tools (Google apps, LMS, and Apple for Education).
## New Courses

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<tr>
<th>Awareness Sessions</th>
<th>Introduction to I-Corps™ L</th>
<th>National Cohort</th>
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<tr>
<td>1-3 hours</td>
<td>2 weeks</td>
<td>7 weeks</td>
</tr>
<tr>
<td>Face-to Face</td>
<td>Online</td>
<td>Hybrid</td>
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<tr>
<td>Online</td>
<td>Hybrid</td>
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- **Introduction to core features of the Lean Startup Process**
- **Opportunity to develop ‘proof-of-concept’ evidence towards sustaining and scaling**
- **Focus on Value Proposition + Customer Segment ‘fit’**
- **Opportunity to determine innovation readiness for sustainable scalability**
- **Immersion in the Lean Startup Process**

**Frontiers in Education (FIE)**
- October 12-15, Erie, PA

**ASEE Annual Conference**
- June 25-28, Columbus, OH

*(traditionally Jul-Aug)*