



LXDRESEARCH
AT CHARLES RIVER MEDIA

VentureLab Entrepreneurship Curriculum

Efficacy Study Summaries



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LXDRESEARCH
AT CHARLES RIVER MEDIA



PROMISING

LXD Research Recognition for VentureLab



venturelab
Entrepreneurial Learning

This product has been rigorously evaluated and is hereby acknowledged for meeting the educational impact criteria of the Every Student Succeeds Act (ESSA), warranting a **level 3 designation** for "**Promising**" evidence. This recognition is based on its proven effectiveness in enhancing learning outcomes with participants.

REVIEWED BY THE LXD RESEARCH EXPERT REVIEW PANEL

Rachel Schechter, Ph.D.
Founder of LXD Research

August, 2024

DATE

Educators search for high-quality research and evidence-based interventions to strengthen grant applications, to support comprehensive and targeted schools, or to implement new programming in their schools. Evidence requirements under the Every Student Succeeds Act (ESSA) are designed to ensure that states, districts, and schools can identify programs, practices, products, and policies that work across various populations.

Educational programs document their evidence of design, effectiveness, and impact in order to be eligible for federal funding. While there is no singular authority that determine's a program's tier, the Department of Education's Office of Educational Technology provides standards to assess the varying levels of strength of research for education products.

The categories for ESSA Evidence are: strong (Tier 1) , moderate (Tier 2), and promising (Tier 3) evidence of effectiveness, or demonstrates a rationale to be effective (Tier 4).

This product meets the requirements for Tiers 4 and 3:

- ✓ Includes a logic model based on research
- ✓ Research documentation connects academic research studies to features in the program that support learning.
- ✓ Correlational studies have been completed on the program's effectiveness with youth and educators who have participated.
- ★ A third-party research organization has reviewed the documentation for ESSA validation



When product designers leverage learning sciences to design their programs, educators can better target instruction, and students' skills soar. Through interviews with the product designers, an evaluation of their research-informed activities, and an investigation of student and educator survey responses, this product meets the criteria for LXD Research's ESSA Tier 3 Evidence.

– Rachel Schechter, Ph.D., Founder of LXD Research



STUDY CONTEXT

VentureLab partnered with Expanding Pathways in Computing (EPIC) STEM Evaluation Services at The University of Texas at Austin (UT) Texas Advanced Computing Center (TACC). VentureLab developed a survey to assess instructors' satisfaction with and implementation of the VentureLab entrepreneurship curriculum. The program was funded by the Charles Stewart Mott Foundation.

STUDY DETAILS

Sample Size

128 Instructors

Time Frame

June 2020-June 2024

Methodology

The survey measured the change in instructors' entrepreneurial skills and mindsets, as well as perceived change in their elementary and secondary students' entrepreneurial skills, mindsets, interests, and confidence.

KEY FINDINGS

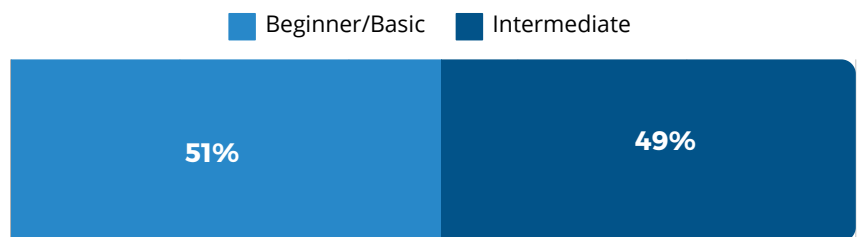
Instructors continue to report high satisfaction with the program and its outcomes.

- **93(+)%** of instructor respondents were satisfied with their overall experience.
- **80(+)%** said their students gained new skills such as creativity, idea generation, design thinking, and pitching.
- **94(+)%** of instructors would recommend the entrepreneurship program to others.
- **92(+)%** of instructors reported intermediate/advanced skills after their program, compared to 49% before the program.

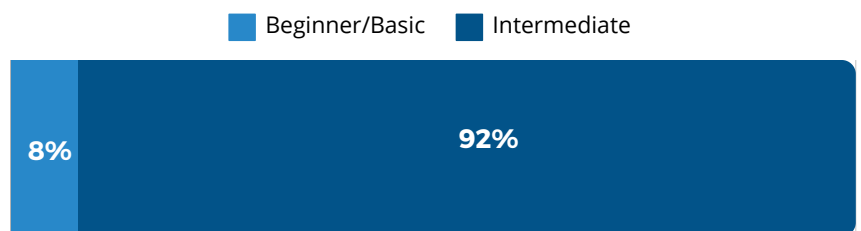


Instructor ratings of their entrepreneurship teaching skill level substantially improves after implementing VentureLab.

My skill teaching entrepreneurship **BEFORE** this program:



My skill teaching entrepreneurship **AFTER** this program:





STUDY CONTEXT

VentureLab partnered with Expanding Pathways in Computing (EPIC) STEM Evaluation Services at the University of Texas at Austin (UT) Texas Advanced Computing Center (TACC). VentureLab developed a survey to assess student engagement levels and changes in students' skillsets and mindsets as a result of their entrepreneurship curriculum. The Charles Stewart Mott Foundation funded the program.

STUDY DETAILS

Sample Description

- Total = 1114 Students
- Grades 1-2 = 220 Students
- Grades 3-5 = 310 Students
- Grades 6-12 = 584 Students

Time Frame

June 2020-June 2024

Methodology

The survey measured the change in students' entrepreneurial skills, mindsets, interests, and confidence.

KEY FINDINGS

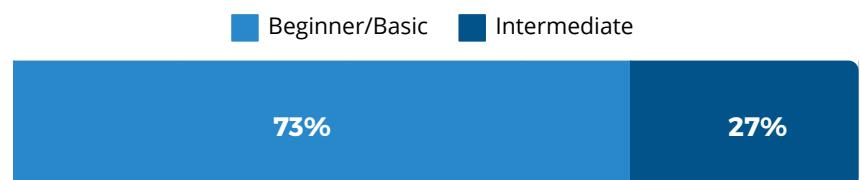
Students reported significant improvements in their mindsets and confidence as well as interest in entrepreneurship.

- **81(+)%** of elementary students learned at least some about being an entrepreneur.
- **84%** of Grades 6-12 students developed at least intermediate entrepreneurship skills.
- Approximately three-quarters of students indicated they improved in their entrepreneurial mindsets (75-82%), self-confidence (74-87%), and confidence in their abilities (73-90%) because of their entrepreneurship program.

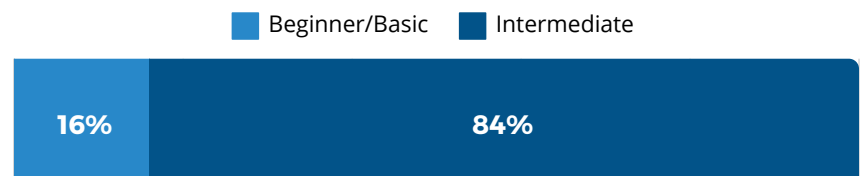
Percent of Students Who Improved in Entrepreneurial Skills

Skillset	Average (Grades 1-12)
Creativity	83%
Idea Generation	81%
Design Thinking	79%

My level of entrepreneurship skill BEFORE this program:



My level of entrepreneurship skill AFTER this program:





STUDY CONTEXT

VentureLab partnered with Expanding Pathways in Computing (EPIC) STEM Evaluation Services at The University of Texas at Austin (UT) Texas Advanced Computing Center (TACC). VentureLab developed a survey to assess instructors' satisfaction with and implementation of the VentureLab entrepreneurship curriculum. The program was funded by the Charles Stewart Mott Foundation.

STUDY DETAILS

Sample Size

88 Instructors

Time Frame

June 2020-December 2023

Methodology

The survey measured the change in instructors' entrepreneurial skills and mindsets, as well as perceived change in their elementary and secondary students' entrepreneurial skills, mindsets, interests, and confidence.

KEY FINDINGS

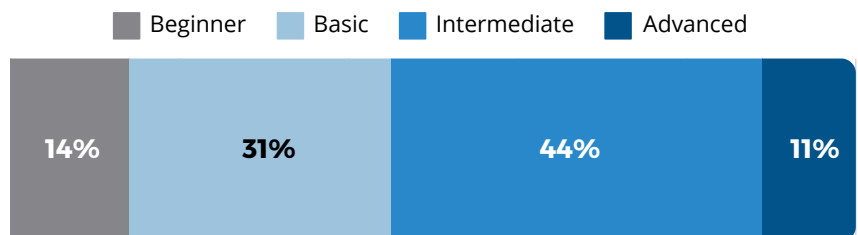
Instructors overwhelmingly reported high satisfaction with the program, materials, and support.

- **94(+)%** of instructor respondents were satisfied with their overall experience and enjoyed teaching the entrepreneurship activities.
- **93(+)%** reported that their students' mindsets improved.
- **78(+)%** said their students gained new skills such as creativity, idea generation, design thinking, and pitching.
- **58(+)%** of instructor respondents said their own mindsets improved as a result of using the program.

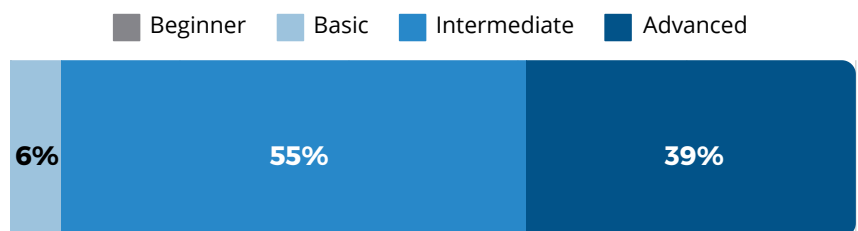


Instructor ratings of their entrepreneurship teaching skill level substantially improves after implementing VentureLab.

My skill teaching entrepreneurship BEFORE this program:



My skill teaching entrepreneurship AFTER this program:



3x larger!



STUDENT SURVEY RESULTS 2021-2023



STUDY CONTEXT

VentureLab partnered with Expanding Pathways in Computing (EPIC) STEM Evaluation Services at The University of Texas at Austin (UT) Texas Advanced Computing Center (TACC). VentureLab developed a survey to assess student engagement levels as well as changes in students' skillsets and mindsets as a result of the VentureLab entrepreneurship curriculum. The program was funded by the Charles Stewart Mott Foundation.

STUDY DETAILS

Sample Description

- Total = 694 Students
- Grades 1-2 = 43 Students
- Grades 3-5 = 224 Students
- Grades 6-12 = 427 Students

Time Frame

June 2020-September 2023

Methodology

The survey measured the change in students' entrepreneurial skills, mindsets, interests, and confidence.

KEY FINDINGS

Students reported significant improvements in their mindsets and confidence, increased interest in entrepreneurship, and substantial skill development.

- **70(+)%** of students had enhanced mindsets & confidence after their programs.
- **71(+)%** of students had increased interest in owning or starting a business.
- **77%** of Grades 6-12 entrepreneurship students started with beginner or basic skills.
- **82%** of Grades 6-12 entrepreneurship students ended with intermediate or advanced skills.

Percent of Entrepreneurship Students Who Said They Improved in Skillsets

Skillset	Average (Grades 1-12)
Idea Generation	85%
Creativity	85%
Teamwork	79%
Design Thinking	78%
Pitching	77%

Public Thinking = 74%; Opportunity Analysis = 74%; Business Model = 71%; Prototyping = 71%; Market Research = 70%



INSTRUCTOR INTERVIEW RESULTS 2021

STUDY CONTEXT

VentureLab partnered with Expanding Pathways in Computing (EPIC) STEM Evaluation Services at The University of Texas at Austin (UT) Texas Advanced Computing Center (TACC). EPIC evaluators created the Entrepreneurship Instructor Interview Protocol. The protocols were implemented during two instructor interviews.

STUDY DETAILS

Sample Size

2 Instructors

Time Frame

February-March 2021

Methodology

The interview protocols were developed to provide additional insights into the entrepreneurial experiences of interviewees, both before and during their entrepreneurship program; their perceptions of the program; and the impact of the program on entrepreneurial skillsets, mindsets, interests, and confidence. The protocols also provided opportunities for interviewees to share challenges, recommendations, and comments for program evaluation and improvement.

KEY FINDINGS

Instructors reported satisfaction with the quality of the student activities and experiences.

- Overall, both entrepreneurship instructors reported being satisfied with their experiences teaching with the materials.
- One instructor really enjoyed how autonomy-supportive the activities were and how they allowed the students to innovate.
- The other instructor said they enjoyed the structure of the activities and how they were scaffolded.
- The instructors said some of their students started the program with minimal entrepreneurship experience, and their students learned a moderate amount or “rose to maybe mid-level” on average. The instructors credited the activities and hands-on experiences as being valuable.



“[Students] were very highly motivated and participated.”

- Instructor

“[I liked] just giving them that empowerment that they don’t have to wait until they have a career to go and make a difference.”

- Instructor

“Creativity was [part of everything], from the very initial games we played all the way to prototyping.”

- Instructor



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LXD Research is an independent research firm that evaluates educational programs with ESSA-aligned methods.

Learn more at www.lxdresearch.com

For additional information about
VentureLab visit:

www.venturelab.org

