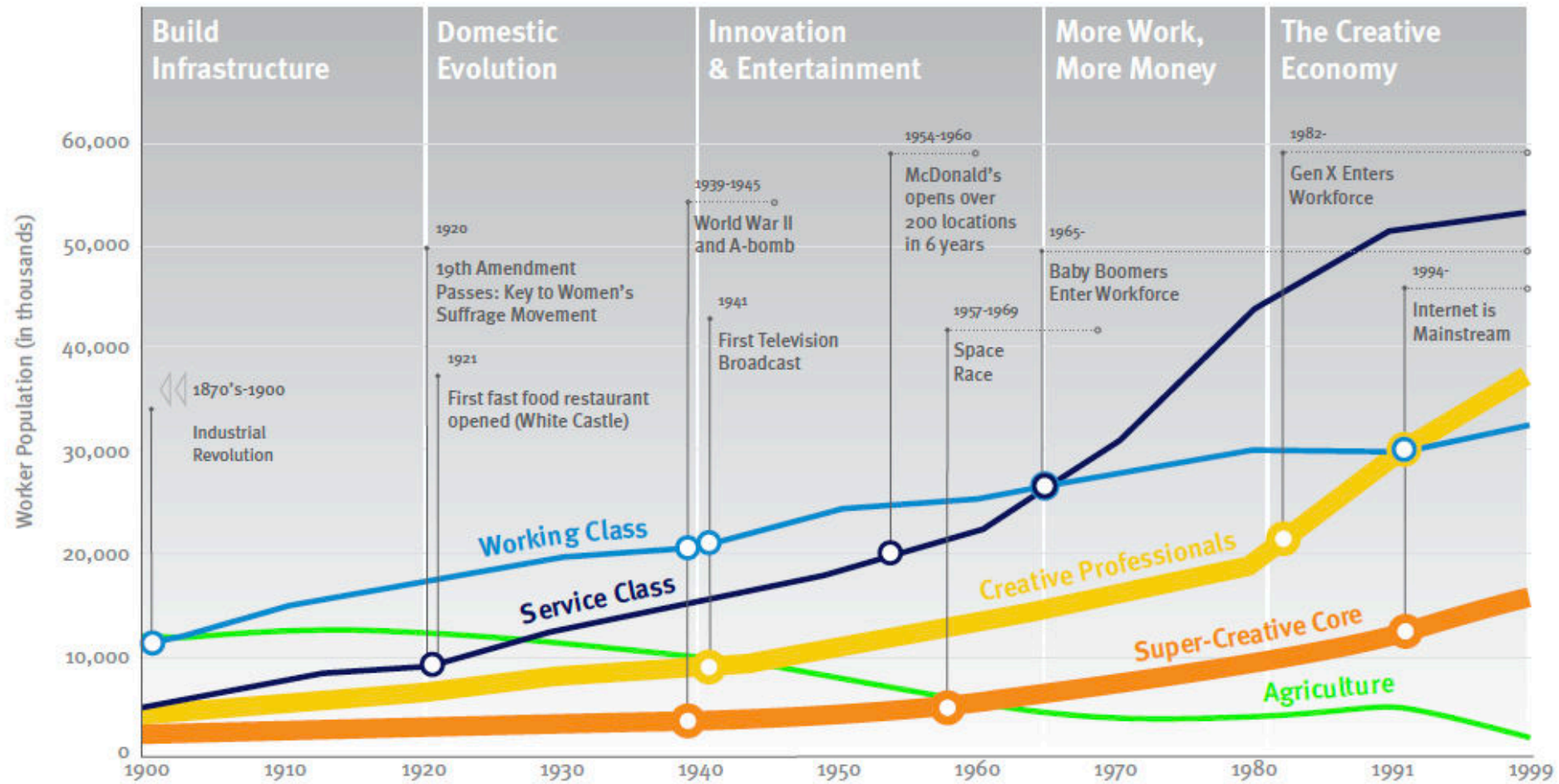


# **The Case for Youth Entrepreneurship Education**

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Founder, VentureLab  
November 2019



# The Rise of the Creative Economy



# Entrepreneurial Education Key to Student Success

- **50%** of the workforce will be independent or freelance within a decade<sup>(a,b)</sup> – students need ability to create their own careers
- Inherent in an innovation economy – non-cognitive skills - the ability to be creative, adaptable, and entrepreneurial, etc...
- Today more than **90%** of employers identify entrepreneurial skills as important<sup>(c)</sup> and **1 in 3** employers seek entrepreneurial experience in hires<sup>(d)</sup>.

*(a) 2019 MBO Partners Future of Work Report, 2019: The Changing Nature of the American Workforce  
MBO The State of Independence in America Report (b) Freelancing in America: 2017 Report Edelman  
Intelligence (c) The need to address noncognitive skill in the education policy Agenda. Garcia (d)  
Millennial Branding Student Employment Gap Study 2012*



# Rapidly Changing Technology and Workplace

The World Economic Forum reports that we are in the midst of a Fourth Industrial Revolution. Technology and careers of the future are changing at a rapid pace.

65% of children entering primary schools today will likely work in roles that don't currently exist.

The hard skills we are teaching kids now, may not be relevant for the future.

# Skillsets of the Future



- Creativity
- Lateral Thinking
- Pattern Recognition
- Design Mindset
- Empathy
- Adaptability
- Problem Solving
- Social Intelligence
- Entrepreneurship

# Entrepreneurship is more than simply wanting to start a business

Entrepreneurship = Mindset + Skillset

**We are ALL entrepreneurs!**

- Artists/Musicians - need to know how to market and sell their art
- Doctors - may have their own practices
- Intrapreneurs - innovate from within companies
- Teachers - have to be resourceful, develop and implement courses and advocate for students



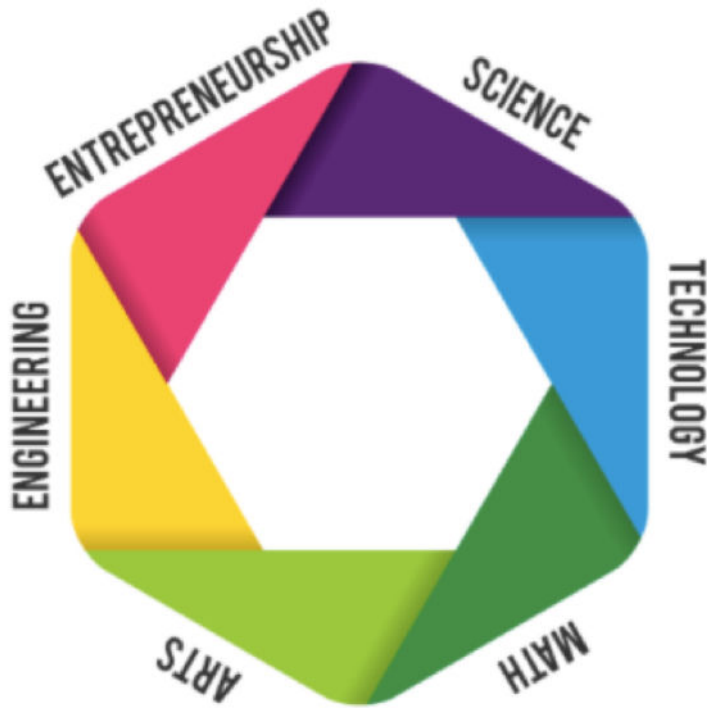
# Entrepreneurship: 21<sup>st</sup> Century Skills and Social Emotional Learning

## 4 Cs + 2

- Problem-solving
  - Empathy
  - Self-Confidence
  - Optimism
  - **Opportunity seeking**
  - **Failure Resilience**
  - **Growth Mindset**
- Creativity
  - Critical Thinking
  - Collaboration
  - Communication
  - **Citizenship**
  - **Culture**



# Entrepreneurship: Tying together all the disciplines



**ESTEAM**<sup>TM</sup>

- Integrated, **interdisciplinary approach** to learning
- Provides **'hands-on'** applications
- **Relevant and real-world** experience for students



# Entrepreneurial Learning Create Opportunities and Careers Across Industries

- Plant biology – developing hydroponics kits and creating a plan to sell hard-to-get produce
- Geography or social studies – developing products to help people in arid regions get potable water
- Robotics – developing devices that assists doctors in operations
- Physics or materials – developing ways to make solar energy more affordable using 3D printed materials
- Coding – developing an app that help fights obesity
- Drama – writing, producing and delivering a performance
- Art – producing and sell artwork

# Entrepreneurship: Students and School Communities

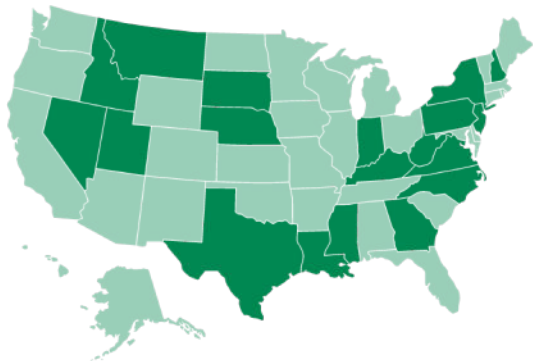
- Envision future career paths or create their own
- Apply knowledge and passion to real-world problems
- Collaborate and communicate as part of a team
- Increases **self-efficacy/confidence** in ability to learn and take on challenges
- Creates a culture of experimentation and curiosity and **failure-resistance**
- Creates a culture of mentorship and continued learning
- **Engages the whole school community**

# **Current State of Youth Entrepreneurship Education**

# Entrepreneurship Education Opportunity Growth in States

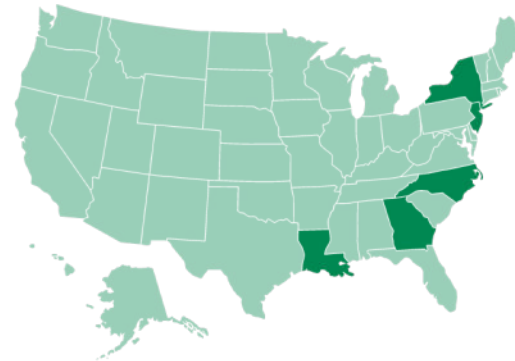
## States reporting K-12 standards, guidelines or proficiencies in entrepreneurial education in K-12

**19/50**  
**2009**

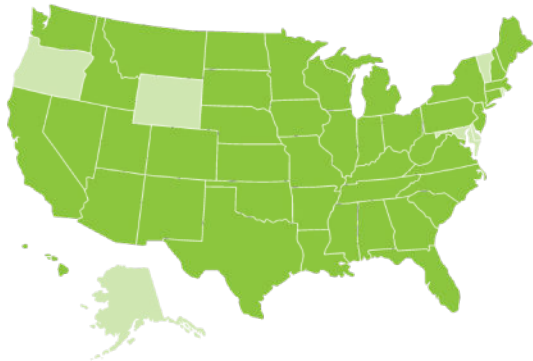


## States reporting entrepreneurship education courses required to be offered in high school

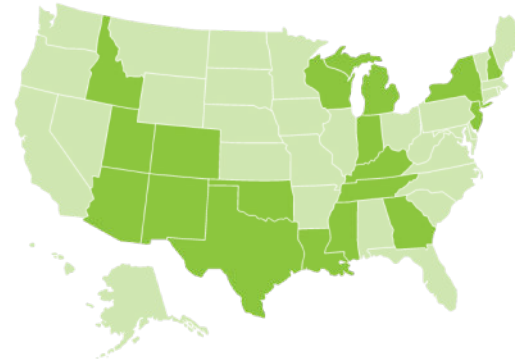
**5/50**  
**2009**



**42/50**  
**2015**



**18/50**  
**2015**



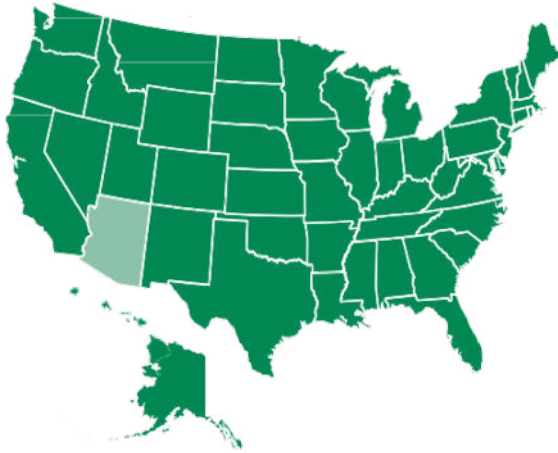
## Policy Driver:

**Every Student Succeeds Act (ESSA)**, passed in 2015, makes room for the teaching of non-cognitive and socio-emotional skills, such as skills that drive an entrepreneurial mindset.



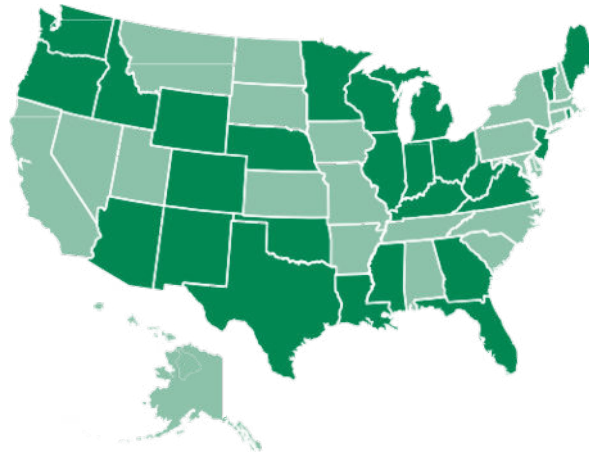
# Entrepreneurship Education Opportunity Growth in States

States reporting K-12 standards,  
guidelines or proficiencies in  
entrepreneurial education in K-12



**49/50**  
**2019**

States reporting entrepreneurship  
education courses required to be  
offered in high school



**27/50**  
**2019**

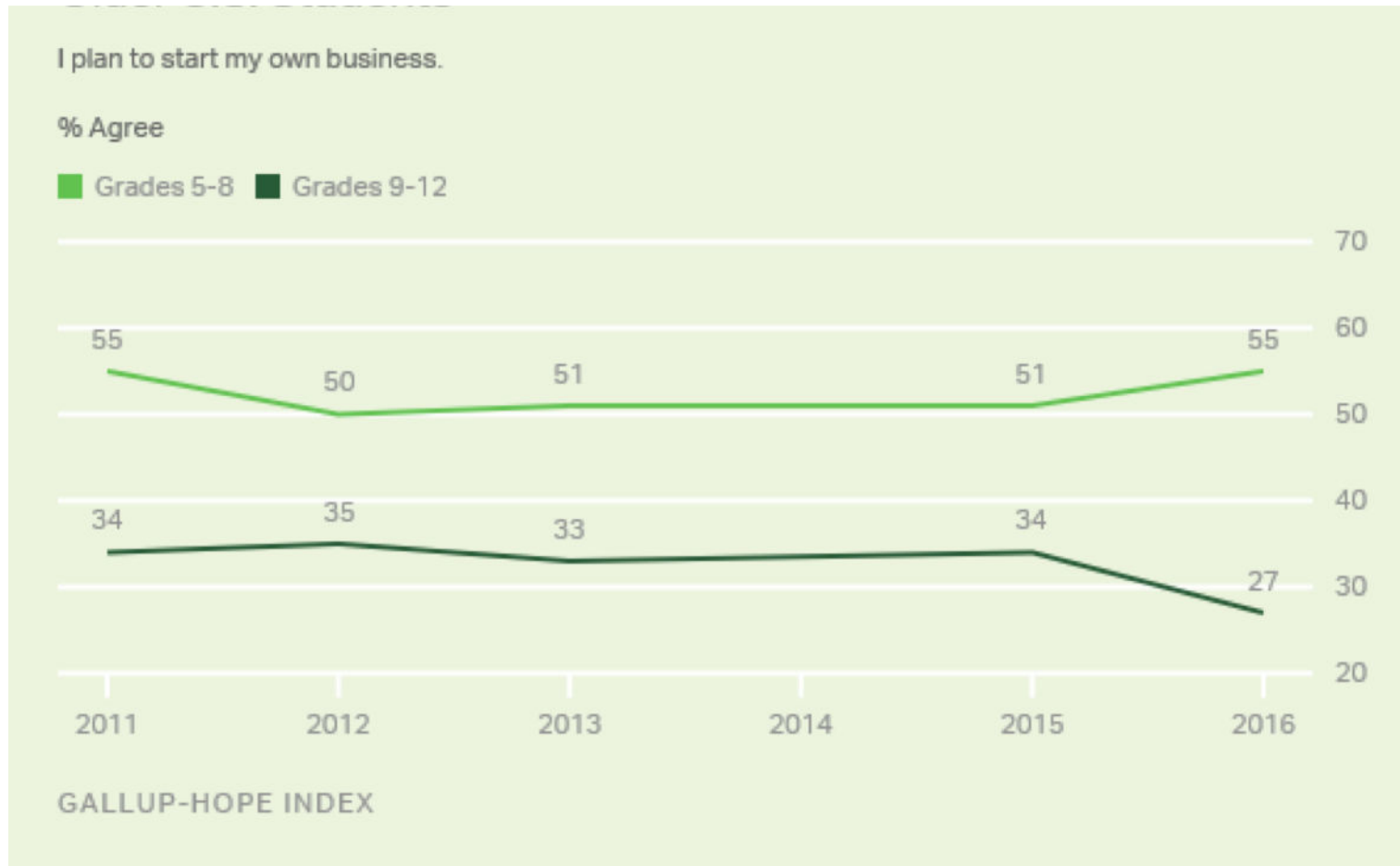
## Policy Driver:

In 2018, reauthorization of the **Carl D. Perkins Career and Technical Education Act** requires states to offer entrepreneurship education in their career and technical education (CTE) pathways

# Gallup Student Survey on Entrepreneurship

- 16% agreed that they would invent something that changes the world, 24% strongly disagreed
- 25% strongly agreed they would start a business
- 13% strongly agreed they are learning how to start and run a business, 37% strongly disagreed
- 43% agreed that their school offered classes on how to run a business

# Widening Entrepreneurial Ambition Gap Between Younger and Older Students



2015 Gallup Student Poll - Engaged Today Ready for Tomorrow



# Why Entrepreneurship Education is Still Not Widely Implemented

1. Mandatory testing and evaluation of school performance based on achievement in skills;<sup>(a)</sup>
2. Strength of traditional disciplines among education groups who have primary responsibility for writing curriculum;<sup>(a)</sup>
3. Lack of understanding among educators of the operations and importance of entrepreneurship;<sup>(a)</sup>
- 4. Standards, guidelines and classes are available and offered, but students don't have to take an entrepreneurship class.<sup>(b)</sup>**
- 5. Ecosystem - To succeed for students and educators, entrepreneurship education must interact with its community, outside as well as inside the school.**

*a: An Assessment of Youth Entrepreneurship Programs in the United States Teresa A. Daniel 2005*

*b: Junior Achievement – The States of Entrepreneurship in America 2019*



# OST is Key for Workforce Readiness

**59 percent of surveyed workers agreed or strongly agreed that they developed most of the skills they use in their current job outside of school.**

# Early Exposure Promotes Equity and Opportunity in Workforce Pipeline Development

- Studies show that exposure to innovation and entrepreneurship during childhood has significant causal effects on children's propensities to become inventors or entrepreneurs <sup>(a-c)</sup> by up to 60% <sup>(d)</sup>.
- Children from high-income (top 1%) families are ten times as likely to become inventors as those from below-median income families due to exposure to high innovation-rate environments <sup>(c)</sup> and parental role-models.
- Exposure to innovation and entrepreneurship at a young age is important to prepare students for future success and to close the **inequality gap**, in income, race, gender, etc...<sup>(c)</sup>

*a: Growing up “Entrepreneurial”? Cognitive Developmental Consequences of Early Exposure to Entrepreneurship Norris F. Kreuger, Jr., b: Closure and Exposure: Mechanisms in the Intergenerational Transmission of Self-employment, Jesper B Sorenson, c: Who Becomes an Inventor in America? The Importance of Exposure to Innovation. Alex Bell, et al. d: Lindquist, M., Sol, J., & Van Praag, M. (2012). Why Do Entrepreneurial Parents Have Entrepreneurial Children?*



# Selected Youth Entrepreneurship Education Programs Student Impact in 2018-2019

- Junior Achievement: 20,050 students
- Lemonade Day: 58,770 students
- VentureLab: 60,325 students
- YEI: 70,000 students
- BizWorld: 63,753 students
- NFTE: 100,898 students

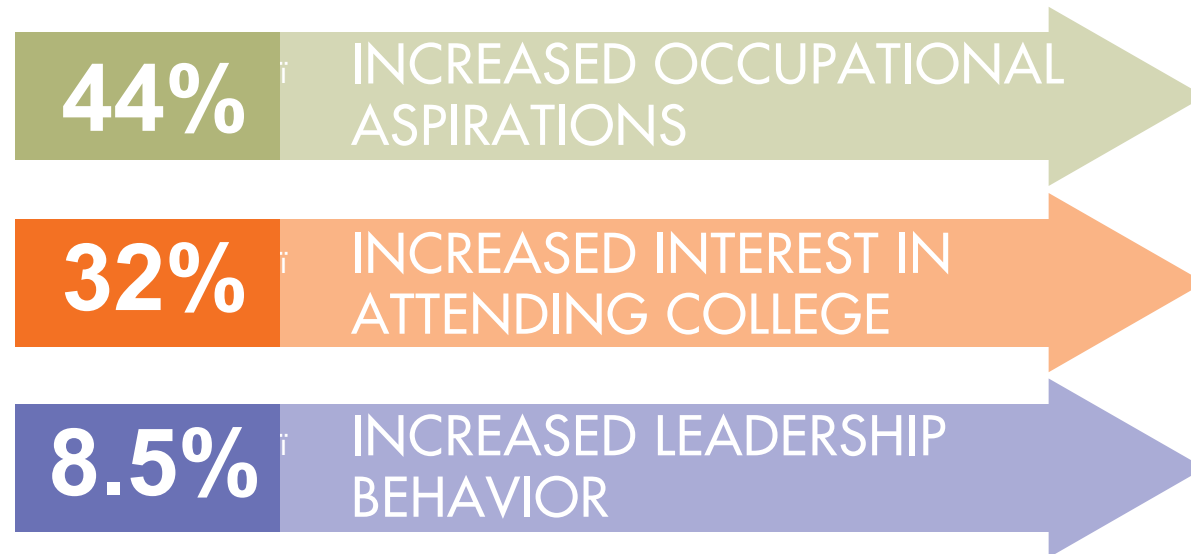
**370K+ Students  
Reached Yearly**



*Data taken from annual reports and impact data on individual group websites*

# Measuring Impact on Youth Entrepreneurship

Most of the data on the effectiveness of youth entrepreneurship education programs focuses on relatively short-term program outcomes from groups like NFTE and Junior Achievement.<sup>(a)</sup>



**Student Outcomes of NFTE  
In-School Programs <sup>(b)</sup>**

# Data Collection for Metrics/Outcomes of Youth Entrepreneurship Programs

- Demographics (Student, Educators, Schools, Programs)
- Number of Students, Schools, Teachers, Partners reached
- Overall Academic Outcomes – engagement in school, test grades, etc..
- Aspirational Careers and Career Outcomes – interest in STEM, starting a business, etc.
- Entrepreneurial Process/Skillset Mastery – business models, opportunity analysis
- Entrepreneurial Mindsets/Behaviors – resourcefulness, opportunity seeking, creative problem solving, confidence, failure-resistance









# Tools for Measuring Entrepreneurial Programs, and Mindset and Skillset

- As youth entrepreneurship education is nascent in K-12, there are not many available tools for program evaluation.
- Three entrepreneurship-specific tools:
  - NFTE: Entrepreneurial Mindset Index (EMI)<sup>TM</sup>
  - BizWorld Student Evaluations
  - VentureLab Youth Entrepreneurship Program Evaluation Tools
- Related Resource: The Pear Institute – STEM and SEL assessments



# NFTE: Entrepreneurial Mindset Index (EMI)<sup>TM</sup>

- The Entrepreneurial Mindset Index (EMI)<sup>TM</sup> measures student mastery in eight core domains of entrepreneurial thinking.
- Students receive a personalized report of their entrepreneurial mindset upon completion of the EMI.
- Available for students and educator in NFTE programs.

 COMFORT WITH RISK	 CREATIVITY & INNOVATION	 CRITICAL THINKING & PROBLEM SOLVING	 INITIATIVE & SELF-RELIANCE
 COMMUNICATION & COLLABORATION	 FUTURE ORIENTATION	 OPPORTUNITY RECOGNITION	 FLEXIBILITY & ADAPTABILITY

# BizWorld Student Assessments

- Pre and Post survey assessment of student business skillsets
- Built into BizWorld curriculum

## VentureLab Youth Entrepreneurship Program Evaluation Tool

- Mindset and Skillset Instructor self-evaluation (piloted 2019)
- Mindset and Skillset Student self-evaluation (piloting 2020)
- Mindset and Skillset Instructor evaluation of student (piloting 2020)
- Built with OST in mind for all entrepreneurial programs

# VentureLab Entrepreneurial Mindsets & Skills

- Curiosity
- Growth Mindset
- Courage
- Persistence and Grit
- Opportunity-seeking
- Creative Problem Solving
- **Failure Resilience**
- Optimism
- Resourcefulness
- Adaptability
- Empathy



- Creativity
- Teamwork
- Idea Generation
- Opportunity Analysis
- Market Research
- Design Thinking
- Prototyping
- Business Model
- Pitching
- Public Speaking

