

Rebooting the American High School with Neuroscience and Purpose Learning

Presented by Patrick Cook-Deegan and Bob Lenz

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Rebooting the American High School with Neuroscience and Purpose Learning

Moderated by



Patrick Cook-Deegan

Lecturer,
Stanford University's
d.school



Bob Lenz

Executive Director,
Buck Institute for
Education



David V. Johnson

Senior Editor,
*Stanford Social
Innovation Review*

Rebooting the American High School



Patrick Cook-Deegan

Lecturer,
Stanford University's d.school

Stanford University



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OUR SCHOOL SYSTEM WAS DESIGNED IN 1893.



Most Likely To Succeed.

mltsfilm.org



How Do Students Describe High School?

"TIRED"

"STRESSED"

"BORED"

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*"As long as you're happy,
you're going to be ok in life.
But nothing in high school
prepares me to explore what
that might be."*

- Cooper, Palo Alto High School Sophomore



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THE NEW YORK TIMES BESTSELLER

AN INSIDE-OUT GUIDE TO THE EMERGING

ADOLESCENT MIND, AGES 12-24

BRAINSTORM

THE POWER AND PURPOSE
OF THE TEENAGE BRAIN

DANIEL J. SIEGEL, M.D.

bestselling author of *The Whole-Brain Child*
and *Parenting from the Inside Out*

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"Simply the best book I have ever read about adolescence."
— MARTIN E. P. SELIGMAN, Ph.D.

Age of Opportunity

LESSONS FROM THE
NEW SCIENCE OF ADOLESCENCE



Laurence
Steinberg, Ph.D.



Institute for Applied Neuroscience

brain science for good

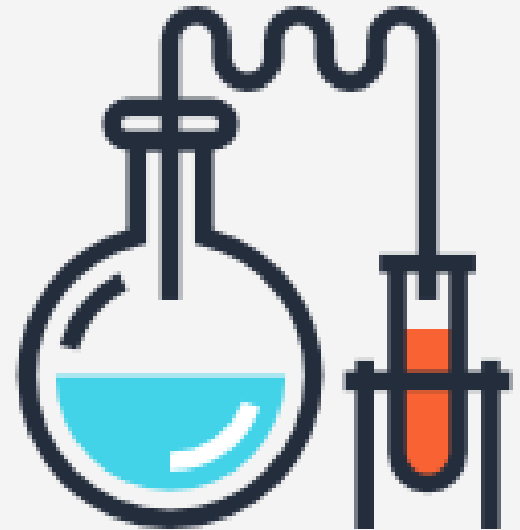
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Design Thinking



Classic Research



Learning Engineering

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65% OF JOBS TODAY'S STUDENTS WILL HAVE DON'T EXIST YET.

> DOE REPORT



Mindsets



Growth mindset



Creative confidence



Has a self-defined sense of purpose



Embraces failure / shows grit and resilience



Traits



Baseline optimism level: 9.2

1. Compassionate

2. Good listener

Skills



Visual communication



User-centered design/design thinking



Rapid prototyping (physical, experiential, digital)



Leadership + facilitation



Time management



Self-discipline/self-control



Habits



Meets with a mentor from personal 'Board of Advisors'

1x/week

Meditates and reflects for 10m

2x/day

Writes in gratitude journal

1x/day

Reads 5 news articles

1x/day

Physical Exercise (dance or running)

5x/wk

Practices Active Shaping (altering personal habits related to physical activity/health, social context, environment, etc. to improve learning conditions)

3. Energetic

4. Positive attitude

5. Dedicated/hardworking

6. Motivated/driven

7. Worldly

Data Sources: Dot scales are calculated by averaging reported values from teachers, mentors, and peers. Most Skill traits are assessed by standardized measures used school-wide. Traits listed are the top 7 most commonly used traits to describe the individual by teachers, mentors, and peers. Baseline optimism level is assessed by a clinical psychologist.

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PROJECT

WAYFINDER



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WAYFINDER



**SELF-
AWARENESS**



**FOCUS OUTSIDE
THE SELF**



**EMPOWERED
ABILITY TO MAKE
THINGS HAPPEN**

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BOLDLY EXPERIMENTAL.

You are action-oriented, driven by curiosity, and have a willingness to fail.

**INSTINCTIVELY PURPOSEFUL.**

You travel with a self-defined vision that comes from an intrinsic source of motivation, and you chart your own pathway.

**KEENLY SELF-AWARE.**

You understand yourself on many levels, from how you function to what nourishes and sustains you.

**GLOBALLY MINDED.**

You care about and are invested in the world around you, from your immediate community, to your global community, to the natural world.

**INSATIABLY INQUISITIVE.**

You constantly pursue new knowledge and desire to seek the truth, forming your own independent thoughts.

**DEEPLY GRATEFUL.**

You have a humble appreciation and reverence for the people and the world around you.

**INTUITIVELY COLLABORATIVE.**

You are a relationship-builder who constantly seeks out guidance and support (from diverse perspectives), and who listens thoughtfully.

**FIERCELY DETERMINED.**

You persevere. Period.

**FLUIDLY ADAPTIVE.**

You are comfortable navigating ambiguity, and can easily find multiple ways to the same destination.

**KNOWN FOR INTEGRITY.**

You are honest, responsible, and trustworthy. You stand firmly rooted in your values, and will courageously act on them.



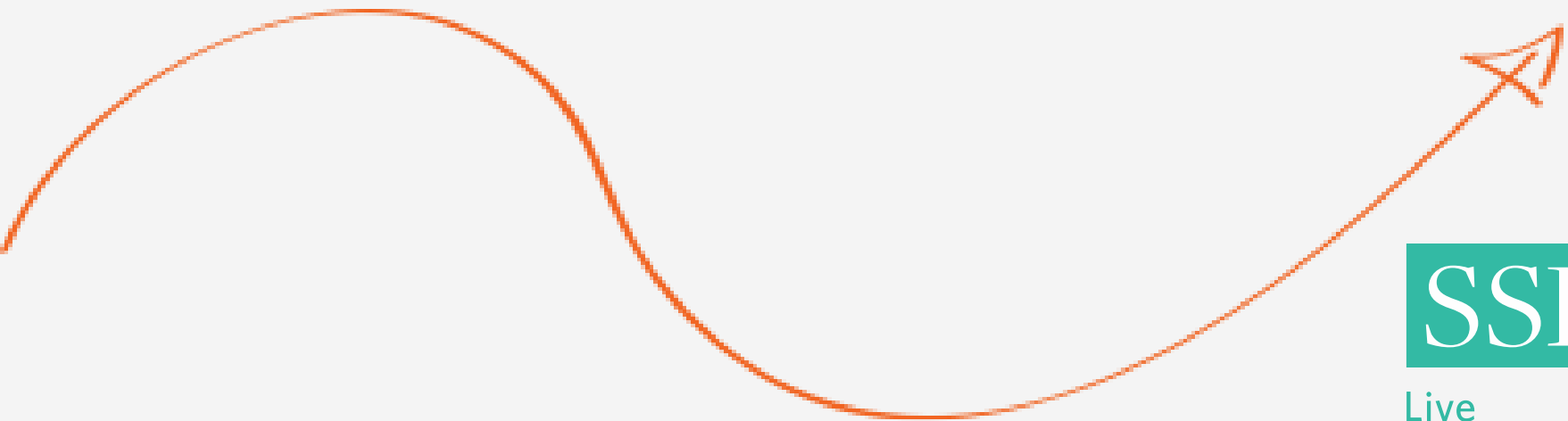
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How do we define PURPOSE?

“Purpose is a stable and generalized intention to accomplish something that is at the same time meaningful to the self and consequential for the world beyond the self.”

- William Damon, Professor of Education at Stanford University and author of *The Path to Purpose*



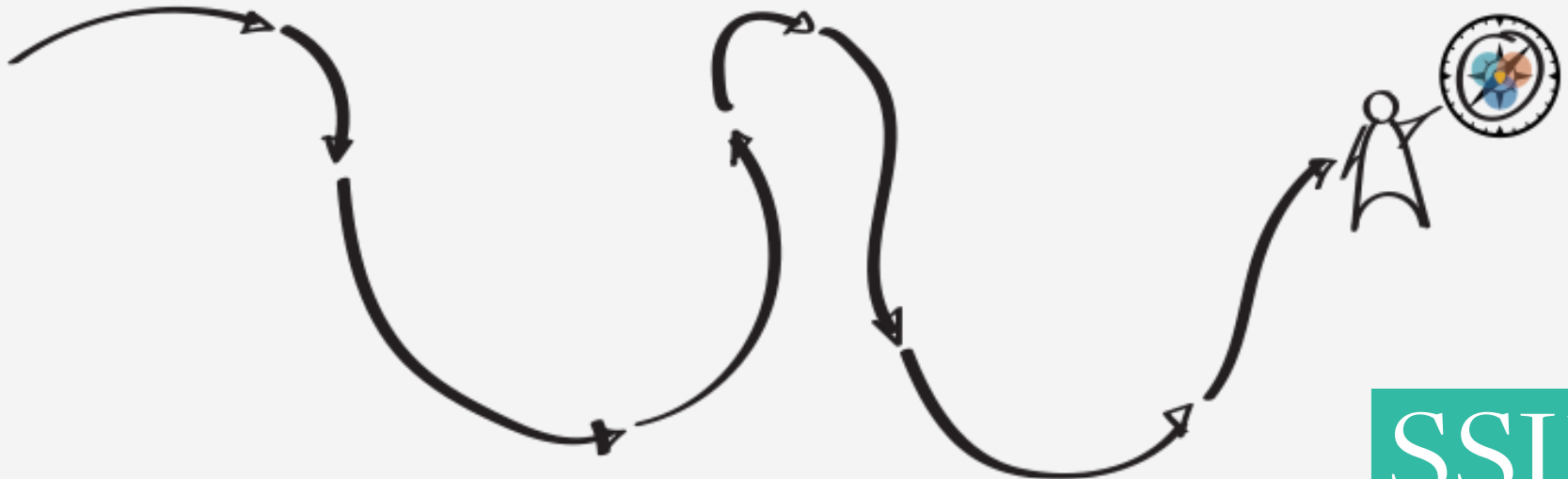
from **LINEAR** PATHTAKERS...



... to **SELF-RELIANT** **WAYFINDERS**

who thoughtfully, intentionally move through their life and the world with a sense of purpose as their compass

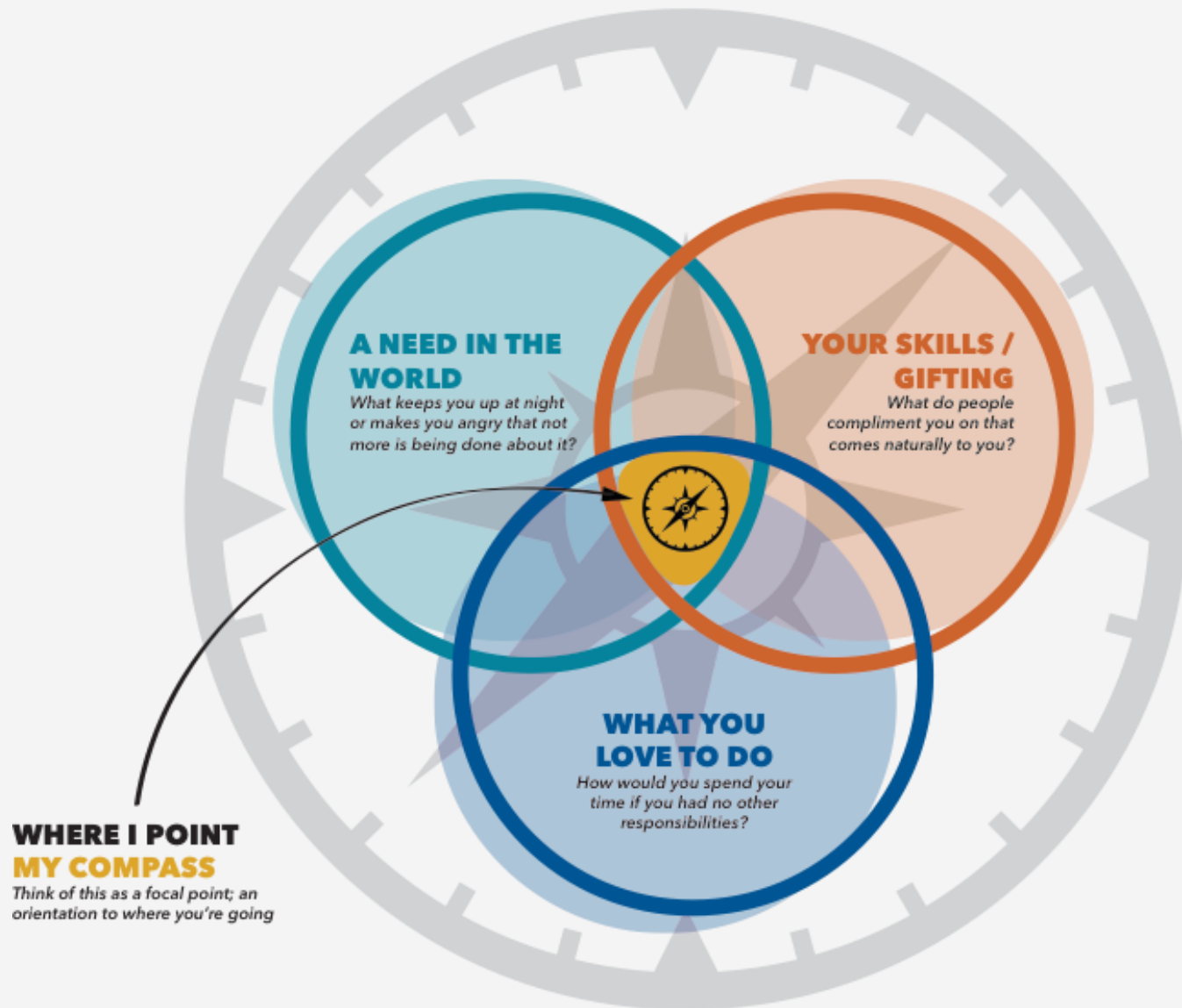
fluidly exploring many purposes



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THE WAYFINDER **PURPOSE COMPASS**



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Rebooting the American High School



Bob Lenz

Executive Director,
Buck Institute for Education



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| The Problem



Too many students, especially those furthest from opportunity, are unprepared for the challenges of the 21st century.

Project-Based Learning



Unleashing a contagious, creative energy among students and teachers

- Teachers make learning come alive for students.
- Students work on an extended project to solve a real-world problem or answer a complex question.
- Students demonstrate knowledge and skills for an audience beyond the classroom.
- Students get assessed on deep content knowledge and critical thinking, creativity, and communication skills.
- Students become confident problem-solvers.

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Evolution of BIE



BUCK INSTITUTE
FOR EDUCATION

1987

Buck Institute for Education was founded to advance the practice of teaching and the process of learning.

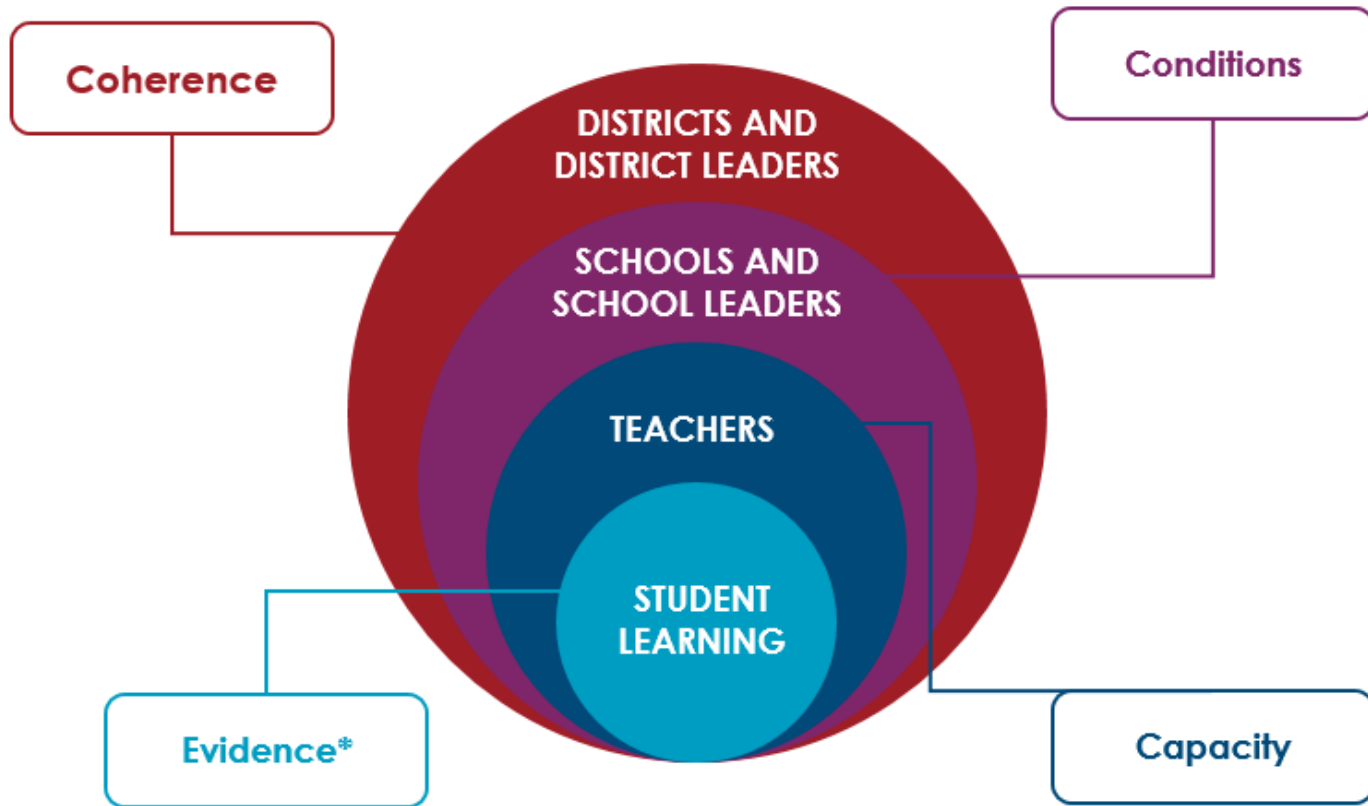
2017

Buck Institute for Education is working to ensure all students—no matter where they live or what their background—will have access to quality project-based learning to deepen their learning and achieve success in college, career, and life.

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Strategic Frame



*Engagement, performance, success skills, "non-cognitive", SBAC, PARCC

School PBL Design Principles

Develop a clear vision/purpose that includes PBL and promotes student outcomes for success in college, career, and life.

Vision/ Purpose

Culture

Develop and sustain a school-wide culture for all learners (students, teachers, leaders) that promotes collaboration, connectivity, and excellence through Project Based Learning.

Create the conditions necessary for sustainable PBL and build the capacity (knowledge, skills, and mindsets) of teachers to design and implement high quality projects.

Capacity Building

Continuous Improvement

Commit to an ongoing process of reflection, adaptation/iteration and growth to improve student learning outcomes through the use of PBL.

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| Case Study

Stanford Center for Opportunity
Policy in Education (SCOPE)

STUDENT-CENTERED SCHOOLS:
CLOSING THE OPPORTUNITY GAP
CASE STUDIES



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What are the implications for student-centered learning under the new Trump Administration?



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Key Takeaways

“You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.”

- R. Buckminster Fuller

- 1 Our high school system is a century behind the rest of our society.
- 2 Brain science should play a leading role in adolescent-education design.
- 3 21st century success = helping students navigate an ambiguous world confidently.
- 4 Students thrive with meaningful project-based learning.
- 5 States, local districts, and visionary leaders hold the future for HS innovation.

Audience Questions

Submit your questions in the box to the left



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Resources

Additional reading for more information

- 1 Book: *Age of Opportunity* by Larry Steinberg
- 2 Book: *Brainstorm* by Dan Siegel
- 3 Book: *Transforming Schools Using Project-Based Learning, Performance Assessment, and Common Core Standards* by Bob Lenz, Justin Wells, and Sally Kingston
- 4 SSIR Article: [Redesigning American High Schools for the 21st Century](#)
- 5 Economic article on rise of HS + employment options:
http://scholar.harvard.edu/files/goldin/files/americas_graduation.pdf

- 6 Book: *The origins of the American high school* by William J. Reese
- 7 Book: *The Path to Purpose* by William Damon
- 8 Book: *Purpose in Life: A Critical Component of Optimal Youth Development* by Kendall Cotton Bronk
- 9 [Institute for Applied Neuroscience](#)
- 10 [Project Wayfinder](#)
- 11 [Buck Institute for Education \(BIE\)](#)

Thank you for joining us!

Opportunities for further engagement

We'd love to hear your feedback

A brief survey will appear when you exit this presentation. Thank you in advance for completing it. We'll use your feedback to plan future *SSIR Live!* webinars.

Download the slides

Access this webinar as many times as you'd like for the next 12 months by clicking on the same link you did today. You may also download the slides in the Event Resources panel to the left.

Didn't get your question answered? Continue the conversation on LinkedIn

The presenters have agreed to answer additional questions asked during the webinar on the *SSIR Live!* LinkedIn group. You can join the LinkedIn group at the link below:

www.linkedin.com/grp/home?gid=2730249

Thank you for joining us today!

Upcoming Webinars and Events

1

[Creative Approaches to Building a Data Culture](#)

Date: Wednesdays, June 14, 2017

Time 11 a.m.-12 p.m. PST / 2-3 p.m. EST

The logo for SSIR, consisting of the letters "SSIR" in a white, serif font, set against a teal rectangular background.

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