



Science in the City

This website is designed to provide a community for teachers and educators to explore resources, exchange ideas and hear about our new research findings.

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This website is designed to provide a community for teachers and educators to explore resources, exchange ideas and hear about our new research findings.

Resources

Explore the lesson plans, question guides and other classroom resources we have available. Use the filters below to find exactly what you need.

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FIND BY TYPE

Big Ideas	Lesson Plans
Lab Examples	Standards

FIND BY GRADE LEVEL

PRE-K	K—6th
6—8th	9—12th

FIND BY TOPIC

Physical	Biology
Physics	Life

[+ 5 MORE](#)

FEATURED RESOURCES

<p>NGSS Core Ideas Essential Questions</p> <p>In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.</p> <p>★★★★</p> <p>Big Ideas All grades Physical Sciences</p> <p>VIEW</p>	<p>Conservation of Energy at the Skate Park</p> <p>In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.</p> <p>★★★★</p> <p>Lesson Plan Grade 4 Energy</p> <p>DOWNLOAD</p>	<p>Natural Selection (PhET Simulation)</p> <p>In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.</p> <p>★★★★</p> <p>Game Grade 5 Evolution</p> <p>VIEW DOWNLOAD</p>
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Research & Projects

Science in the City is a team of researchers, educators and other amazing people interested in finding new models and methodologies for teaching science to kids in inner-city contexts.

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Race, Culture, & Digital Self-Reflection

A super super short description of the project would go here, something to entice visitors.

[MORE](#)



Teacher Academic Language PCK

A super super short description of the project would go here, something to entice visitors.

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Race, Culture, & Virtual Reality Science Teaching

A super super short description of the project would go here, something to entice visitors.

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About Us

Science in the City is a team of researchers, educators and other amazing people interested in finding new models and methodologies for teaching science to kids in inner-city contexts.

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Bryan A. Brown, Ph.D.



Catherine Lemmi



Lynne Zummo



Xavier Monroe

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Resources



Maecenas commodo, risus vel ullamcorper rhoncus, neque felis ullamcorper nisl, ut viverra arcu libero quis nulla. Curabitur tristique vitae odio eget efficitur.

4
subjects

20
resources

FILTER RESOURCES

GRADE LEVEL	+	SUBJECT	+	TYPE	+	RATING	+	REGION	+
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ALL RESOURCES



NGSS Core Ideas Essential Questions

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Conservation of Energy at the Skate Park

In gravida pretium leo. Proin luctus nisi eget mauris auctor. eu velutpat est conyallis.



Natural Selection (PhET Simulation)

In gravida pretium leo. Proin luctus nisi eget mauris auctor. eu velutpat est conyallis.

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NGSS Core Ideas Essential Questions

In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.



Big Ideas All grades Physical Sciences

VIEW



Conservation of Energy at the Skate Park

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Lesson Plan Grade 4 Energy

DOWNLOAD



Natural Selection (PhET Simulation)

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Game Grade 5 Evolution

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Exploring Slope



Fraction Matcher



Gravity and Orbits



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NGSS Core Ideas Essential Questions

SYNOPSIS

This resource is intended to help spark ideas for conversation topics and questions you can ask students to test their content retention and other learning words would go here, basically this would be something quick to read so teachers know if this is relevant to them.

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SOURCE: COLORADO STATE

PS1: Matter and Its Interactions

How can one explain the structure, properties and interactions of matter?

PS1.A: Structure and Properties of Matter

How do particles combine to form the variety of matter on observes?

PS1.B: Chemical Reactions

How do substances combine or change (react) to make new substances?

How does one characterize and explain these reactions and make predictions about them?

PS1.C: Nuclear Processes

What forces hold nuclei together and mediate nuclear processes?

PS1: Matter and Its Interactions



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How do particles combine to form the variety of matter on observes?

PS1.B: Chemical Reactions

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PS1: Matter and Its Interactions

How can one explain the structure, properties and interactions of matter?

PS1.A: Structure and Properties of Matter

How do particles combine to form the variety of matter on observes?

SIMILAR RESOURCES



NGSS Core Ideas Essential Questions

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Big Ideas

All grades

Physical Sciences



Conservation of Energy at the Skate Park

In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.



Lesson Plan

Grade 4

Energy



Natural Selection (PhET Simulation)

In gravida pretium leo. Proin luctus nisi eget mauris auctor, eu volutpat est convallis. Aenean a viverra ex.



Game

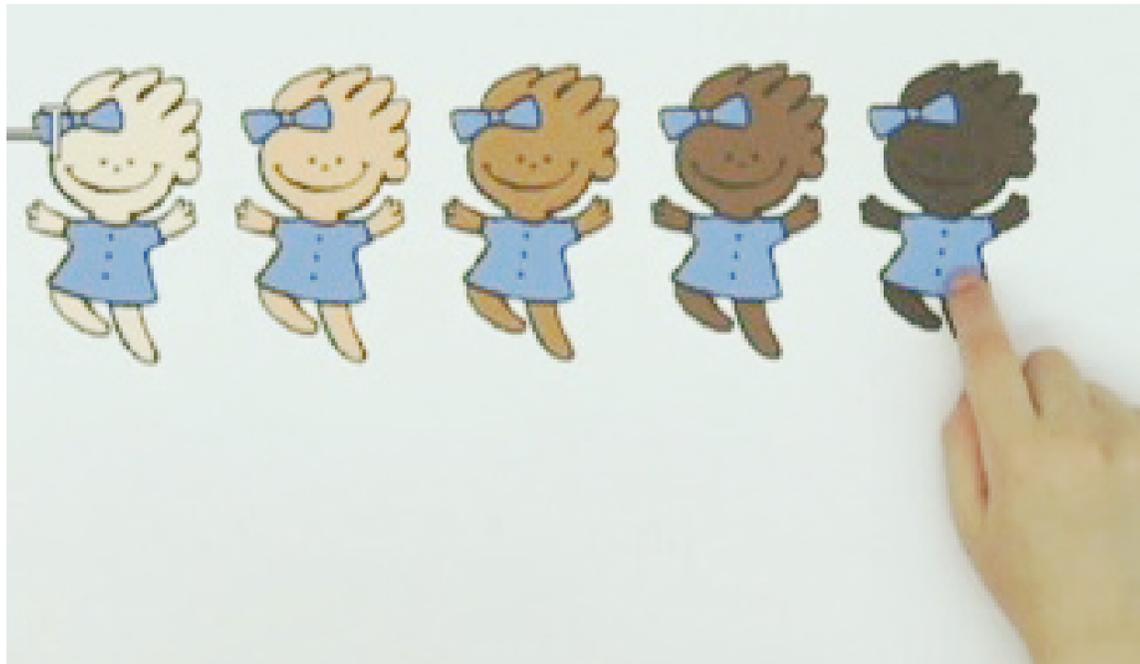
Grade 5

Evolution

Research



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Race, Culture, & Digital Self-Reflection

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Many years ago Clarke & Clarke conducted a famous study that asked



Teacher Academic Language PCK

[LEARN MORE](#)

There are numerous things that teachers need to know that are vital to



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Race, Culture, & Digital Self-Reflection

SYNOPSIS

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The growing concern for providing access to science careers for African-American men has led to many programs that attempt to provide students' access to high end science education.

We conducted a year-long study of one organization's attempt to understand the challenges of teaching science in urban context. We monitored how the school's leadership designed and implemented a STEM charter school for boys. The results of the study highlighted how the school's design and implementation was built upon some myths associated with how race and culture impact education. Through pre- and post-year surveys and interviews, we were able to document the leadership's changing perspective on race, culture, and the teaching of science.

3 primary changes occurred:

(1) First, the school changed their assumptions about professional development. They originally believed that providing professional



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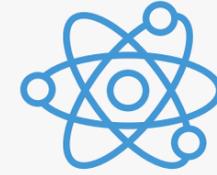


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About Us



The Science in the City Research team is comprised of a group of former science teachers who examine how to improve science teaching and learning in urban contexts. The research team explores a range of topics extending from the teaching of biology, the affect of complex language, the use of technology in science language to the knowlege teacher need to have in order to prepare diverse learners.

GET TO KNOW US

OUR TEAM	SUMMER CAMP	TEACHING	CONTACT
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Our Team



Bryan A. Brown, Ph.D.
Stanford University

Bryan A. Brown is an associate professor of science education at Stanford University. He

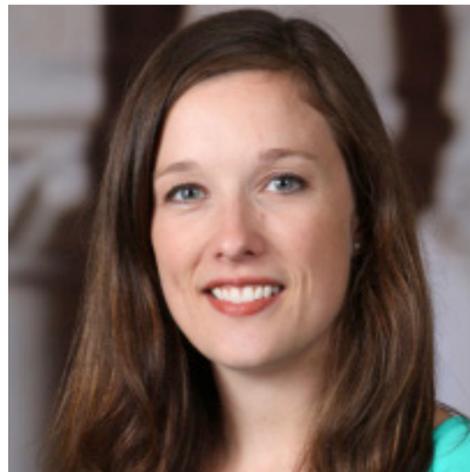
Our Team



Bryan A. Brown, Ph.D.

Stanford University

Bryan A. Brown is an associate professor of science education at Stanford University. He joined Stanford in the 2004 after working on a post-doctoral fellowship at Michigan State University. His work in the center for research on teaching at Stanford focuses on improving urban science education. He focuses on exploring how language and identity impact urban students' learning. Dr. Brown is a former high school science teacher who earned a Bachelor's degree in Biological Sciences from Hampton University, a Master's degree in Educational Psychology from the University of California, and a Ph.D. in Educational Psychology from the University of California, Santa Barbara.



Catherine Lemmi

Stanford University

Catherine Lemmi Catherine Lemmi is a PhD student in Science Curriculum and Instruction at the Stanford GSE. Her work investigates science teaching for students who are designated as English Language Learners. Her current project explores how teachers make sense of what their students know. Before beginning her doctoral work, Catherine was a substitute in Memphis, taught ESL in Japan for two years, and spent five years teaching Biology, Integrated Science and IB Environmental Systems and Societies at Sequoia High School in Redwood City



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Summer Camp

We invite you to join us for the 5th annual Science In The City Summer Camp. This year, we will offer a special 1-Day Engineering Camp. This camp is an opportunity to give Latinx students access to science at an early age.

This camp is offered through a collaboration between Stanford University's **Science In The City** research group and **The Social Engineering Project**. The Social Engineering Project seeks to impact the world by building and sustaining social structures that will support themselves and impact change. In this camp, the focus is to get 4th and 5th graders excited about science. During our day long session students will learn Engineering.

This high energy camp requires young people to think hard, ask questions, and to generate powerful explanations about science. The power of getting young people involved in science is that allowing them to experience success at an early age removes any doubt that science is for our children. Consider joining us for this year's camp.

Spaces are limited, so sign up today!



Summer Camp 2017

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The Basic Details

The Science in The City Camp is a day camp. Students will arrive at 9:00am for instruction and will be dismissed at 4:00pm.

Lunch will be provided. As a result, please provide information about your child's dietary or allergy limitations.

WHEN July 31, 2017
9:00am to 4:00pm

WHERE Stanford Graduate School of Education
Center of Educational Research at Stanford
520 Galvez Mall, Stanford, CA 94305

CONTACT Greses Perez, Camp Director
greses@stanford.edu

[REGISTER HERE](#)



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Teaching

My instructional goals are based on my experiences in education.

First, my approach attempts to follow basic Socioconstructivist models of education by attempting to identify what students know and bring to the classroom as a primary component of their learning. In addition my teaching goals follow a simple attempt to place the students at the center of instruction. In line with that, my teaching involves the following goals: (a) Students will use classroom literature as 'Data' to be analyzed.

Each classroom session will involve the revisiting, analyzing, and the production of new ideas based on literature used in the course. (b) The 'Goals' of classroom instruction will be transparent to students. They will be provided with clearly articulated goals associated with the class.

Select Publications

"Content-First" Science Teaching

The Science of Baseball

Science, Literacy, & Identity

Language, Identity, and Classroom Learning

The Black Science Project

Affective Impact of Science Language

Isn't That Just Good Teaching

Lyricism & Science Learning

Pathways Towards Science Fluency

Double-Talk: Dialect Code Switching & Science Learning

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Contact

For any questions, or partnership opportunities, please fill out the form below and we'll be in touch as soon as possible.

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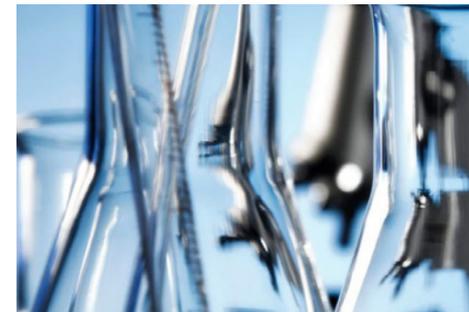
**NGSS Core
Ideas Essential
Questions**



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Questions**



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Questions**



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Bryan Brown

Email brbrown@stanford.edu
Affiliation Stanford Graduate School of Education
Location Palo Alto, California, USA

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SIGN OUT

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NGSS Core Ideas Essential Questions

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Big Ideas All grades Physical Sciences

VIEW



Conservation of Energy at the Skate Park

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Lesson Plan Grade 4 Energy

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Natural Selection (PhET Simulation)

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Game Grade 5 Evolution

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Messages

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NEW MESSAGE

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Inbox (1 Unread)

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20 MINS AGO

This is a test message title

Ut blandit ac elit ac porttitor. Curabitur eu purus et ipsum sodales elementum sed a metus. Sed nec orci nunc. Proin volutpat arcu ac dui semper volutpat. Integer quis diam ante. In hac habitasse platea dictumst. Fusce aliquet placerat tortor, vitae viverra magna bibendum...

**Bryan Brown**

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**Bryan Brown**

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Block User

Here is the Message Title

Bryan Brown

20 MINS AGO

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Data Collection

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