

# Reach

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## Implementing the Common Core with English Learners

**T**HERE IS CONCERN AMONG SOME EDUCATORS about how the implementation of Common Core State Standards (CCSS) will affect English Learner (EL) students.

EL students have the dual task of mastering content and developing language proficiency, and historically, schools have not done a very good job of supporting them in this endeavor. The new standards' emphasis on complex academic language across content areas presents even greater challenges for schools to ensure that EL students

receive the instruction they need to be academically successful.

One charter school near the California/Mexico border, however, may shed light on how educators can implement CCSS while promoting the academic success of EL students.

With funding from the Spencer Foundation, USC Rossier Assistant Professor Jamy Stillman and colleagues are conducting a detailed case study of the school as it rolls out the new standards to provide a counter narrative to the sometimes rigid implementation approaches that have been advanced by some policymakers and districts.

The school boasts impressive achievement levels among a student demographic that is traditionally underserved and often deemed "underperforming." Its students – 96 percent Latino; 58 percent Spanish-speaking ELs; and 55 percent qualifying for free or reduced-price lunch – recently earned an impressive Academic Performance Index (API) score of 878. The API is a measurement of academic performance and progress of individual schools in California.

Stillman, along with Co-PI Lauren Anderson of Connecticut College and doctoral students Kathryn Struthers, John Beltramo and Joyce Gomez, are exploring connections among standards-based policies, school conditions, and teachers' instructional practices in the school, where students are expected to master both English and Spanish in a dual immersion program from grades pre-K to high school graduation.

"They developed their own academic program where the teachers were engaged in the creation of the entire curriculum, and they turned it around on their own," Stillman said.

Since December 2012, Stillman and colleagues have been engaging in an ethnographic case study of the school, focusing on 10 teachers in three different grade levels through individual interviews, including stimulated recall interviews, focus group interviews, and extensive observations of classroom instruction and meetings with parents, teachers and administrators.

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*“At USC Rossier, we try to prepare teachers to teach in ways that are responsive to the different needs and experiences of students.”*

*—Jamy Stillman*



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MESSAGE

### From the Dean

The Common Core State Standards, adopted by 45 states\* to date, aim to to give every K-12 student, no matter where he or she lives, clear and consistent expectations for knowledge and skills in English language arts and mathematics.

The new standards also mean that schools and teachers across the country are undergoing adjustments in what is taught, how it is taught, and what is used to teach it. This presents fertile ground for research, and USC Rossier is already at the helm.

This issue of *Rossier Reach* highlights our faculty research surrounding CCSS. This work explores the alignment of textbooks, the impact on English Learners, and the Next Generation Science Standards, among other key issues impacted by Common Core.

Rossier's research will continue to enlighten the field during this critical moment in K-12 education reform.



Karen Symms Gallagher, PhD  
Emery Stoops and  
Joyce King Stoops Dean

\*As of 11/1/2013 at  
<http://www.corestandards.org/in-the-states>



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At this early stage of analysis, Stillman said that there are three general features of the school that appear to be supporting its approach to CCSS implementation. These include: strong school leadership; teachers' active participation in a robust professional learning community; and the school's contextually-sensitive approach to standards implementation, which engages teachers in the sense-making process.

Stillman noted that the conditions teachers at this school seem to be experiencing are sometimes not the norm. "When teachers – particularly those serving English Learners, students of color and students from poverty – are involved and can take ownership of this process, and when they are supported in their professionalism and continual improvement, great things can happen for their students.

"At USC Rossier, we try to prepare teachers to teach in ways that are responsive to the different needs and experiences of students, to be mindful of the resources that different students bring and to leverage those for learning," Stillman said.

The researchers hope that the findings, expected by mid-2014, will illuminate some of the ways that school conditions, school leadership and teacher practices can make CCSS implementation work to the advantage of EL students.



**Jamy Stillman**  
Assistant Professor



## *Study Tests Claims of* **Common Core** *Aligned Textbooks*

**AS TEACHERS AROUND THE COUNTRY** work to effectively implement Common Core standards in their classrooms, they are adopting new curriculum materials and textbooks that claim to be "Common Core aligned." However, Assistant Professor Morgan Polikoff argues that "there are many reasons to be skeptical of (textbook companies') claims given their poor track record," and the fact that there has been no rigorous evaluation of how aligned these textbooks are to the Common Core.

In his current study, Polikoff is conducting an analysis of fourth grade mathematics textbooks to test their publishers' claims of "Common Core alignment," and explore the association of aligned textbooks with student learning outcomes.

"We know from research that textbooks often vary substantially in their effects on student achievement," Polikoff said. "It may be the case that the best textbooks are the ones that are best aligned to the standards and assessments, as they help teachers faithfully implement the standards and, therefore, produce gains on assessments aligned to those standards."

His study not only provides evidence as to the alignment of several widely used textbooks with the standards, but it also presents a method for researchers to evaluate textbook alignment in other subjects and grade levels that will help inform teachers, schools and districts in the future.

Polikoff measured the alignment of the popular textbooks to Common Core standards, and how they differ from versions aligned with prior state standards. His analysis included seven books by four major publishers – Houghton Mifflin Harcourt, MacMillan/McGraw-Hill, Pearson, and Saxon. He then looked at how their levels of alignment predict effectiveness measured by student learning outcomes.

Polikoff's work has produced several important findings about "Common Core-aligned" textbooks. On the one hand, he found that all of the texts do cover the large majority of the topics in the Common Core standards, as they claim. On the other hand, the texts rarely maintain the level of rigor found in the standards.

"Where the standards might focus on applying or understanding a particular concept, for instance, the texts tend to focus on procedures," he said. "Unless teachers go beyond what's called for in the texts, it is likely that students will not be exposed to the important conceptual understanding they will need for future mathematics learning."

The study also found that each of the texts uses a substantial proportion of its space covering topics outside the fourth grade mathematics standards, diluting the increased focus and coherence the standards were intended to create. And because these extra topics differ from book to book, the choice of textbook can have dramatic implications for the content to which students are exposed. Polikoff plans to build upon his study by expanding his evaluation of textbook alignment to include grades K-5 in mathematics.

# How Will the Next Generation Science Standards Affect Research *and* Practice?

**IN SEPTEMBER 2013**, California became the seventh state to adopt the Next Generation Science Standards (NGSS), new K-12 science standards that move from what students are expected to know to what they are expected to do. The new standards focus on the process of inquiry, or scientific practice, and they are integrated across disciplines and applied to real life and careers in STEM disciplines.

Currently, several USC Rossier faculty members are involved in the development of K-12 curriculum materials aligned to both NGSS and the Common Core State Standards (CCSS). Among them are Fred Freking, a former scientist who focuses on math and science teacher preparation and development, and Gale Sinatra, whose research focuses on the cognitive and motivational processes that lead to successful learning in science, particularly controversial topics like evolution and climate change – two topics included in the new science standards.

**Rossier Reach** asked Freking and Sinatra about the impact NGSS may have on research and practice.

## **Q: How will the new standards change the classroom experience?**

**GS:** The way that inquiry – the emphasis in science education now – has typically been implemented is with hands-on activities and doing things. The new emphasis is going to be on thinking about things. So, it's not just about doing a fun experiment, but emulating the practices that a scientist engages in as he or she is reasoning and thinking with data. For example, how do you weigh evidence and draw conclusions? So that's a huge shift.

## **Q: What are the challenges to implementing NGSS?**

**FF:** NGSS is a better guideline for teaching and learning science as a body of knowledge and a way of knowing. One criticism has been that curricular materials that are aligned to these standards have not been developed. Also, the emphasis on scientific practices, while a huge step forward for kids learning to do science, will be challenging for teachers, especially those who have not participated in doing science themselves. Most elementary teachers are not STEM majors and will need professional development to implement NGSS. Finally, the assessments, although promising, are still being developed.

## **Q: How does it impact how teachers should be prepared?**

**FF:** Schools need to support teachers as they collaborate on curriculum to engage kids in the scientific practices in NGSS. All teacher education programs will need to address the integration of scientific practice, with cross-cutting concepts. *The USC Rossier Master of Arts in Teaching program currently emphasizes developing students' inquiry skills, which are very similar to the scientific practices as described in NGSS.*

## **Q: How will NGSS affect science learning, and will kids be able to do it?**

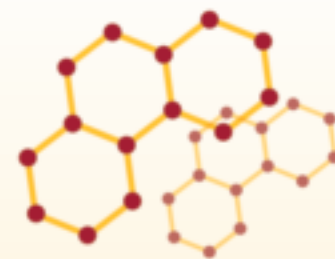
**GS:** Kids are naturally curious and all of the questions they ask are also asked by scientists, but in different ways. It will be more engaging, interesting and meaningful if it's done right. My colleague Doug Lombardi and I just did a study that showed that urban middle school kids are able to weigh evidence for human-induced climate change versus a skeptic model, and they found the scientific model to be more compelling, scientifically correct and plausible than the skeptic model. So when kids are given the chance to weigh evidence, which is what NGSS asks them to do, they can do it.

## **Q: What future research opportunities do you see related to NGSS?**

**FF:** In addition to studying the eventual curriculum and assessments, it will be interesting to know how science teachers implement NGSS and how their teaching impacts student understanding of science. Will a more interdisciplinary approach encourage more students to consider studying STEM in college? And, as a teacher educator, how will teacher education programs prepare future teachers for NGSS?

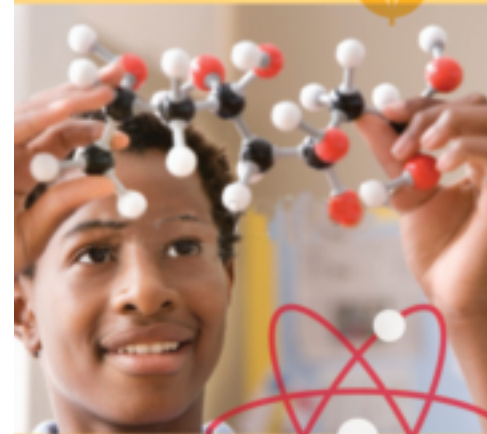
**GS:** I have submitted a proposal, building on the previous study I mentioned, to explore different methods that promote the skills and knowledge and the willingness to engage in critical thinking and reasoning among middle school students.

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“The new emphasis is going to be on thinking about things....not just doing a fun experiment...”

— Gale Sinatra



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## Major Grants Awarded to Faculty

Between May 2013 and October 2013

**Julie Marsh** and **Katharine Strunk** received an **\$849,905** award from the U.S. Department of Education, for the five-year evaluation of the Los Angeles Unified School District's Teacher Incentive Fund (TIF) Grant.

**USC Hybrid High School** was granted **\$500,000** from Windsong Trust, and **\$200,000** from The Broad Foundation. **Dean Karen Symms Gallagher** is the PI for both.

**Darnell Cole** was awarded a **\$500,000** grant from

Covered California for his Health Outreach through Mobile Education (H.O.M.E.) project.

**Gale Sinatra** and **Julie Marsh** were awarded **\$230,000** from Mattel Children's Foundation for the development of an innovative STEM curriculum using Hot Wheels.

**Jerome Lucido** was awarded **\$131,657** from the National College Advising Corps to expand the college advisor training program to underserved high schools in Southern California.

## California Voters Have Little Knowledge of COMMON CORE



**ACCORDING TO A POLL** conducted by the Policy Analysis for California Education (PACE) and the USC Rossier School of Education, **71 percent of California voters** knew little or nothing about the state's implementation of the Common Core State Standards.

"These results mean that schools and districts have a lot of work to do educating parents about what the Common Core means," said Dominic Brewer, USC Rossier professor and director at PACE.

USC Rossier Assistant Professor Morgan Polikoff added that the low level of public knowledge about the Common Core presented an opportunity to shape public opinion – for both advocates and detractors.

The August 2013 poll, which is the third in a series from PACE and USC Rossier, also found:

- 2/3 of California voters said **students should be tested in every grade level** to ensure they are progressing; 55% said California should **test high school students in all subjects**.
- 80% believe at least some component of **teacher evaluation** should be **based on student standardized test scores**.
- 52% agreed that **paying teachers more for exceeding performance standards** would improve the quality of the state's public schools.
- 48% said **teachers are largely to blame** if a school fails; 28% said **parents**; and 25% said **local school boards**.

View full results of the PACE/USC Rossier Poll at <https://rossier.usc.edu/2013-pace-results/>

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