

# High-quality English instruction helps student performances across other subjects

February 25 2014, by Clifton B. Parker

---



Education researchers found that students of good language arts teachers had higher than expected math scores in subsequent years.

Great English teachers boost their students' achievements in math, a very different subject, according to Stanford researchers.

The researchers found that [students](#) of good language arts teachers had higher than expected math scores in subsequent years – a crossover

effect.

On the other hand, good math teachers had only small long-term effects on English scores.

"What surprised us," said Susanna Loeb, a professor at Stanford Graduate School of Education, "was how clear the distinction was between math and English language arts, with [math teachers](#) teaching almost exclusively subject-specific skills and English teachers teaching skills that affect students' later outcomes across other subjects."

The researchers examined the performances of 700,000 students in New York City in third through eighth grade from 2003 to 2010.

The findings confirmed the enduring effect of good teachers. These teachers not only produced higher-than-expected test scores during the period they taught their students, but those students went on to score better in those subjects in future years.

A good English teacher was defined as one who generates above average increases in student test scores. The study points out that the effect of good teachers on test scores persists longer than those of other teachers.

"Great teachers are ultimately those with both short- and long-term effects on student achievement," said Ben Master, a Stanford doctoral student in education.

The findings reinforce the value of investments in student learning in English language arts, the researchers said.

The scholars, including a researcher from the University of Virginia, undertook the study out of concern that too many schools rate teachers on students' short-term [test scores](#) rather than their performances over

the long run.

"Our findings suggest that schools may benefit from carefully monitoring the relationship between [teachers](#)' short- and long-term academic effects. This can help to ensure that our measures of student success and teacher quality are aligned with our ultimate instructional priorities and values," Master noted.

## Demographic differences

While noting this relationship, the study is not conclusive about exactly why good English teaching matters so much in other subjects. The report points out that other subjects require some amount of reading and writing – in other words, one must read and understand word problems to do well in math.

Finally, substantial demographic differences in the long-term benefits to good teaching were found in the research. For example, more long-term benefits to good teaching were found in schools that serve more white and high-income students. Conversely, long-term benefits to good teaching were smaller in schools characterized by minority and low-income students.

"Teachers in schools that served primarily lower-achieving students consistently had smaller long-term effects, even if they themselves taught students that were high-achieving," Master said.

**More information:** The complete report is available online: [cepa.stanford.edu/content/lear ... -long-term-knowledge](https://cepa.stanford.edu/content/learning-long-term-knowledge)

Provided by Stanford University

Citation: High-quality English instruction helps student performances across other subjects (2014, February 25) retrieved 19 April 2024 from <https://phys.org/news/2014-02-high-quality-english-student-subjects.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.