

## *Using Scientists' Stories to Build Interest*

**Summary:** It can sometimes be difficult to build students' deep appreciation for science beyond their interest in flashy experiments. In an article for the *Journal of Educational Psychology*, a professor at Columbia University and a professor in Taiwan discuss a strategy that uses stories about scientists to build students' interest and understanding.

### **Practical Applications**

The authors focused their study on low-performing high school students, but this is likely applicable through the grades: they presented students with stories of famous scientists (in this case, Galileo, Newton and Einstein). One group of students received a lesson that simply focused on the scientists' accomplishments, while the other received a lesson that focused on the scientists' struggles along the way to reaching their accomplishments. While there was no measurable effect for the students who just learned about scientists' accomplishments, the students who learned about the struggle-oriented stories showed:

- An increase in personal interest in science among those students who started out being disinterested in the topic
- A significant increase in students' long-term retention of material
- An improvement in the ability to solve "complex, open-ended science problems." (there was no increase in the ability to solve "textbook-based problems")

The authors suggest that when low-performing students interact with these types of stories of scientists struggling, it makes the science more relatable and does away with the preconceptions of what science and those who are good at it are like; it normalizes science and scientists, in other words.

### **Conclusion and Citation**

While there is much future research to be done, this study suggests that teachers should invest in teaching students not just about the science, but the scientists behind it. By providing information about scientists' struggles and failures on the road to success, it makes science a more enjoyable subject which students can see themselves being good at, even if they struggle to begin with.

Lin-Seigler, X. & Hong, H. "How Learning about Scientists' Struggles Influences Students' Interest and Learning in Physics." *Journal of Educational Psychology* 104.2 (May 2012), pp. 469-484. <http://bit.ly/LJMTPb> (subscription only).