

### Effets sur les résultats des élèves

San Francisco South Bay School	Chicago North West School
2016 Preliminary Mathematics Smarter Balance Assessment Systems (California Department of Education) student results	2015 Mathematics Illinois State Achievement Test results
Standard Met or Exceeded: 78%	Standard Met or Exceeded: 44%
Percentage change: 17% Over 2 years	Percentage change: 28% Over 2 years

Chicago Public Schools, Office of Accountability  
California Department of Education, Testing and Accountability  
Citéz par Friedkin, 2016



### Effets sur le développement professionnel

#### The effects of five professional development approaches on student math proficiency

Of the five math professional development approaches that had effectiveness studies that met WWC standards, two had statistically significant positive effects, one had limited effects, and two had no discernible effect (table 1).

Table 1. Summary of findings for the five effectiveness studies of math professional development approaches that met What Works Clearinghouse evidence standards

Findings of the effectiveness study	Professional development approach
Statistically significant positive effects*	• Interactive math content courses accompanied by follow-up workshops (Stimpert, McMeeking, Orsi, & Cobb, 2012). • Lesson study focused on linear (measurement) model of fractions (Perry & Lewis, 2011).
Limited effects*	• Cognitively Guided Instruction (Carpenter, Fennema, Peterson, Chang, & Loei, 1989; Jacobs-Kramer, Carpenter, Lesh, & Barry, 2007); • (Garret et al., 2010, 2011).

Lewis, J. M., 2016

In fact, lesson study was one of only two programs of professional development in mathematics (out of 643) that led to statistically significant positive gains for students in the US, according to the criteria of the US Department of Education Institute of Education Sciences (Gersten et al. 2014).

(p.2)

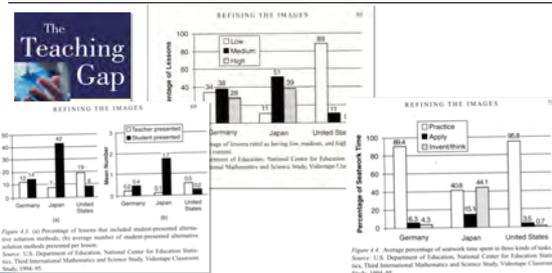
### Dépersonnalisation de l'enseignement

—Hiebert, J. & Stigler, J. W. (2017). Teaching Versus Teachers as a Lever for Change: Comparing a Japanese and a U.S. Perspective on Improving Instruction. Educational Researcher, 0(0), 0013189X17711899.

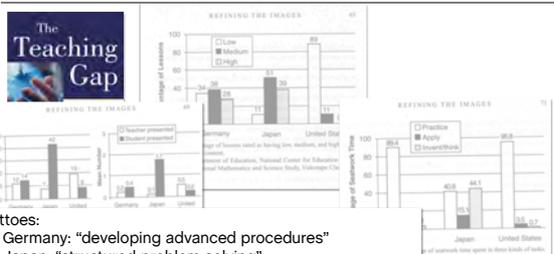
—Clivaz, S. (2016). Lesson Study: from professional development to research in mathematics education. Quadrante, XXV(1), 97-112.



### Effet sur le type de leçons



### Lesson Study



Mottoes:

On Germany: "developing advanced procedures"

On Japan: "structured problem solving"

On U.S.: "learning terms and practicing procedures" (p. 27)

<https://vimeo.com/315>

