

#betterteaching

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49 × 5 = ?

$49 \times 5 = 245$

 $49 \times 5 = 405$

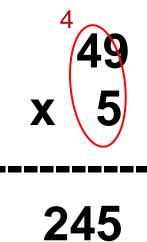
$\Box A$. Hyman Bass



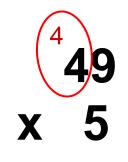
□ 𝔅. Deborah Ball



correct method:



5x9=45 write down 5 carry the 4 4x5=20 20+4=24 answer: 245 student's method:

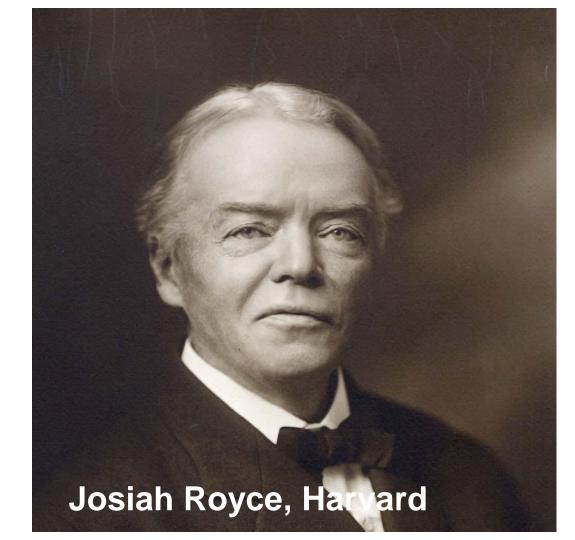


405

5x9=45 write down 5 carry the 4 4+4=8 5x8=40 answer: 405

Teaching requires specialized *knowledge* and *skill*.

But we haven't treated it that way.



"There is no such thing as a science of Pedagogy...

As for a 'philosophy of education' in any other sense, the lord deliver us thereform." Teaching requires a "clear head, an enduring conscience, an elastic enthusiasm, and uncommon commonsense."





Steven Farr



What does this mean for education?

Observation Score Distributions: PLATO Prime Behavior management

Mr. Sal

		1 1	
Time mana	gement		
Intellectual	challenge	THE STREET	
Classroom	discourse		
Strategy us	e and instru	ction	
Modeling			
			-
Almost no evidence		Evidence with some weaknesses	Consistent strong evidence

- Solve problems that require one or two steps
- Solve problems that rely on familiar situations





- Successfully explore a problem and make inferences about relationships within it
- Can take given hypothesis and test it through methods they devise





- In addition to exploring a problem successfully, can plan a solution and monitor progress
- Can tackle unfamiliar situations (vending machines, home appliances)



- Successfully solve *complex* problems and do so *efficiently*
- Maintain an understanding of their own mental models and choose the most useful to target the problem







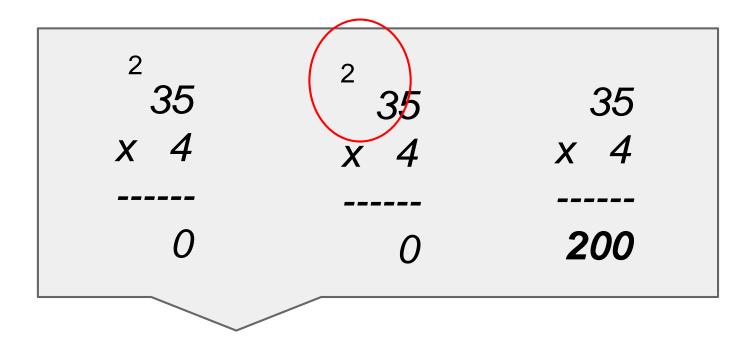
"Why should we pay the same amount for a third of a pound of meat as we do for a quarter-pound at McDonald's?"



4 coconuts at 35 cruzeiros a coconut?

"Three will be 105, plus 30, that's 135 . . . one coconut is 35 . . . that's 140!"

35 × 4 = ?



How do we fix this?



Approach #1: Accountability

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OPINION

Free the teachers: Give classroom educators, sufficiented by pureaucracy, freedom to inspire students

BY PHILIP K. HOWARD

SUNDAY, NOVEMBER 28, 2010, 4:00 AM





Approach #2: Autonomy

But neither of these approaches has worked.

A more promising approach: Japan.







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11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9
12-3, 12-4, 12-5, 12-6, 12-7, 12-8, 12-9
13-4, 13-5, 13-6, 13-7, 13-8, 13-9
14-5, 14-6, 14-7, 14-8, 14-9
15-6, 15-7, 15-8, 15-9
17-8, 17-9
18-9
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11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9
12-3, 12-4, 12-5, 12-6, 12-7, 12-8, 12-9
13-4, 13-5, 13-6, 13-7, 13-8, 13-9
14-5, 14-6, 14-7, 14-8, 14-9
15-6, 15-7, 15-8, 15-9
17-8, 17-9
18-9
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What will it take to create Japanese conditions in other countries?



Magdalene Lampert







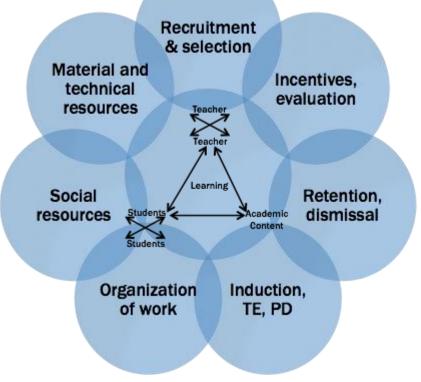


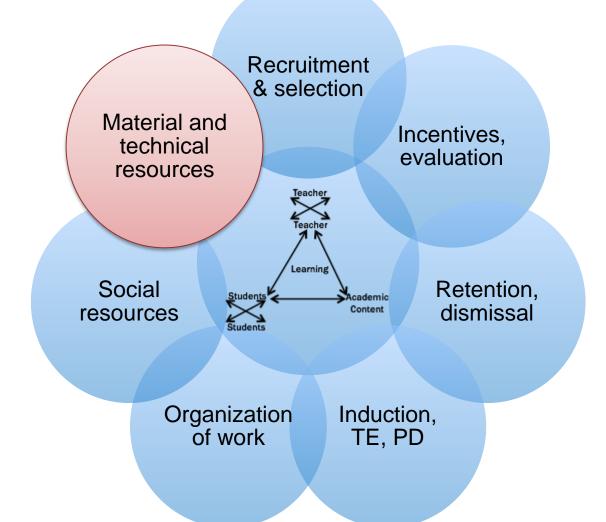


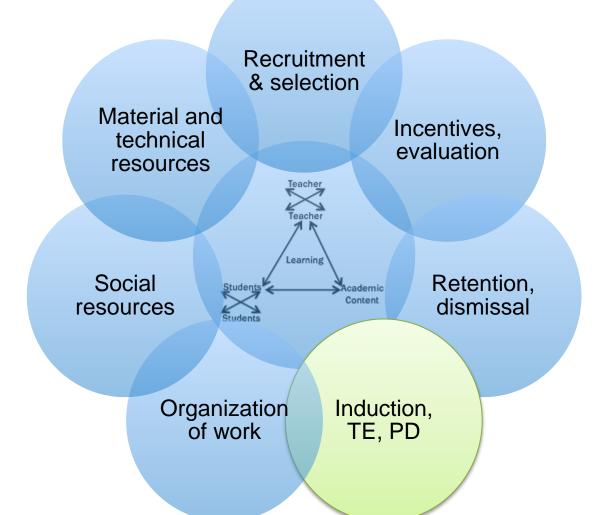
Welcome to Italiaidea, Italian language school in Rome!

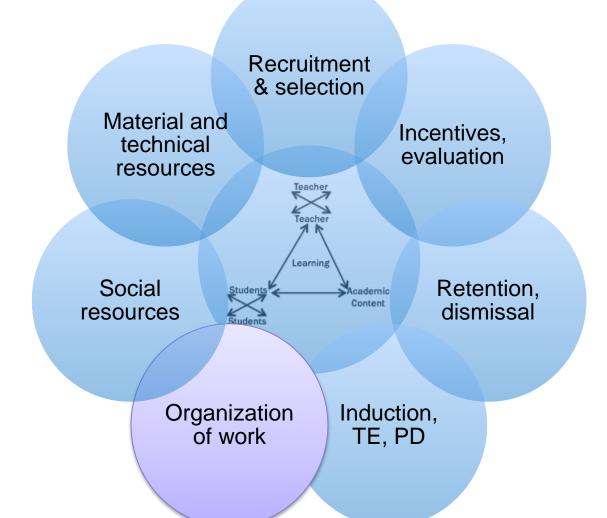
infrastructure

educational infrastructure









Thank you!

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