BUILDING A BETTER TEACHER

HOW TEACHING WORKS (and How to Teach It to Everyone)

Elizabeth Green

"This beautifully written, deftly hopeful book points the way to a better future for American teachers and the children they teach."
—Paul Tough, best-selling author of Alienated Students

@elizwgreen @chalkbeat buildingabetterteacher.com #betterteaching
$49 \times 5 = ?$
49 × 5 = 245
49 × 5 = 405
correct method:

\[
\begin{array}{c}
4 \\
49 \\
\times \\
5 \\
\hline
245
\end{array}
\]

5 \times 9 = 45
write down 5
carry the 4
4 \times 5 = 20
20 + 4 = 24
answer: 245

student’s method:

\[
\begin{array}{c}
4 \\
49 \\
\times \\
5 \\
\hline
405
\end{array}
\]

5 \times 9 = 45
write down 5
carry the 4
4 + 4 = 8
5 \times 8 = 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 therefrom.”

Josiah Royce, Harvard
Teaching requires a “clear head, an enduring conscience, an elastic enthusiasm, and uncommon commonsense.”

LeBaron Russell Briggs
What does this mean for education?
Observation Score Distributions: PLATO Prime

Behavior management

Time management

Intellectual challenge

Classroom discourse

Strategy use and instruction

Modeling

Almost no evidence  Limited evidence  Evidence with some weaknesses  Consistent strong evidence
• Solve problems that require one or two steps
• Solve problems that rely on familiar situations

94.3%

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

59.0%
• In addition to exploring a problem successfully, can plan a solution and monitor progress

• Can tackle unfamiliar situations (vending machines, home appliances)

32.0%

• 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

2.7%
“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 \times 4 = ?

\[
\begin{align*}
2 & \quad 35 \\
\times & \quad 4 \\
\hline
\phantom{0} & \phantom{0} \\
0 & \phantom{0}
\end{align*}
\]

\[
\begin{align*}
2 & \quad 35 \\
\times & \quad 4 \\
\hline
\phantom{0} & \phantom{0} \\
0 & \phantom{0}
\end{align*}
\]

\[
\begin{align*}
2 & \quad 35 \\
\times & \quad 4 \\
\hline
\phantom{0} & \phantom{0} \\
200 & \phantom{0}
\end{align*}
\]
How do we fix this?
Approach #1: Accountability
Free the teachers: Give classroom educators, suffocated by bureaucracy, freedom to inspire students

BY PHILIP K. HOWARD
SUNDAY, NOVEMBER 28, 2010, 4:00 AM
But neither of these approaches has worked.
A more promising approach: Japan.
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
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
What will it take to create Japanese conditions in other countries?
Welcome to Italiaidea, Italian language school in Rome!
infrastructure
educational infrastructure
Recruitment & selection

Incentives, evaluation

Retention, dismissal

Organization of work

Induction, TE, PD

Material and technical resources

Social resources
Recruitment & selection

Material and technical resources

Incentives, evaluation

Social resources

Retention, dismissal

Organization of work

Induction, TE, PD
Thank you!

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