## Educating the innovators of the 21st century

Teaching and Learning Experiertce Sinar Ceminar flong fong Baptist Unityersity

## aeric_mazu!

 fong isong, China, Ie Decernes 2013Innovation

## Nobel Prize in Physics 2010



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Ig Nobel Prize in 2000

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& \text { ABE }
\end{aligned}
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"For me it's very boring to work on the same thing year after year..."



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## graphene resulted from

"Friday night experiments
where you try something very elementary and try to go in another direction"
how can we foster/teach innovation?

## Need to...

- teach problem solving
- encourage risk taking










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3. It rains in London and Chicago
4. It rains in London or Chicago

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You...

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You...

1. made a commitment

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You...

1. made a commitment
2. externalized your answer

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You...

1. made a commitment
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3. moved from the answer/fact to reasoning

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You...

1. made a commitment
2. externalized your answer
3. moved from the answer/fact to reasoning
4. became emotionally invested in the learning process

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## ALL CASES

LONDON

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## ALL CASES



CHICAGO

## ALL CASES



## ALL CASES

\section*{40\% <br> | 2 |
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| 0 |
| $\mathbf{Z}$ |
| 0 | <br> }

rain


no rain


## ALL CASES



## ALL CASES



## ALL CASES



## ALL CASES



## ALL CASES

## rain言in $L^{\text {Lons }}$ don AND Chicago

rain

no rain



## ALL CASES

## raiish in tondon OR Chicago

rain
no rain


## ALL CASES



## ALL CASES



## Want to educate innovators?

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Rethink education!

## mazur.harvard.edu

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