Computer Science Education
In Defence of Programming

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European Computer Science Summit 2017, Lisbon, Portugal

So, let's talk about programming!

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Motivation

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Greenfoot

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Eight ways to motivate students

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Use open problems

Allow students to take control.

Creativity.

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Asteroids

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Projects of discovery

Surprises are good.

Experiment.

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Ants

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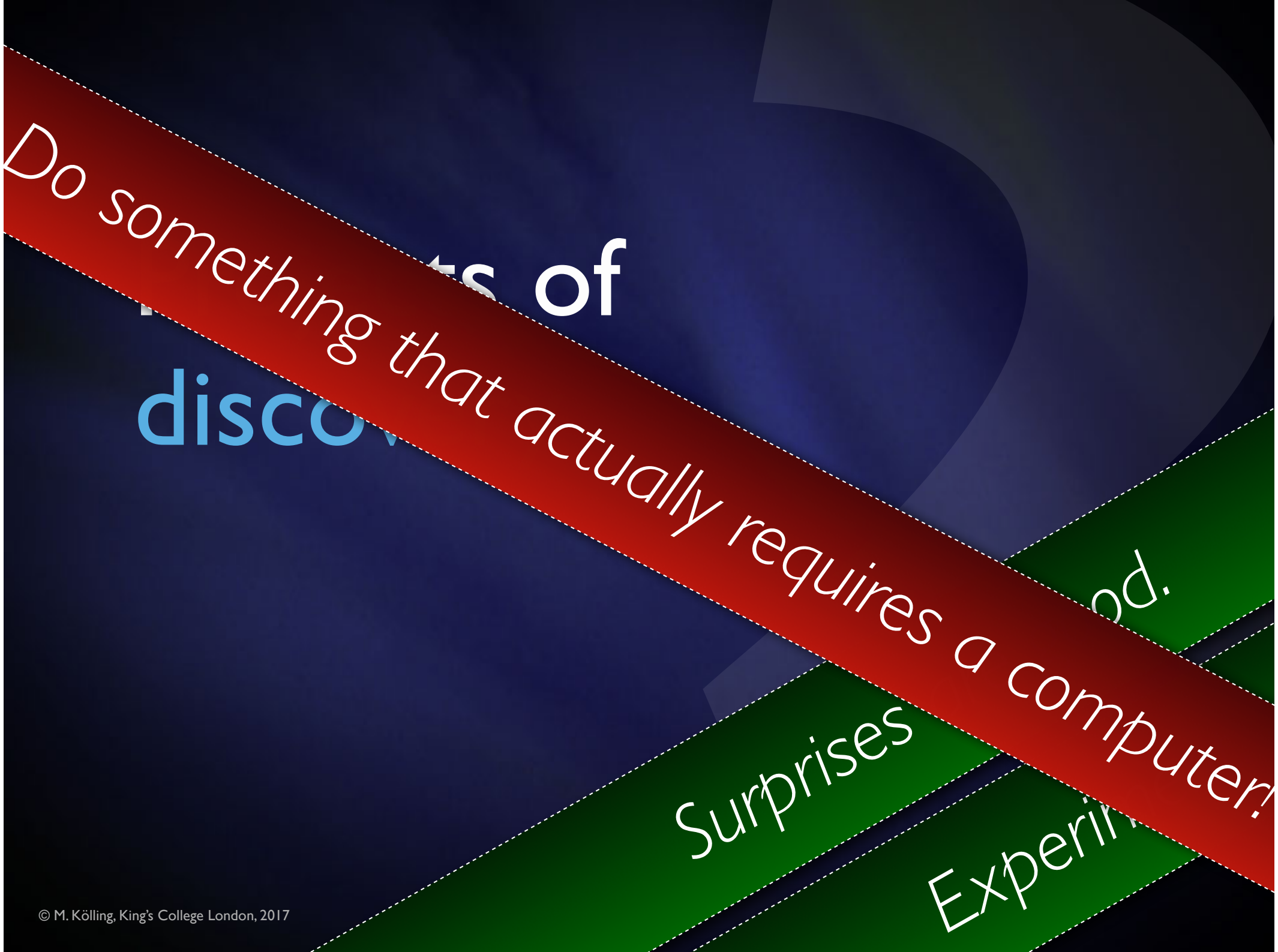

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Connect to their interests

What are their interests?

Let them choose

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Real world connections

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Pollution.

Health / fitness.

Global warming.

Traffic simulations.

Social interactions.

...

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Use real data

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Weather

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Multi-level learning

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Wave

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Gadgets are cool

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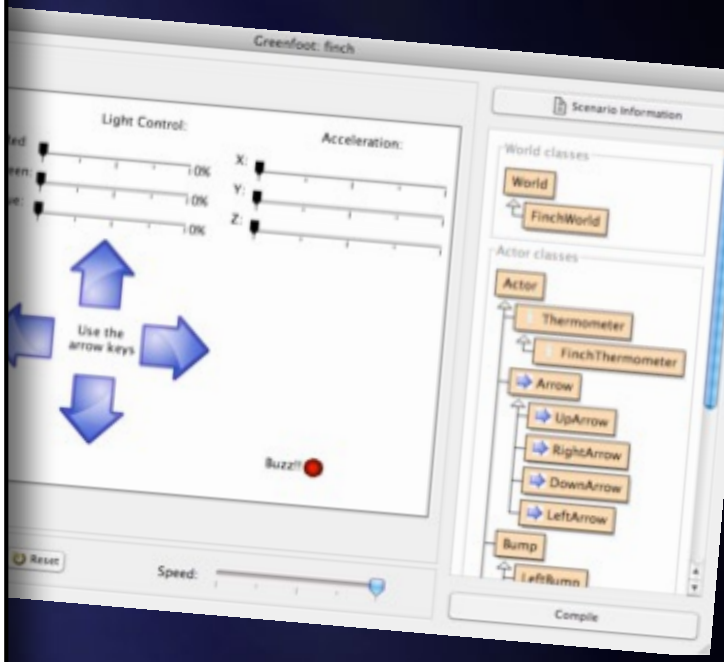

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Gallery

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But how?

Stride.

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Stride

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How do we make this happen?

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Teachers.

Ambitious curriculum.

Tools.

Guidance (tools, pedagogy).

Support (political, financial).

Education research.

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Informatics Education in Europe: *Are We All In The Same Boat?*

Association for Computing Machinery

INFORMATICS EUROPE

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A case study:

COMPUTING AT SCHOOL

EDUCATE · ENGAGE · ENCOURAGE

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Enthusiastic volunteers
Work with academia, government, industry
Act locally: grassroots, hubs.
At all levels of school.
NCOURAGE

Collaborate internationally on research
Act locally

KING'S College LONDON

Thank you.

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